COMFORTage

Prediction, monitoring and personalized recommendations
for prevention and relief of dementia and frailty

D5.1

Training and Educational Toolkit I

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DELIVERABLE

D5.1 – Training and Educational Toolkit I

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Definitions, Acronyms and Abbreviations

Abbreviation	Description
DHL	Digital Health Literacy
EU	European Union
HCPs	Healthcare Professionals
LMS	Learning Management System
MDC	Mild Cognitive Decline
TEM	Training and Educational Marketplace
TET	Training and Educational Toolkit
WP	Work Package

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Executive Summary

This deliverable, i.e., D5.1 – "Training and Educational Toolkit I", presents the initial design and development phase of the COMFORTage Training Programme under Task 5.1 – "Continuous Learning through Training Materials & Guidelines". This task aims to bridge digital and health literacy gaps and empower key user groups—older adults, informal caregivers and healthcare professionals—through an inclusive, personalised, and modular learning framework. The Training Programme is grounded in a people-centred pedagogical approach that promotes self-awareness, self-empowerment and behavioural change. It draws upon desk research, co-design methods, and end-user needs assessments to ensure relevance and adaptability to diverse learning needs and digital readiness levels. Moreover, D5.1 – "Training and Educational Toolkit I" builds on Work Package 2 work—particularly D2.1 – "State of the art and requirements analysis I" and D2.4 – "People-Centred System Design I"—which informed the technical requirements, user personas, and needs assessment guiding the designing of the COMFORTage Training Programme, as detailed in the following sections.

The deliverable also introduces the first prototypes of the two core technical components: the Training and Educational Toolkit (TET), which provides the infrastructure for the interactive educational content to be operated; and the Training and Educational Marketplace (TEM), a curated repository of digital health applications and tools. Together, they constitute a scalable and user-friendly platform to support continuous learning and digital inclusion within the COMFORTage ecosystem. D5.1 – "Training and Educational Toolkit I" lays the groundwork for the Training Programme's localisation, multilingual adaptation and pilot deployment across participating sites. The insights and tools presented here will be further refined and validated in the upcoming D5.2 – "Training and Educational Toolkit II", following user testing and integration into real-life community and care environments.

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1 Introduction

1.1 About Task 5.1 and purpose of deliverable D5.1

Task 5.1 – "Continuous Learning through Training Materials & Guidelines" focuses on the design and development of the COMFORTage training and educational programme, targeting key user groups such as older adults, informal caregivers and healthcare professionals (HCPs). Its overarching goal is to bridge gaps in digital and health literacy and support the adoption of integrated, community-based care models by delivering structured, inclusive and personalised learning tools. Within this framework, Deliverable 5.1- "Training and Educational Toolkit I" marks a key milestone, presenting the pedagogical approach that shaped the proposed training curriculum—including its thematic modules and learning pathways—as well as the first prototypes of the two core technological infrastructures: the Training and Educational Toolkit (TET), a digital learning platform and the Training and Educational Marketplace (TEM), a digital repository of health-related applications and resources. The Training Programme (both the curriculum and the TET/TEM) will provide central access for both learners and trainers, enabling scalability, user interaction, and lifelong learning across COMFORTage pilot sites and beyond.

The Training Programme is designed to address the diverse needs of its target audiences, taking into account age-related challenges, chronic health conditions, and the growing reliance on digital technologies in health and care. It is developed with a strong commitment to inclusivity, avoiding gender biases and socio-economic stereotypes, and ensuring accessibility for individuals across all literacy levels. The content is presented in plain, lay-friendly language, making it understandable and usable for everyone, regardless of background or prior knowledge. It offers a flexible, modular structure based on people-centred design principles and aims to promote self-awareness, self-empowerment and behavioural change. Combining theoretical knowledge with experiential learning methods, the programme supports digital health readiness and is adaptable to different user profiles and skill levels, ranging from beginners to more experienced learners. The content is grounded in needs assessments, literature reviews and co-design activities with end users, ensuring its real-world relevance and alignment with COMFORTage's core values for people-centric care pathways.

Deliverable 5.1 lays the foundation for the refinement and pilot implementation of the training programme during M18-M36 of the project lifecycle. It supports the broader goal of improving digital health access and inclusion, enabling older adults living with dementia and frailty to make more informed decisions and benefit from personalised care pathways. The programme also aims to enhance caregiver support, upskill the healthcare professionals, improve communication between targeted stakeholders and foster trust in digital health solutions across the COMFORTage ecosystem.

1.2 Connection with other tasks and deliverables

Deliverable 5.1 is closely informed by the foundational work of Work Package 2 (WP2), particularly Task 2.1 – State of the Art Analysis, Technical, Use Case & Ethical Requirements and Task 2.2 – People-Centred System Design and Co-creation, as the outputs of these tasks collectively contributed to the rationale, structure, and methodology of the COMFORTage training programme. Specifically, Task 2.1 (D2.1 – "State of the Art and Requirements Analysis") outlined key technical and use-case requirements essential for the feature selection and design of the TET and the TEM,

ensuring alignment with real-world care contexts and user needs. In parallel, Task 2.2 (D2.4 – "People-Centred System Design I") contributed through its user personas to the needs assessment and population segmentation for the Training Programme, offering useful insights and training needs, highlighting digital and health literacy challenges, technological barriers and contextual needs across the main target groups namely older adults, caregivers, healthcare professionals and researchers.

An updated version of this report, D5.2 – "Training and Educational Toolkit II", will be delivered in M36. It will report on the implementation of the training programme following the release of the second prototype of the TET and TEM, the finalisation and localisation of training materials and the integration of the toolkit into pilot activities after M20. This second version will document user feedback, and real-world validation of the programme across COMFORTage pilot sites.

1.3 Structure of this deliverable

Deliverable 5.1 is structured around the design and early development of the COMFORTage Training Programme. It begins with an overview of the programme's objectives and target population segmentation, followed by a detailed presentation of the pedagogical approach and teaching methods (Chapter 1). Afterwards, the training curriculum development process is outlined, including a literature review (Chapter 2), results from an online survey (Chapter 2) and the identification of final training themes and learning pathways (Chapter 3). Then the deliverable proceeds on describing the first prototype of the TET, its functionalities, structure and intended use (Chapter 4), followed by a subsequent corresponding chapter about the TEM, which serves as a curated repository of digital health applications (Chapter 5). The document concludes with the outcomes of the first iteration of co-validation sessions held with end-users, summarising participant feedback (Chapter 6) and highlighting implications for the next phase of training refinement and pilot deployment (Chapter 7).

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2 The COMFORTage Training Programme

2.1 Overview and objectives

The COMFORTage Training Programme has been developed as a core component of the project's mission to address the multifaceted challenges of frailty and dementia in ageing populations through proactive, person-centred strategies. Grounded in a holistic and preventive approach, the programme is designed to support older adults (whether healthy, frail, or living with dementia), informal caregivers, and healthcare professionals (HCPs) in acquiring the knowledge, skills, and confidence needed to meaningfully engage with self-management strategies and digital health technologies, with a particular focus on managing age-related health risks and everyday living challenges.

At its core, the programme aims to strengthen health and digital health literacy (DHL), enhance self-awareness and self-management competencies and foster the adoption of healthy lifestyle behaviours. **Health literacy** plays a pivotal role in enabling individuals to make informed decisions, engage effectively with care services, and maintain overall well-being—especially in the context of frailty and dementia (Nakamura et al., 2025). In today's digitally transforming healthcare landscape, **digital health literacy (DHL)**—the ability to seek, understand, evaluate, and apply digital health information—has become equally essential (Dong et al., 2023). Strengthening these competencies empowers individuals to navigate digital care environments with confidence, make informed health choices, and engage in personalised care pathways that reflect their needs, values, and daily lives (Hladek et al. 2024; Li et al., 2024). **The COMFORTage Training Programme is specifically designed to support this empowerment by enhancing both health and digital health literacy through inclusive, needs-based, and context-sensitive educational content.**

A defining feature of the COMFORTage Training Programme is its co-creation and co-validation process, which actively engages older adults, informal caregivers, and HCPs across multiple healthcare contexts. This participatory methodology ensures that the programme is grounded in lived experiences, user capabilities and contextual needs. Input from existing literature and consultation with clinical experts, developers, social scientists and educators has further enriched the programme, ensuring its scientific rigour, practical relevance and pedagogical integrity.

The programme is comprised of a training curriculum, which serves as its central educational structure. This curriculum addresses not only the health-related dimensions of ageing, dementia and frailty, but also the psychological, social and technological aspects that affect quality of life and care. It offers a multidimensional learning journey, tailored to the needs, digital abilities and preferences of each user group, as well as of each individual learner (personalized learning pathways).

The delivery of the curriculum is supported by two complementary digital platforms, the TET and the TEM. Together, TET and TEM provide the digital infrastructure for the training programme, offering participants access to interactive thematic modules, practical learning activities and curated digital health applications. Specifically:

- **The Training and Educational Toolkit (TET)** is a digital learning environment offering modular, accessible content that is thematically structured and adapted to different user profiles. It promotes self-paced learning through real-world scenarios, visual content, and interactive

self-assessment exercises, helping participants build confidence in navigating digital health technologies.

- **The Training and Educational Marketplace (TEM)** is a curated catalogue of digital health applications, organised to help users discover relevant tools, read community evaluations, and apply practical solutions in the context of frailty and dementia prevention, self-care, and caregiver-patient communication.

The COMFORTage Training Programme is designed as an online, open-access resource, ensuring broad availability, low-threshold entry, and inclusiveness across diverse European healthcare contexts. The learning experience is sought to be modular, flexible and progressive, allowing individuals to advance at their own pace and according to their level of digital familiarity. The content is intentionally intuitive, visual and multi-lingual with localised adaptations, making it accessible for users with varying cognitive, linguistic and educational backgrounds.

The key objectives of the Training Programme are to:

- **Empower** older adults to actively manage their health, especially in the context of frailty or cognitive decline, and remain socially connected and empowered through digital means.
- **Support** informal caregivers by offering accessible, practical learning and strategies to reduce burden, support their caring persons, as well as digital health tools for coordinated care.
- **Equip** healthcare professionals with innovative content, methodologies and digital health tools to support older adult empowerment and community-based care.
- **Bridge** gaps in digital confidence and data protection awareness, enabling users to use digital health tools safely and effectively.
- **Promote** equity and accessibility, particularly for underserved populations with limited exposure to health services (cultivating the culture of using digital health services).

By explicitly addressing health literacy and digital health literacy, the training programme responds to the growing need for individuals to confidently navigate a complex and evolving health information landscape. It supports informed decision-making, promotes strategies for early identification of risk, and encourages the development of personalised, meaningful care pathways.

Ultimately, through its inclusive, interdisciplinary, and user-centred approach, the COMFORTage Training Programme contributes to reducing digital exclusion, enhancing individual and community self-efficacy, and reinforcing the continuity of care across formal and informal networks.

2.2 Population segmentation

A core strength of the COMFORTage Training Programme lies in its user-centred, evidence-informed design, supported by a robust population segmentation methodology. Recognizing the diversity in digital familiarity, health literacy and care-related needs across project's target audiences, the segmentation process was developed to inform content adaptation, personalize user journeys and enhance the inclusivity and impact of the training programme's educational interventions.

The segmentation strategy was developed from the early phases of the training programme design, following a 10-step evidence-based process (Lynn et al., 2007; Scheufele et al., 2022), adapted to

the needs of the training programme, beginning with a clear objective: to enable the tailoring of the training content in TET and digital health tools in TEM, based on the actual profiles, preferences and learning capabilities of the COMFORTage end-users. A multidisciplinary team of social scientists, clinicians, designers and educators worked together to define and refine the segmentation strategy and apply it across the training programme.

Key steps in this process included:

- **Target group definition:** Older adults (healthy, frail, or living with dementia), informal caregivers and HCPs, as well as researchers, aligned to the user groups of the COMFORTage project.
- **Initial profiling using personas:** The foundation of segmentation came from the personas developed in deliverable D2.4 – "People-Centred System Design I", which provided rich, qualitative insights into different user profiles and their needs, behaviours, motivations and challenges, focusing more on the digital health literacy aspect.
- **Literature-informed enrichment:** The profiles and training needs, derived from the D2.4 – "People-Centred System Design I" personas, were subsequently enhanced with evidence from recent literature, covering digital health readiness, care contexts, sociodemographic traits, behavioural and psychosocial determinants of health.
- **Segmentation criteria:** The literature search led to a list of segmentation criteria, including health and digital health literacy levels, motivation to prevent or manage frailty and dementia, sociodemographic and health-related factors, caregiving responsibilities and technology confidence and trust.

2.2.1 COMFORTage user profiles (in relation to the training programme)

The following user group profiles emerged from the iterative, mixed-method process. Three primary end-user groups were identified: older adults, informal caregivers and healthcare professionals (HCPs). Additionally, a secondary user group was recognized, comprising researchers and other interested stakeholders. While this secondary group will not directly participate in the programme, they will have access to its materials and tools, enabling them to benefit from its outcomes—such as developing new digital health solutions or informing policies related to care pathways. Each group represents a distinct training pathway within the COMFORTage Training Programme:

A. Older Adults

This group includes both healthy older individuals interested in prevention, self-awareness, as well as frail older adults or people living with dementia, who may already experience age-related cognitive or physical decline, and they are interested in self-management strategies. Profiles range from healthy and digitally literate, socially active older adults to isolated individuals with minimal experience in health management and using technology. Their training needs focus on building confidence in managing their health, improving access to credible information and learning to use digital tools for prevention, communication and daily health self-management tasks.

B. Informal Caregivers

This group represents family members, friends, or other informal carers who provide unpaid care to older adults. They often mediate communication between their caring persons and health

systems and play a key role in encouraging the use of digital health tools. Their health literacy and digital skills vary widely, and their training priorities include stress management, coordinated care techniques, digital health literacy to support others and learning to find reliable resources. Many face emotional strain and time limitations, requiring accessible, concise and empathic content.

C. Healthcare Professionals (HCPs)

This group includes a wide range of professionals working in geriatric, community-based or primary care (e.g., doctors, nurses, physiotherapists, psychologists, social workers). While many are clinically trained, their levels of familiarity with digital health methods vary. Their role in the training programme is both as learners and as facilitators of older adult empowerment. Their training covers the integration of digital health tools in practice, risk communication, person-centred care and how to support both older adults and informal caregivers in navigating health information and services.

D. Researchers

Although not primary end-users of the training programme, researchers involved in ageing, public health and digital innovation are considered as a secondary user group. They benefit from access to training resources and platform insights to inform their work in evidence generation, intervention design, development of digital health tools and evaluation. Their engagement also ensures that the programme remains aligned with current research, ethics and innovative practices across Europe. Within the training programme context, they will be able to propose new tools to be included in the digital health repository of TEM, as well as to recommend further training materials and activities to be integrated in TET.

2.2.2 From segmentation to personalisation

The proposed segmentation model has informed the design, delivery and navigation pathways of the educational curriculum and its digital platform. It allows for:

- Modular access based on personalised baseline and user profiles (onboarding questionnaire to identify literacy levels, needs and preferences) (Faux-Nightingale et al., 2022).
- Adaptive recommendations in the TET educational content and activities, as well as to the TEM catalogue, matched to user roles, interests and digital health maturity.
- Scaffolding of content complexity across all TET modules, making content challenging enough based on the user's digital and health literacy capacity.
- Greater engagement and retention, as users feel represented, respected and supported throughout their learning experience.

Indeed, a key differentiating factor in the personalisation process is the assessment of digital health literacy and health literacy levels, which serve as the foundation for categorising users into two main learning pathways: Beginner and Intermediate (Del Pilar Arias López et al., 2023; Yuen et al., 2024). These literacy-based tiers shape the tone, depth and delivery format of the training materials (both theory and practical activities). For example, the beginner-level content includes simplified language, strong visual support and step-by-step guidance, while intermediate content features more complex scenarios, self-reflection activities and curated resources for deeper exploration (Table 1). A core difference between these pathways is also the digital dimension: beginner users

may need initial guidance in using basic digital tools or platforms, while intermediate users are typically more familiar with online environments and can confidently navigate interactive modules, engage in peer forums, or explore external digital health applications via the TEM. This segmentation ensures that digital onboarding, engagement and learning are tailored to each user's real capabilities and comfort levels, avoiding cognitive overload and fostering self-efficacy.

Table 1: The COMFORTage Training Programme Learning Pathways

USER GROUP	BEGINNER PATHWAY (Experiential, practical, foundational)	INTERMEDIATE PATHWAY (Strategic, scenario-driven, technology-integrated)
Older Adults	• Focus on day-to-day health self-care routines • Practical strategies for recognising symptoms and managing conditions • Emphasis on lived experiences and peer discussion • Use of simplified language, visual cues, and hands-on examples	• Self-management through the use of digital tools (e.g., setting reminders, accessing online portals) • Realistic health scenarios and experiences • Exploration of related digital health apps in TEM
Informal Caregivers	• Focus on emotional support, caregiving routines, and stress management • Communication strategies and physical care techniques • Use of checklists and practical tip sheets for care tasks	• Digital support strategies for coordinated care (e.g., calendar sharing, teleconsultation) • Case-based scenarios using apps and platforms • Access to curated digital tools in TEM with review options • Coaching modules for digital caregiving
Healthcare Professionals	• Introduction to patient empowerment concepts and health literacy barriers • Strategies for clear communication and care coordination	• Integration of digital health tools in clinical routines • Support for patient digital empowerment (training, mentoring) • Experiential learning with real-world cases and the use of tools and apps from TEM

	• Peer learning and empathy-building activities	

The adaptation of content difficulty to real-world user capacity allows the COMFORTage Training Programme to enhance learning outcomes, support confidence-building and reduce frustration or disengagement—particularly for vulnerable, low-literate and first-time users. This layered, person-centred design contributes to reducing digital exclusion, promoting equitable access to care information, and ensuring autonomous engagement with digital health environments across Europe.

2.3 Pedagogical approach and teaching methods

As previously mentioned, the COMFORTage Training Programme employs an inclusive, evidence-based pedagogical approach tailored to the needs of its diverse targeted user groups. The programme is structured around two foundational learning frameworks—***the 5E Instructional Model*** *and* ***Kolb's Experiential Learning Cycle***—and is enriched with principles drawn from adult education, cognitive psychology, and social learning theory (Bybee, 2019; Kolb, 1984). This blended educational strategy enables not only the acquisition of confidence and basic skills for digital health literacy, but also encourages motivation, empowerment and sustained application in everyday life (self-management).

2.3.1 Theoretical foundations

A. The 5E Instructional Model

Developed initially within science education, the 5E Instructional Model (*Engage, Explore, Explain, Elaborate, Evaluate*) offers a constructivist, scaffolded (step-by-step and guided) learner-centred pathway for building new knowledge and skills (Figure 1). It guides learners through a meaningful, interactive learning journey that emphasises Inquiry-based exploration, reflection and application. Particularly well-suited for adults with varying cognitive and physical capacities, the model helps reduce cognitive overload by structuring content into manageable phases and by encouraging active participation, repetition and feedback (Ruiz-Martín & Bybee, 2022).

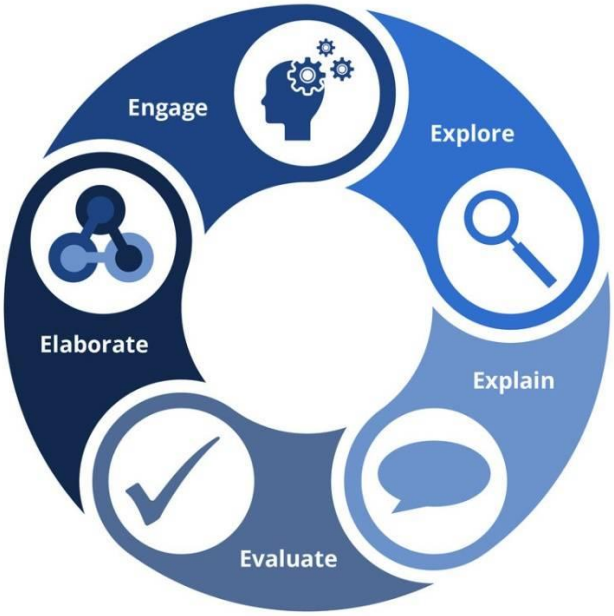

Figure 1: The 5E Instructional Model
(Source: https://www.continuous-learning-institute.com/about)

In the COMFORTage training programme context, the 5E Model is especially effective for the primary end-users— older adults, individuals with frailty or mild dementia, and informal caregivers —as it facilitates a low-pressure, curiosity-driven environment where learning is both structured and experiential. Specifically:

- **Engage** activates prior knowledge and taps into emotional relevance, setting the stage for learning.
- **Explore** encourages tactile interaction with digital tools in a stress-free setting, allowing learners to try without fear of failure.
- **Explain,** facilitators guide the meaning-making process through clear visuals, verbal cues and simplified content.
- **Elaborate** supports the transfer of new skills into real-world tasks, while
- **Evaluate** includes self-reflection, supported feedback and positive reinforcement.

This iterative flow not only supports cognitive reinforcement and digital fluency but also nurtures emotional safety, autonomy and a sense of achievement.

B. Kolb's Experiential Learning Cycle

Kolb's cycle emphasises learning as a continuous process grounded in experience. The cycle includes four stages: *Concrete Experience, Reflective Observation, Abstract Conceptualisation, and Active Experimentation (*Kolb, 1984) (Figure 2). Learners are not only doing, but also thinking, interpreting and adapting what they've learned to new real-world scenarios (everyday living conditions).

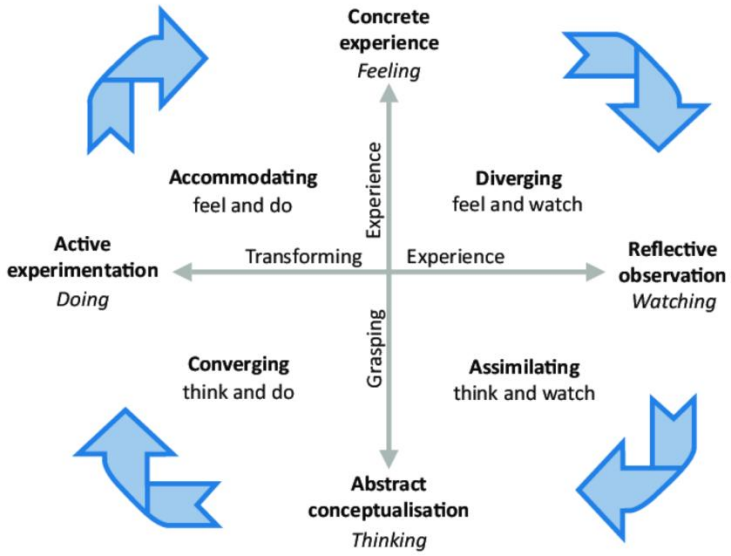

Figure 2: Kolb's Experiential Learning Cycle
(Source: https://educationaltechnology.net/kolbs-experiential-learning-theory-learning-styles/)

For COMFORTage participants, this model is compelling. It supports different learning preferences—whether visual, hands-on, social, or reflective—and enables individuals to progress at their own pace, while reinforcing skill mastery through both action and reflection. A typical session may involve using a digital health device (concrete experience), discussing feelings or difficulties with peers or facilitators through the forum (reflection), linking this experiential learning activity to broader health self-management or communication benefits (conceptualisation) and applying the new skill at home, addressing real-life needs (experimentation).

C. Supplementary Learning Theories

Several learning theories further strengthen our pedagogical design (Shams & Seitz, 2008):

- **Andragogy (Adult Learning Theory)** underlines the value of self-directed, experience-based and goal-oriented education. It informs our approach to building confidence and relevance into every health or digital skill exercise, ensuring learners understand *why* they are doing something.
- **Social Learning Theory** highlights the importance of learning through observation and peer interaction. Participants learn not just from instructors, providing the modules, but also from one another, with more confident learners modelling digital tasks and encouraging group members (through group discussions and forums hosted in the TET platform).
- **Cognitive Stimulation and Errorless Learning** are essential, especially for older adults with mild cognitive decline. Strategies include visual cues, repetitive actions, and guided steps that foster positive reinforcement and successful task completion, eliminating trial-and-error frustration (Kruse et al., 2017).
- **Multi-Sensory and Embodied Cognition** approaches are used to integrate visual, auditory and tactile experiences, which support memory retention and engagement.

Examples include using large tablets with voice interaction, watching videos and physically imitating gestures, attitudes etc.

- **Constructivist and Humanistic Pedagogy** ensures that learning is emotionally supportive and personally meaningful. Sessions are structured around participants' stories, needs and preferred learning rhythms.

2.3.2 Experiential and practical teaching methods

To support the implementation of the above learning frameworks and theories, the COMFORTage training programme applies a series of carefully selected methods tailored to different end-user learning needs (Kapp, 2012). The following table (Table 2) summarises some of the methods that will be explored during the training programme delivery.

Table 2: List of Proposed Experiential and Practical Teaching Methods

METHOD	DESCRIPTION	END-USERS	EXPECTED OUTCOMES	WAYS OF DELIVERY
Peer Learning and Mentoring	Learning in pairs or groups with mutual support and modelling.	Older adults, caregivers	Builds trust, reduces fear of failure, and encourages cooperative learning.	Community forum
Real-Life Scenarios	Practice-based activities such as telehealth video calls, online pharmacy searches, nutritional tips, and memory exercises.	All users	Fosters immediate, relevant skill application.	Experiential learning and practical activities
Guided Reflection	Structured self-assessment, either written (i.e. open-ended self-reflection questions) or structured (i.e.quizzes)	All users	Encourages knowledge acquisition and confidence in learning progress.	Self-assessment quizzes
Visual Aids and Infographics	Use of simple charts, images and diagrams to aid retention.	Older Adults (especially, individuals with mild cognitive decline/ frailty)	Reduces mental load, anxiety and supports step-by-step learning.	Videos, images, inforgraphics

Role-Play and Simulation	Realistic enactment of digital healthcare, self-management strategies or communication tasks.	Older adults, caregivers	Prepares participants for real interactions with digital health tools or self-management strategy application.	Experiential learning and practical activities
Simplified Interfaces	Devices adapted with large icons, audio support or low-complexity screens.	Older adults	Improves accessibility and engagement.	Accessibility features and multiple ways of content delivery
Gamification Elements	Small rewards, verbal praise, or printed acknowledgements.	All users	Makes learning enjoyable, reinforces motivation and helps memory retention.	Quizzes, Awards, Puzzles
Multi-Sensory Inputs	Combining touch, vision, and hearing in exercises.	Older adults, (especially in dementia-friendly settings)	Improves attention and long-term retention.	Multiple ways of content delivery (text, videos, images etc)

2.3.3 Benefits for each user group

The promoted pedagogical design ensures that each end-user group benefits in ways that are contextually appropriate, emotionally supportive and practically empowering. Specifically:

A. Older Adults (Including persons with Mild Cognitive Decline/Dementia, frailty)

Older adults benefit from structured, low-pressure learning environments that allow them to develop digital confidence at their own pace. The proposed approach of the COMFORTage training programme validates their past experiences, while building new skills without inducing stress or embarrassment. Enhanced health and digital health autonomy contribute directly to improved quality of life, enabling communication with family and clinicians, access to health services and social participation.

B. Informal Caregivers

Caregivers often undertake multiple roles and responsibilities without having the necessary training and skills. The COMFORTage training provides them with the digital health skills and disease management strategies necessary to support their loved ones, while also empowering them to manage their own health and well-being. Through experiential learning and peer exchange, caregivers gain emotional validation and actionable digital health tools and other resources, such as managing online appointments or accessing caregiver support communities.

C. Healthcare Professionals

Healthcare professionals participating in the training programme improve their digital health literacy and empathy, as well as their capacity to guide older adults and caregivers through self-management and digital health support processes. The training includes simulation-based learning that mirrors real-life interactions with older adults or family members, equipping professionals with a person-centred approach to digital health communication and support. This contributes to more inclusive and effective care delivery, tailored to individuals' needs.

D. Researchers and Training Facilitators (Educators)

The structure and documentation of the COMFORTage training programme and pedagogy also enable researchers to evaluate learning outcomes through qualitative and quantitative means. Reflection logs, task completion rates and observed behaviours offer rich data for analysis. Moreover, the framework is designed to be replicable and transferable across different cultural or healthcare contexts, allowing researchers to scale, adapt or deepen the impact of the intervention.

2.3.4 Potential risks and challenges

While the COMFORTage pedagogical approach is designed to be inclusive, adaptive and evidence-based, risks and challenges may arise during its implementation in the training programme. One key concern is variability in digital readiness among participants—some older adults may have little to no prior experience with technology, leading to initial resistance or anxiety, despite supportive scaffolding. Similarly, cognitive fatigue, especially among individuals with mild dementia or frailty, can limit the duration and intensity of learning sessions, requiring facilitators to maintain a flexible and responsive pace. Over-reliance on peer support may inadvertently place pressure on more digitally confident participants or caregivers, potentially affecting the learning curve dynamics, if not managed sensitively. Technical limitations, such as lack of reliable internet access or unfamiliarity with digital devices (smartphones, tablets), may also hinder progress. Moreover, privacy concerns, and emotional responses to perceived failure can impact learners' engagement and confidence. Addressing these challenges requires proactive facilitation strategies, continuous feedback loops and a strong emphasis on creating a safe, non-judgmental learning environment tailored to each participant's needs.

In the following sections, we will explore how the pedagogical approach outlined above will directly inform the design and development of training materials for the COMFORTage training curriculum under the TET. Drawing on the 5E Model and Kolb's Experiential Learning Cycle, these materials will be carefully tailored to meet the unique needs of each target group—older adults, informal caregivers, and healthcare professionals—while also facilitating cross-group activities that foster shared learning and empathy. Furthermore, the pedagogical framework will be strategically combined with the TEM's digital health tools and resources to enhance awareness, encourage self-management and bridge the gap between theory and real-world application. This alignment ensures that each learning module not only transfers theoretical knowledge but also builds confidence

through practical engagement with self-management strategies and digital health technology in meaningful, real-life contexts.

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3 Training Curriculum Development

To inform the development of the COMFORTage training curriculum, a rapid literature review was conducted as a foundational step. Its primary aim was to identify training needs, persistent knowledge gaps, implementation challenges, and emerging opportunities in the domains of health literacy and digital health literacy, with a dedicated focus on older adults affected by frailty and dementia.

This review functioned as an evidence-mapping exercise, systematically consolidating data on the behavioural, cognitive, social, and structural factors that shape individuals' ability to access, comprehend, and apply health-related information—both in traditional and digital environments. In doing so, it enabled the categorization of critical thematic areas such as frailty and dementia literacy, digital health inclusion disparities, and the role of community-based practices in supporting literacy and self-management capacities.

In addition to peer-reviewed academic sources, the desk research encompassed existing educational programmes and resources targeting older adults' self-management of chronic diseases and digital empowerment. This broader scope allowed for the integration of best practices and lessons learned from previously implemented initiatives. Training materials aimed at caregivers and healthcare professionals were also reviewed and considered, primarily as supportive mechanisms for empowering older adults, who are the primary beneficiaries of the COMFORTage platform.

Based on the literature review and existing training programmes' search outcomes, the COMFORTage training curriculum was structured into discrete thematic areas to be covered in distinct educational modules, each designed to cultivate specific competencies and address knowledge gaps. These areas specifically respond to the cognitive and physical vulnerabilities commonly observed in ageing populations, while also tackling digital health challenges and issues related to trust in technology that older adults frequently encounter. The literature review directly informed the selection and organization of content areas, ensuring that the resulting curriculum is relevant, user-responsive, and grounded in current research insights. This approach supports the development of a training ecosystem that is accessible, inclusive, and tailored to the real-world experiences and needs of older adults and their support networks.

Following the identification of core training needs through the literature review, a targeted survey was developed and circulated among experts involved in the COMFORTage clinical use cases. The aim was to co-validate and expand the preliminary list of proposed thematic areas by incorporating interdisciplinary input from healthcare professionals, social scientists, and technical experts. This internal consultation served as a critical preparatory step to refine the curriculum framework, — prior to initiating co-validation workshops with end-users.

The following sections present the methodology and outcomes of the literature review and explains how these findings informed the expert survey, which ultimately shaped the final set of curriculum themes.

3.1 Literature review

3.1.1 Methodology

To inform the development of the COMFORTage Training Curriculum, a rapid literature review was conducted (November 2024-January 2025), following an evidence-mapping approach. The review

aimed to identify training needs, knowledge gaps, challenges, and opportunities in the fields of health literacy and DHL, with a particular emphasis on older adults living with frailty or dementia, as well as their caregivers and HCPs.

The search strategy was based on querying multiple electronic databases, including PubMed (including MEDLINE results), Cochrane Library, Scopus, and Google Scholar. A combination of free-text terms was used, such as: *"educational program older adults," "health literacy educational material," "digital health literacy," "training needs older adults,"* and *"digital empowerment dementia"*. Boolean operators (AND/OR) were applied to combine keywords across thematic clusters (health literacy, digital skills, ageing, education, technology use). A representative example of the applied search string included:

(("health literacy"[MeSH Terms] OR "health knowledge"[All Fields] OR "health communication"[All Fields] OR "patient education"[All Fields] OR "health information access"[All Fields] OR "health comprehension"[All Fields] OR "eHealth literacy"[All Fields]) AND (("digital literacy"[MeSH Terms] OR "digital literacy"[All Fields] OR "digital skills"[All Fields] OR "technology adoption"[All Fields] OR "digital divide"[All Fields] OR "e-literacy"[All Fields] OR "eHealth"[All Fields]) AND (("elderly"[MeSH Terms] OR "elderly"[All Fields] OR "aged"[All Fields] OR "older adults"[All Fields] OR "aging population"[All Fields] OR "senior citizens"[All Fields] OR "persons with dementia"[All Fields] OR "cognitive impairment"[All Fields] OR "memory impairment"[All Fields] OR "dementia"[MeSH Terms])) AND (("training"[MeSH Terms] OR "training"[All Fields] OR "education"[All Fields] OR "capacity building"[All Fields] OR "educational needs"[All Fields] OR "training gaps"[All Fields] OR "content delivery"[All Fields] OR "training delivery"[All Fields] OR "learning needs"[All Fields] OR "instructional design"[All Fields] OR "educational strategies"[All Fields]))))) Filters: in the last 10 years, English.

The search was limited to English-language studies published between January 2015 and April 2025, focusing on international interventions and frameworks. Due to time and resource constraints, a rapid review method was adopted (Grant & Booth, 2009), with the first 100 results screened per database and per search query.

Inclusion criteria:

1. Studies focused on health literacy or digital health literacy in older adults (healthy or with cognitive/physical decline).
2. Interventions involving educational content delivered via technology or digital tools.
3. Research examining demographic and psychosocial factors influencing digital or health literacy.
4. Evidence-based programs and training platforms targeting older adults, caregivers, or healthcare professionals.
5. Studies evaluating usability, accessibility, and quality criteria (e.g., reliability, engagement, adaptability) of digital education platforms.
6. Needs assessments relating to health or digital engagement for older adults and their support networks.

Exclusion criteria:

1. Studies not involving educational interventions or literacy components.

2. Results with inconclusive findings regarding effectiveness.

To complement the academic literature, an additional desktop research was performed to identify existing EU-funded and international educational platforms targeting older adults. EU databases such as CORDIS and the Funding & Tenders Portal were searched using terms like *"frailty education platform," "dementia digital literacy," "digital health education older adults,"* and *"EU health literacy projects."* Notable EU-funded examples include the PERSSILAA (O'Caoimh et al., 2017) and My-AHA (Madureira et al., 2020) projects, which emphasized technology-supported active ageing and early detection of frailty. The mHealth-AD Erasmus+ project (https://mhealth-ad.eu/) focused on mobile solutions for dementia self-management.

Moreover, international platforms such as Senior Planet (https://seniorplanet.org/), GetSetUp.io (https://www.getsetup.io/), UCLA Dementia Care (https://www.uclahealth.org/medical-services/geriatrics/dementia), and the Alzheimer's Foundation of America Online Academy (https://training.alz.org/) were reviewed for content structure, accessibility, and user engagement features. These sources offered insight into best practices in inclusive design, modular learning, and caregiver support integration.

3.1.2 Search outcomes

A growing body of research underscores the increasing integration of digital technologies into the healthcare routines of older adults, offering tools that enhance clinical outcomes and reduce access-related limitations (Mace et al., 2022). However, many older individuals continue to encounter challenges related to the interplay between digital literacy and health literacy—a dynamic that significantly impacts their ability to self-manage chronic conditions and engage with timely interventions (Shi et al., 2024; Chen & Wang, 2025). Bridging this emerging digital health divide requires dedicated educational strategies and support mechanisms that build both digital competencies and health knowledge. In response, researchers from Medical Physics and Digital Innovation Lab of Aristotle University of Thessaloniki conceptualized and structured a specialized educational platform around key thematic domains, with a strong focus on personalization, inclusivity, and accessibility. This approach aims to empower older adults—especially those with cognitive or physical vulnerabilities—to confidently and effectively navigate digital health resources and actively participate in their own care.

Moreover, the desk research regarding existing training programmes and digital platforms of health literacy, showed that PERSSILAA emphasized nutrition, cognition, and physical function in training modules, integrating gamified elements and decision-support systems for personalized intervention, both face-to-face and remote. It highlighted challenges such as cultural and digital literacy barriers, and the need for scalable, inclusive, and people-centred approaches. This platform did not provide support for existing health issues of older adults such as frailty, dementia etc or different digital literacy levels, as well as does not include supportive people of older adults for the maximum intervention results (O'Caoimh et al., 2017). My-AHA similarly addressed healthy aging through comprehensive health monitoring and personalized recommendations but remained focused on using monitoring tools in pre-frailty stages rather than educational content on self-management of health to those with established conditions (Madureira et al., 2020). In contrast, dementia-specific projects such as the Erasmus+ mHealth-AD project target the self-management of individuals with mild dementia. The project developed a multilingual e-training platform that includes educational content, digital tool catalogues, self-management guides, and a digital serious

game. It also recognized the need for simplified, user-friendly interfaces and personalized training to address technological anxiety among older adults.

Drawing on a wide range of recent peer-reviewed studies (n=381) and comparative analyses of existing digital health solutions, the literature review offered valuable insights into the behavioural, cognitive, social, and systemic factors that influence individuals' ability to access, understand, and apply health information—both in offline and digital contexts. These findings facilitated the identification and categorization of critical themes, including dementia and frailty literacy, digital inclusion disparities, and the importance of organizational and community-based practices in fostering literacy development and self-care capabilities. By consolidating this evidence, the review directly informed the development of a targeted and responsive training framework, tailored to the specific profiles, capacities, and barriers experienced by each stakeholder group—older adults, caregivers, and healthcare professionals. This evidence-based approach ensures that the educational platform is not only theoretically grounded but also practically relevant and adaptable to real-world contexts.

3.1.3 Training needs and gaps across stakeholder groups

Based on the findings of the literature review, the following key needs and gaps were identified across stakeholder groups, highlighting critical areas for intervention in both health literacy and digital health literacy.

A. Health Literacy

In terms of health literacy, the literature review reveals specific needs, gaps, and barriers faced by different COMFORTage target populations, focusing on the primary end-users, as well as strategic opportunities for future training design (Table 3).

Older Adults

Older adults—particularly those over the age of 75, living alone, or managing chronic or cognitive conditions—face limited health literacy, which in turn impacts their ability to manage medications, understand health information, or maintain independence in daily life (Chesser et al., 2016; Liu et al., 2020). Health literacy has been shown to mediate the relationship between frailty and quality of life, yet structured training interventions on this connection remain underexplored (Hanipah et al., 2024).

Furthermore, dementia literacy - *knowledge, beliefs, and skills that enable individuals to recognize, understand, manage, and prevent dementia* (Smith et al., 2023)- is notably low among both older adults and their support networks, limiting their capacity to recognize symptoms, seek timely support, or adapt to evolving care needs (Kaup et al., 2014; Dominguez et al., 2021). Frailty prevention and lifestyle management knowledge is also lacking, particularly regarding the role of nutrition, physical activity, and social engagement (Sagong et al., 2024).

Key barriers include cognitive decline, physical impairments (e.g., hearing or vision loss), and socioeconomic disparities that limit access to health information and services. Older adults from migrant backgrounds face further difficulties due to language, system complexity, and lack of culturally relevant health education (Hanipah et al., 2024).

Informal Caregivers

Caregivers, though often digitally active, may lack formal health literacy training, affecting their ability to interpret medical instructions, recognize adverse events, or support self-care for frail or cognitively impaired relatives (Lorini et al., 2023). The literature shows that low health literacy in caregivers is linked to poorer patient outcomes and higher stress levels. Caregivers also struggle with nutrition-related tasks, such as meal planning, identifying healthy dietary options, and managing behavioural eating challenges in dementia care (Volkert et al., 2015).

These gaps are exacerbated by the emotional and physical demands of daily caregiving, limited access to structured training, and restricted communication with health professionals or access to digital health platforms (Meier-Diedrich et al., 2024).

Healthcare Professionals

While HCPs possess clinical expertise, they often receive insufficient training in communication and health education for older patients (Zhu et al., 2024). Organizational health literacy remains underdeveloped across many institutions, with limited guidelines or structured programs to support HCPs in adapting complex health information for populations with low literacy.

Time constraints, lack of system-wide standards, and low prioritization of health education as part of clinical workflows limit their capacity to implement or promote health literacy interventions (Kayser et al., 2022; Brainin & Neter, 2023). Thus, there is a significant opportunity to train HCPs in clear communication, shared decision-making, and the use of person-centred strategies to empower older patients and their families.

Table 3: Matrix of Health Literacy Training Needs, Gaps, Barriers, Opportunities by User Group

USER GROUP	TRAINING NEEDS	GAPS	BARRIERS	OPPORTUNITIES/BEST PRACTICES
Older Adults	Understanding diagnoses, medications, nutrition, self-management of chronic diseases, dementia/frailty literacy (Chesser et al., 2016; Liu et al., 2020; Hanipah et al., 2024)	Materials not tailored for low literacy (Kayser et al., 2022; Brainin & Neter, 2023) or cognitive decline; limited contextualization	Cognitive impairment, hearing/vision loss, limited prior education, mistrust in health info	Use of visuals, storytelling, peer educators, audio support, printed material alternatives (Hanipah et al., 2024)
Informal Caregivers	Care coordination, medication support (Lorini et al., 2023), communicating with HCPs	Overlooked in formal training curricula; mostly unsupported in remote care responsibilities	Emotional burden, time constraints, lack of formal health training (Lorini et al., 2023)	Toolkits with simple guides, caregiver communities, modular mobile resources

	(Meier-Diedrich et al., 2024), health decision-making (Volkert et al., 2015)	(Lorini et al., 2023)		
Healthcare Professionals	Communicating effectively with frail/demented patients (Zhu et al., 2024), shared decision-making, assessing health literacy	Few tools to assess or tailor communication; lack of cross-sector training (Kayser et al., 2022; Brainin & Neter, 2023)	Time pressure, lack of training in plain language or digital skills (Zhu et al., 2024; (Kayser et al., 2022; Brainin & Neter, 2023)	Health literacy screening tools, short online CME modules, co-training with caregivers and patients

B. Digital Health Literacy

The rise of digital health tools introduces both opportunities and disparities. Digital health literacy (DHL) has emerged as a critical competency in navigating modern care environments. However, across all the primary stakeholder groups, training gaps remain substantial (Table 4).

Older Adults

Older adults exhibit significant variation in digital health literacy, with disparities influenced by age, education level, marital status, and prior exposure to digital technologies (Liu et al., 2020; Shi et al., 2024). For example, those aged 60–69 are significantly more capable of using online health information than those over 80 (Zibrik et al., 2015; Shi et al., 2024). Low DHL is strongly associated with reduced access to health services, lower quality of self-care, and increased risk of frailty or delayed diagnosis (Chesser et al., 2016).

Challenges include technological anxiety, physical limitations (e.g., dexterity or vision loss), and complex platform interfaces (Heart & Kalderon, 2013; Chesser et al., 2016). Older adults often lack interactive learning tools tailored to their pace, needs, and literacy level (Mackert et al., 2016). Despite this, opportunities exist through voice assistants, gamified platforms, and modular learning formats—particularly when embedded in supportive community settings like senior centers, or intergenerational learning programs (Peek et al., 2014).

Informal Caregivers

Caregivers require dual digital competence: navigating health data and facilitating access for the older adult. Literature highlights that caregivers often experience limited access to digital health platforms, compounded by lack of training in security, privacy, and data interpretation (Verma et al., 2021). Despite these challenges, caregivers are frequently in a position to mediate and model digital use within the household.

There is untapped potential to train caregivers as digital health literacy facilitators, equipped to support older users while also enhancing their own digital competence. Programs combining e-

learning modules, scenario-based case studies, and peer-led mentoring show promise in closing this gap (Doorenbos et al., 2020).

Healthcare Professionals

Healthcare professionals require not only personal DHL but also the capacity to teach, simplify, and guide older adults and caregivers through digital health environments. However, literature shows that systematic DHL training is rarely integrated into medical or nursing education (Ferguson et al., 2018; Doorenbos et al., 2020). There is a lack of institutional norms guiding user-centered design, health app co-evaluation, and accessible communication practices (Ferguson et al., 2018).

Opportunities lie in establishing interdisciplinary digital literacy training, involving HCPs, designers, and community stakeholders. Empowering HCPs as digital inclusion champions can improve patient trust, engagement, and outcomes—especially when combined with policies that embed DHL in institutional planning (Arcury et al., 2018).

Table 4: Matrix of Digital Health Literacy Training Needs, Gaps, Barriers, Opportunities by User Group

USER GROUP	TRAINING NEEDS	GAPS	BARRIERS	OPPORTUNITIES/ BEST PRACTICES
Older Adults	Using apps/websites, video consultations, managing patient portals, e-prescriptions, device literacy (Liu et al., 2020; Shi et al., 2024)	Lack of accessible and personalized digital content; few dementia-friendly tech solutions Heart & Kalderon, 2013; Chesser et al., 2016)	Low confidence, lack of access, motor/visual limitations, fear of making mistakes (Liu et al., 2020; Shi et al., 2024)	Hands-on workshops, simple interface design, repetition-based learning, caregiver involvement (Mackert et al., 2016)
Informal Caregivers	Supporting tech use for others, troubleshooting, using remote monitoring tools, navigating digital health (Doorenbos et al., 2020)	Resources often not tailored for caregiver roles; no formal training pathways (Verma et al., 2021)	Juggling roles, digital overload, lack of support (Verma et al., 2021)	Mobile-first content, FAQs, short video demos, integrated caregiver help guides (Doorenbos et al., 2020)
Healthcare Professionals	Using e-health systems, advising patients on tools, integrating tech into care plans	Limited training in patient-facing digital coaching; focus often on system use not empowerment	Lack of time, burnout, limited updates on digital health innovations	Practical webinars, eLearning with simulations, tech literacy checklists for consultations (Arcury et al., 2018;

	(Arcury et al., 2018)	(Doorenbos et al., 2020)	(Ferguson et al., 2018)	Doorenbos et al., 2020)

3.2 Online survey and proposed thematic areas

Based on the needs and gaps identified through the literature review and the stakeholder-specific training matrices, a preliminary list of thematic areas for the COMFORTage training curriculum was developed. These areas were structured to address core competencies in health literacy and DHL, tailored to the distinct profiles of primary end-user groups. To ensure the relevance, completeness, and feasibility of this content framework, a targeted internal survey was designed and circulated among COMFORTage pilot partners via the EU Survey platform in February 2025 (see ANNEX I).

The survey aimed to validate the proposed curriculum content, assess its alignment with practical experiences from local contexts, and identify any gaps or opportunities for refinement. Each COMFORTage pilot site submitted one response, indicating agreement or disagreement with each thematic area, proposing additional topics, and identifying areas where their teams could contribute subject matter expertise.

This internal validation exercise served a dual purpose: (1) to co-validate the training curriculum prior to engagement with end users, and (2) to mobilize internal expertise from across the consortium to support content development and co-creation. The overwhelming majority of partners confirmed the relevance of the proposed themes for older adults, caregivers, and healthcare professionals. The finalised thematic list is presented in Figure 3.

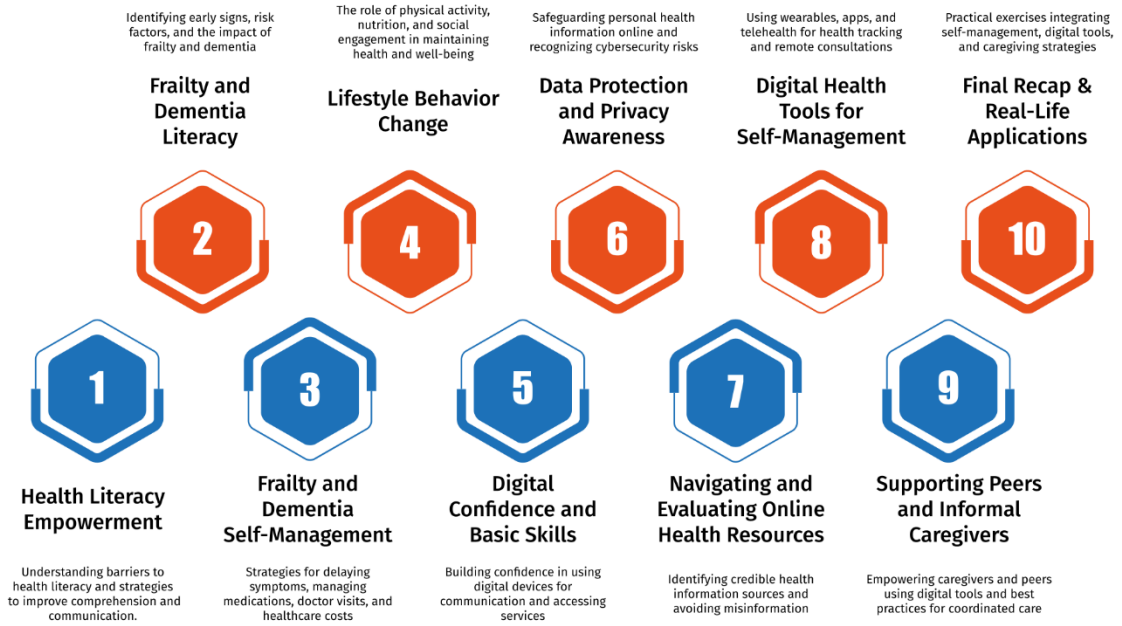

Figure 3: Proposed thematic areas

3.3 Final thematic areas for the training curriculum

Pilot partners' feedback also emphasized the importance of tailoring the curriculum to match the diverse learning needs, capacities, and starting points of different user groups. Several partners underlined that, for the training to be engaging and impactful, it should adopt a tiered pedagogical approach that accommodates varying levels of digital confidence and health literacy. Moreover, population segmentation based on learner profiles—such as beginner vs. intermediate users—was identified as crucial to foster both accessibility and motivation. In response to this insights, in April 2025, the COMFORTage consortium refined the training structure to follow a progressive learning path, organized around four key phases: (1) Onboarding and foundational literacy (a1 & a2), (2) Frailty and dementia literacy (b1B & b2B), (3) Self-management and lifestyle empowerment (c1B & c2B), and (4) Intermediate-level training incorporating digital tools, peer learning, and caregiver integration (b1I, b2I, c1I & c2I).

The final curriculum, as presented in Figure 4, introduces parallel modules at both beginner and intermediate levels. Each thematic area (e.g., frailty, dementia, digital literacy) includes differentiated content and learning methods—from theory-based sessions and peer coaching to digital simulations and toolkits for caregivers. In addition, learners are supported in navigating personalized learning pathways depending on their initial skill levels. For instance, a Beginner learner (beginner in both health and digital literacy) is encouraged to follow the full curriculum from foundational concepts to intermediate self-management tools. In contrast, an intermediate learner (intermediate in one or both domains) may skip to advanced content while revisiting core modules as refreshers.

Figure 4: Final themes

This learner-centred, modular approach ensures that the COMFORTAGE curriculum is not only evidence-based and comprehensive but also adaptable to real-world learning profiles, thereby maximizing its usability and long-term impact.

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Specifically, the characteristics of the end users are defined in Table 5 and the progressive learning pathways are shown in Figures 5 and 6. There are 4 different pathways that the end users may follow according to their profiles.

Table 5: Learning Pathways

Health Literacy	Digital Literacy	Learning Pathway
Beginner	Beginner	Figure 5
Intermediate	Beginner	Figure 5
Beginner	Intermediate	Figure 6
Intermediate	Intermediate	Figure 6

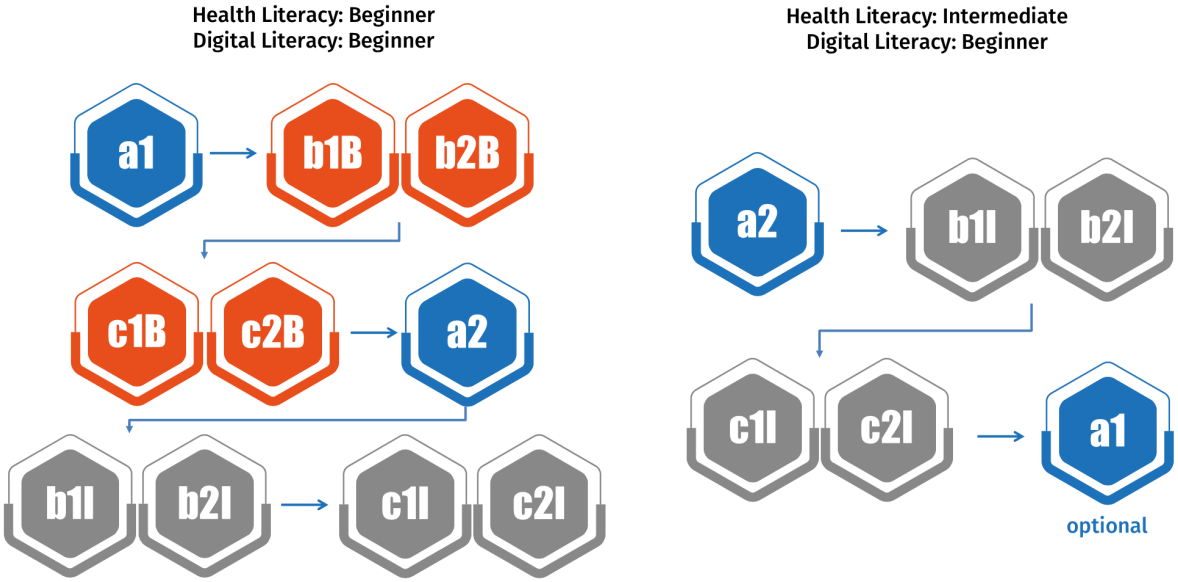

Figure 5: Transitions of learning paths I

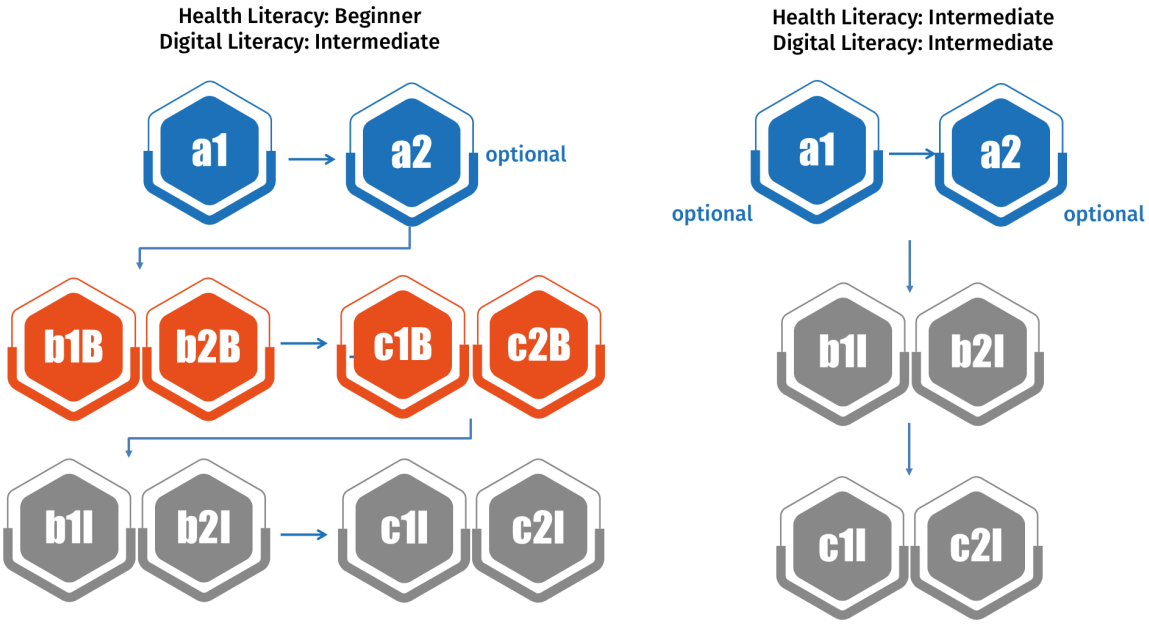

Figure 6: Transitions of learning paths II

4 Training & Educational Toolkit (TET)

4.1 Overview of TET

The goal of the TET is to facilitate the delivery of the developed Training Curriculum through a system that is accessible, personalized, and engaging for all the different end-users' groups (older adults, caregivers and healthcare professionals), ensuring that content is effectively adapted to their specific needs and capabilities. Key features of this system include accessibility features, such as aids for the visually impaired; cognitive accessibility elements, such as simplified educational materials, small information bundles and multimedia formats; gamifying features of award points system; self-paced learning, to be able to pause and return; and progress tracking reports for engagement metrics (Table 6). Tracking reports and logging will also be used to gather metrics, analyse and determine areas of improvement in order to reevaluate both the learning materials and the platform itself.

4.2 Main functionalities

Table 6 shows the main functionalities developed within TET to support the aim and scope of this component. The information includes the functionality, the features and a small description of each feature. The functionalities were designed in order to meet the requirements set in D2.1 - "State of the art and requirements analysis I".

Table 6: Main functionalities of TET

FUNCTIONALITY	FEATURES	DESCRIPTION	REQUIREMENTS OF D2.1
Simplified User Interface and Accessibility	Simplified Navigation	Large icons, intuitive menus, and minimal text for easy access by users with cognitive decline or limited digital skills. Clear and consistent navigation paths, with minimal steps to access different sections.	REQ-10-1 REQ-10-2
	Integrated accessibility features for multimedia content and Accessibility widget for accessible browsing experience	Accessibility standards, such as the Web Content Accessibility Guidelines (WCAG) Compatibility with screen readers, providing text alternatives for images, and enabling keyboard navigation Allowing users to adjust text size, color contrast, etc	New requirement to be added in D2.2

	Language Options	Multi-lingual support with plain language explanations and visual aids.	REQ-10-2
Personalized Learning Paths	Role-Based Dashboards	Access is provided based on the category of the role of each user entering the platform.	REQ-10-3
	Self-Paced Learning	Users can complete modules at their own pace, with the ability to pause and return anytime since the platform can track learner's progress.	REQ-10-5
	Guided learning paths	A diagnostic quiz is provided for leaners when they first login to determine the starting level Restrict access to direct them to the appropriate training material based on activity completion or scores (or groups)	REQ-10-3
Gamification	Gamified elements	Gamify and track users' progress as they complete activities. Assign points or awards based on their interaction and completion rate.	New requirement to be added in D2.2
Interactive and Multimedia Content	Videos and Animations	Short, engaging videos	REQ-10-3
Assessment tools	Quizzes and assessment tools	Simple interactive quizzes or health literacy puzzles to reinforce learning and allow self-reflection	REQ-10-6
Community tools	Forum	A space to engage learners to chat and share ideas	New requirement to

			be added in D2.2
Progress Tracking and Feedback	Reporting Learning Analytics	Tracks progress, completion rates, and quiz results to adapt future content, engagement metrics. Reporting gives insights to user behaviour to identify areas of improvement and the measure the effectiveness of the training curriculum	REQ-10-5
Security and Privacy	Data Protection	GDPR-compliant handling of learning data, especially important for vulnerable populations.	REQ-10-4
	Role-Based Access Control	Ensures appropriate access levels depending on the user's role.	REQ-10-4

4.3 First TET prototype

The educational platform developed utilizes the Moodle Learning Management System (Moodle LMS) (https://moodle.org/). Learning Management Systems are environments specifically designed for educational purposes to deliver accessible content. The first prototype, launched in April 2025, is built around accessibility, interactivity, and engagement. Designed to enhance the learning experience, it incorporates a simplified interface and gamified elements to support older adults and other types of learners. The platform is located at https://comfortage-tet.med.auth.gr and can be accessed from any portable or desktop device. To be able to test the prototype platform as an end-user (specifically from the view of older adults) the following credentials can be used:

Username	comfortage-test
Password	Comfortage-T3T

4.3.1 Prototype screens

The homepage, accessible prior to login, features promotional materials and a scrollable catalogue of available courses (Figure 7).

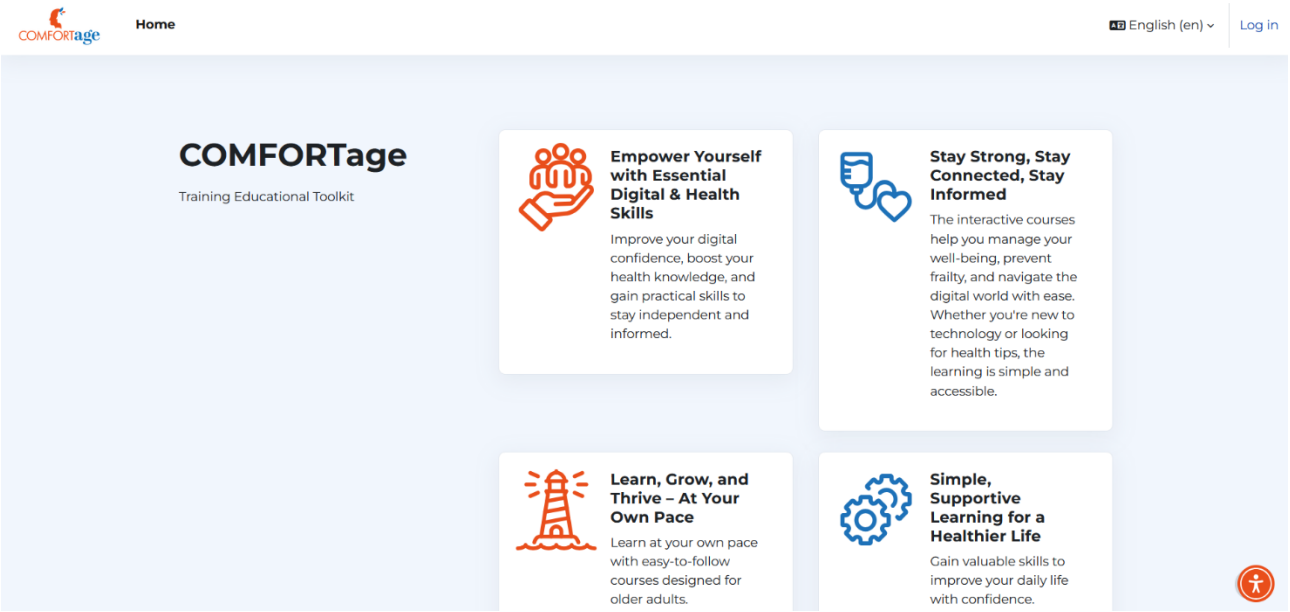

Figure 7: The homepage

A dual login page to support users within and outside of COMFORTage project (Figure 8).

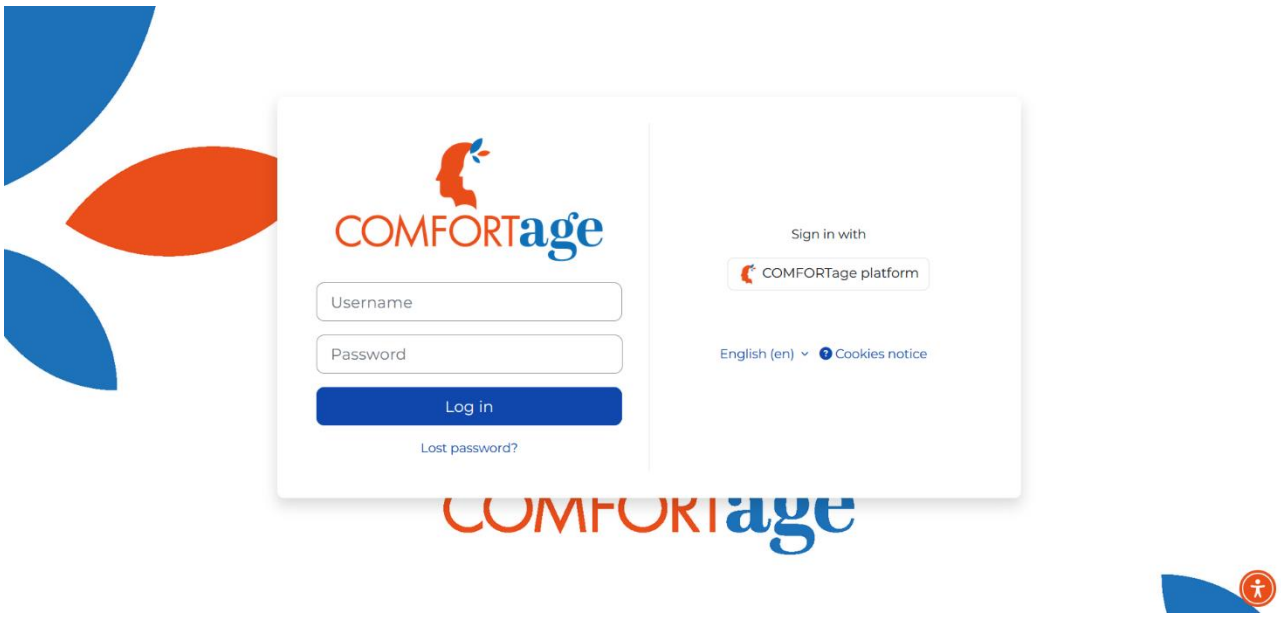

Figure 8: Login page

Upon navigating to the login page, users enter their credentials to access the "My Courses" page, which lists all enrolled courses. Access to the profile and the notification of each user is made available (Figure 9).

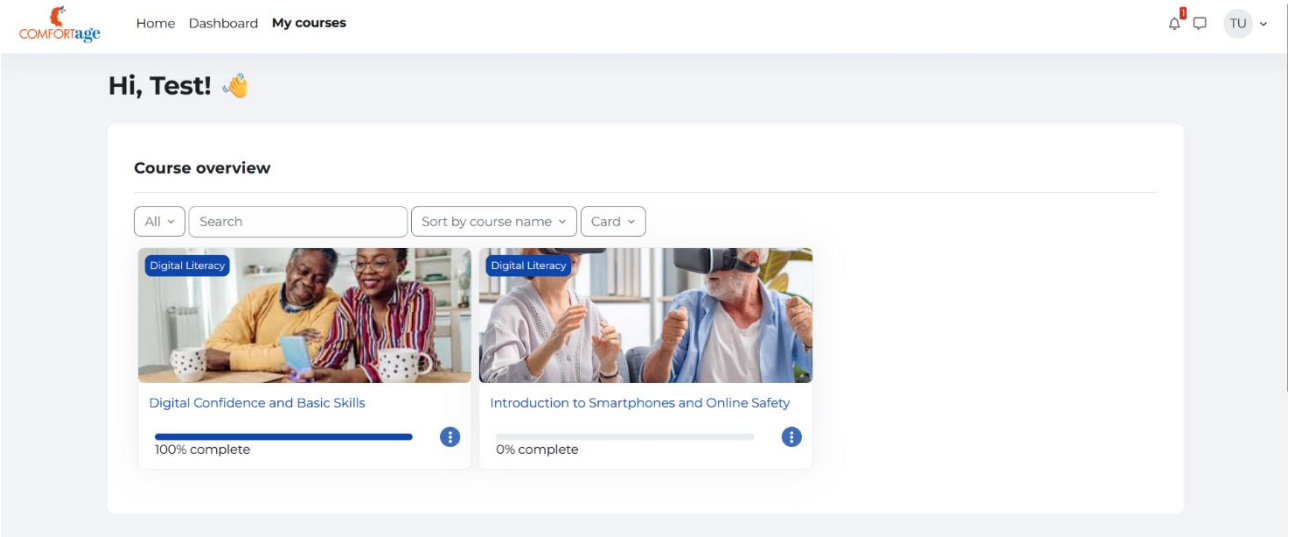

Figure 9: 'My Courses' page

Within each course, the material is organized into modules, each tackling a different topic, allowing intuitive navigation through assignments, resources, videos and several other activities (Figure 10).

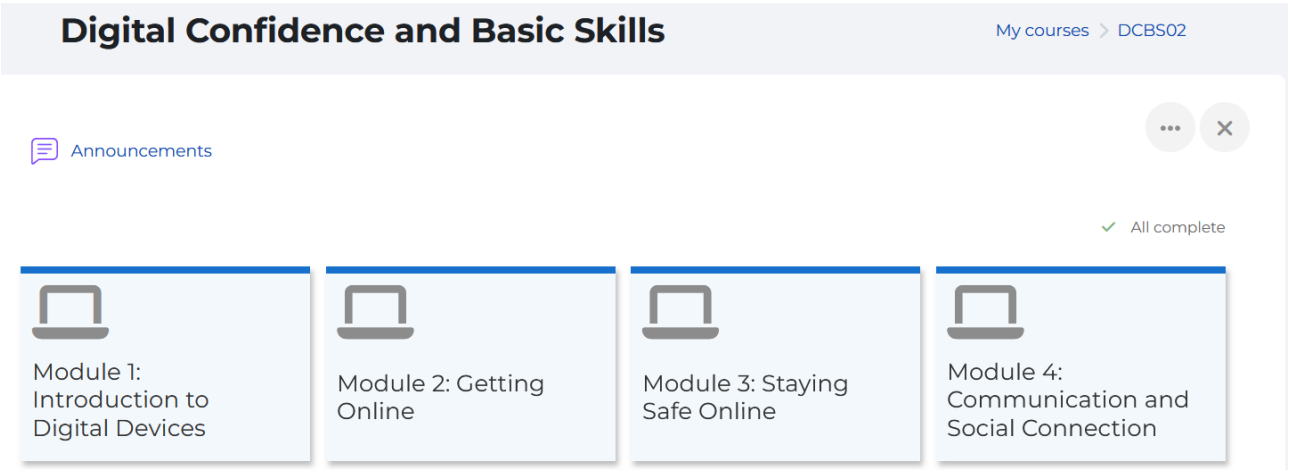

Figure 10: A typical course page

The platform includes an accessibility widget offering features such as contrast adjustments and cursor enhancements to support diverse user needs (Figure 11).

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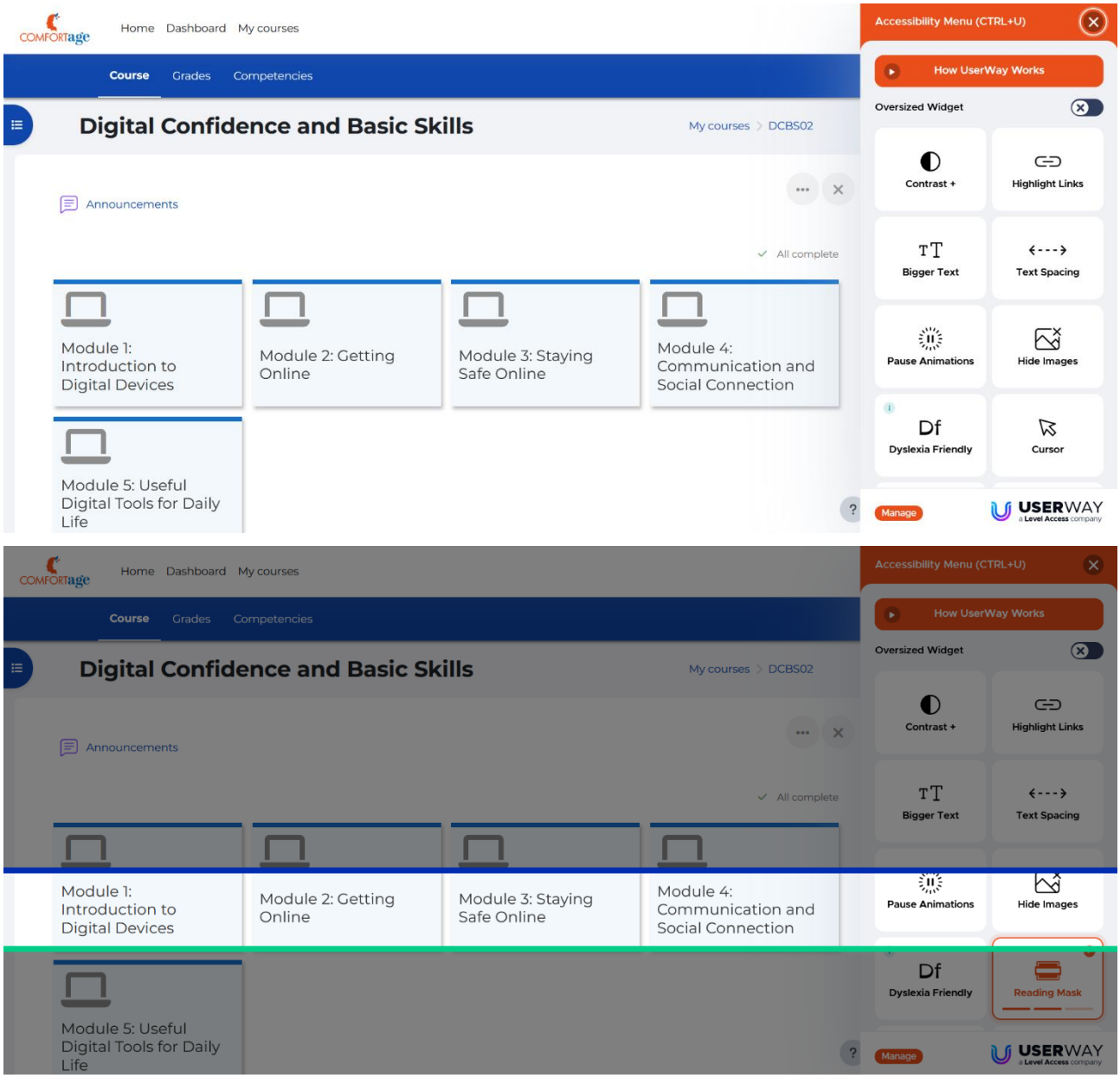

Figure 11: The accessibility widget

Activities are in place inside the course, including reading material, interactive elements, such as videos, and quizzes, keeping track of users as they progress (Figure 12).

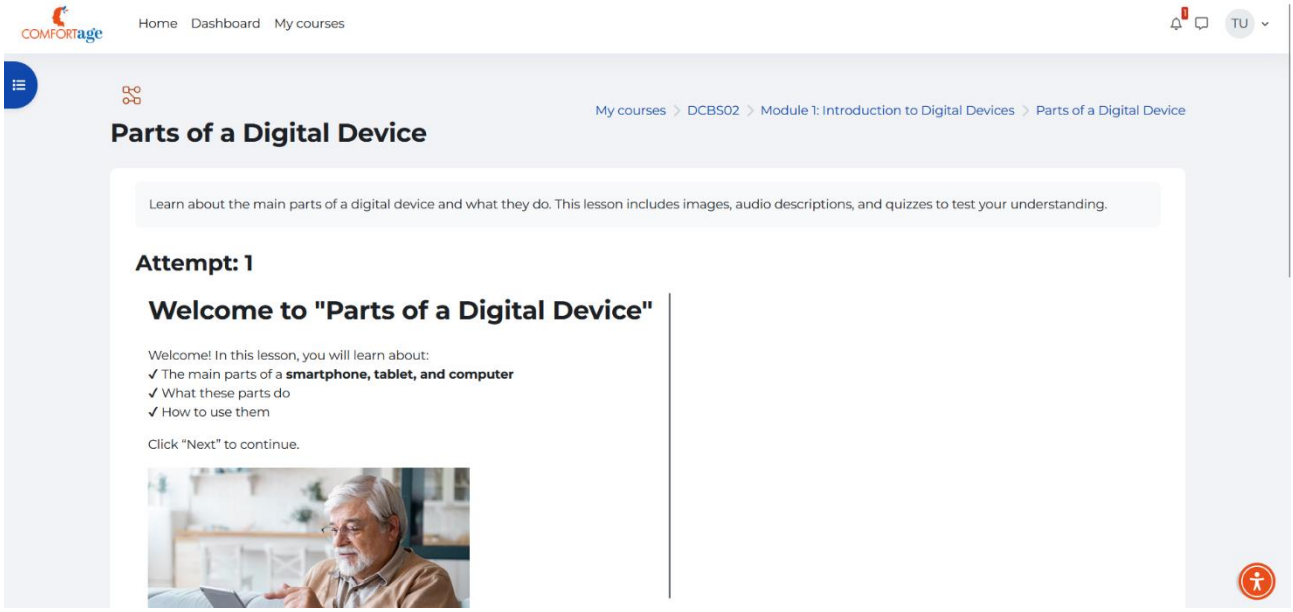

Figure 12: A demo activity

Additionally, the platform incorporates a gamified system, where users earn points for participation, receive notifications when advancing levels (Figure 13) and have a leaderboard that promotes engagement through friendly competition (Figure 14).

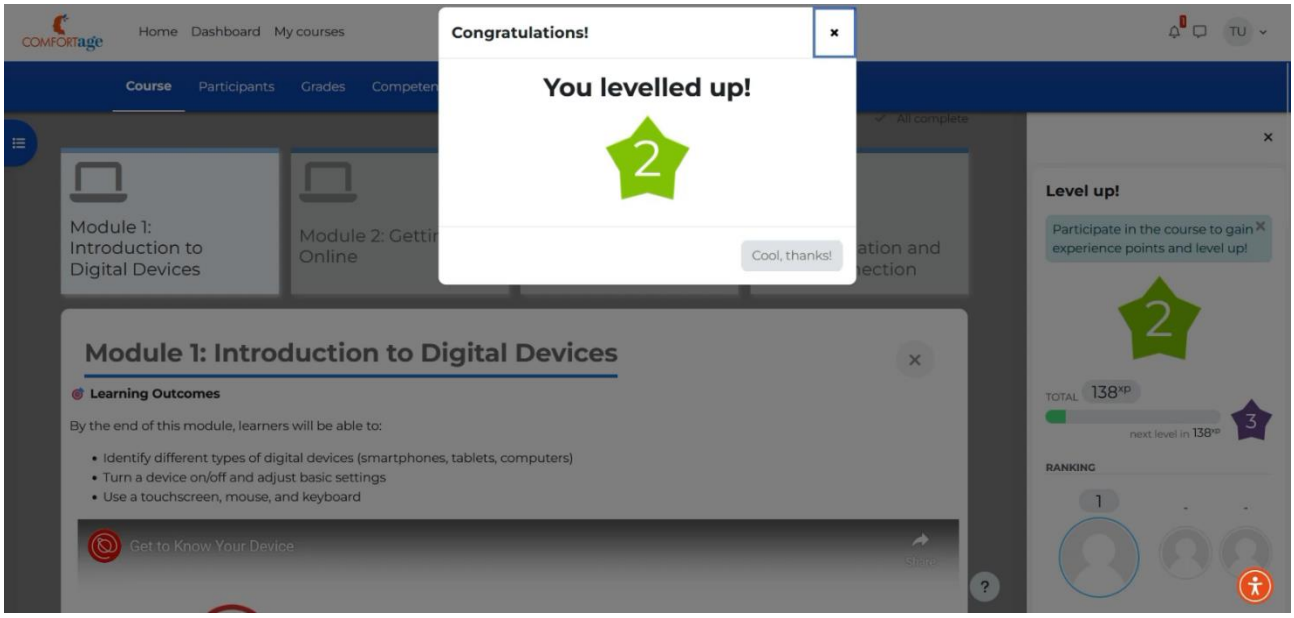

Figure 13: Levelling up by awarding points

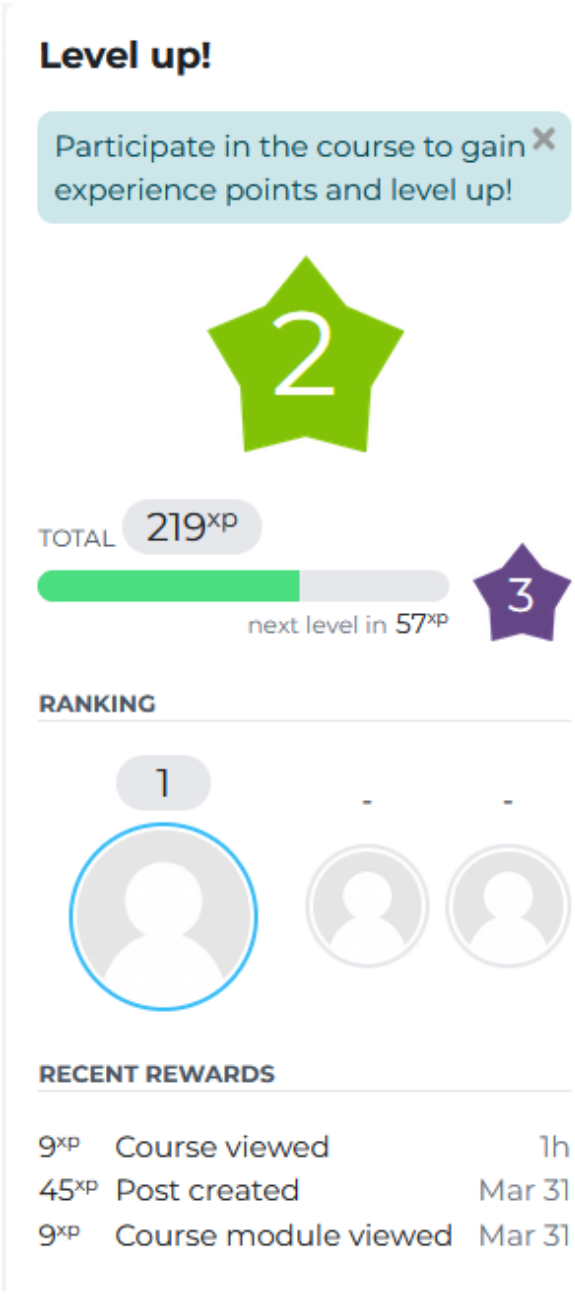

Figure 14: Track user awarded points

5 Training & Educational Marketplace (TEM)

5.1 Overview of TEM

The TEM is a web-based platform developed within the COMFORTage project to support informed decision-making and promote digital health literacy among older adults and those involved in their care. TEM serves as a curated, online, accessible catalogue of digital applications, educational tools, and resources related to frailty and dementia.

Rather than hosting these tools directly, TEM provides comprehensive metadata, descriptive summaries, user guidance, and verified links to external resources. It acts as a centralized reference point where users can explore a broad range of technologies tailored to prevention, monitoring, and management of frailty and cognitive decline.

The primary users of TEM are older adults, who can use the platform to discover suitable tools that support independent living and healthy ageing. Caregivers, healthcare professionals, and researchers are secondary users, benefiting from the repository's structured information to identify innovative solutions, support care delivery, and inform further research.

TEM is designed with usability and accessibility at its core, ensuring that the platform is intuitive and navigable for users with varying levels of digital proficiency. By facilitating easy access to trusted digital resources, TEM contributes to the broader goals of COMFORTage in fostering active, personalized, and digitally supported ageing.

5.2 Description of main functionalities

The TEM will be a dynamic and user-friendly online platform that supports the discovery and informed use of digital tools and applications related to frailty and dementia. Its design will cater to the needs of both primary users (older adults) and secondary users (caregivers, healthcare professionals, researchers), while ensuring accessibility, personalization, and trustworthiness. To promote continued engagement and long-term use, TEM will incorporate features that encourage adherence, such as tailored recommendations, user-friendly navigation, and the ability to bookmark or track preferred tools. By fostering a sense of relevance, ease, and reliability, TEM aims not only to guide users in finding appropriate digital solutions but also to support their sustained use over time.

As in TET, the functionalities were designed in order to meet the requirements set in D2.1 (State of the art and requirements analysis I). Planned Features and Functional Requirements are as in the following table (Table 7):

Table 7: Main functionalities of TEM

FUNCTIONALITY	FEATURES	DESCRIPTION	REQUIREMENTS OF D2.1
User Registration and Authentication	User Registration and Login	Users will have the option to register and log in to TEM. While login will not be mandatory, it will be integrated with the	REQ-11-1

		COMFORTage platform to enable a seamless experience and allow for personalized content and features.	
UI navigation and interaction	Catalogue of Applications	The platform will host a curated catalogue of digital tools and applications. Each entry will include essential metadata such as the tool's name, description, intended use, target audience, and links to external sources.	REQ-11-3
Searching and filtering	Advance filtering options	Applications will be organized into categories based on a structured ontology aligned with the thematic areas of the COMFORTage project. This will support consistent classification and improve discoverability.	New requirement to be added in D2.2
	Search Functionality	Users will be able to search for tools using a robust search mechanism, with filters based on keywords, categories, user roles, and other relevant parameters.	New requirement to be added in D2.2
Application suggestion mechanism	Personalized Recommendations	The platform will provide personalized recommendations, both through integration with the TET and via a standalone recommendation engine embedded in TEM.	REQ-11-4

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Rating and wishlist	Favourites and Wish List	Registered users will be able to save tools to a favourites list or wish list for easy access and future reference.	New requirement to be added in D2.2
	Rating and Feedback System	Users will be able to rate the tools and provide feedback, contributing to a community-driven evaluation process that enhances the relevance and reliability of the catalogue.	New requirement to be added in D2.2
Content Management System	Catalogue Enrichment and Moderation	The catalogue will be regularly enriched with new tools and resources. Criteria for app inclusion will be defined to ensure consistency, quality, and relevance. A designated moderator will oversee the content submission and approval process.	New requirement to be added in D2.2
Accessibility and Usability	Accessibility	TEM is being developed having in mind accessibility features so as to be usable by people with disabilities.	REQ-11-5
Security and Data Privacy	Secure login and data privacy	Users can navigate through TEM without logining in. In that case no data will be stored. If they opt to login to access their personal profile, then this will be made through the main COMOFRTage platform.	REQ-11-6

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5.3 Categories of TEM's applications

To ensure that the applications included in the TEM are organized in a meaningful and user-friendly way, a structured categorization framework is currently under development. This framework will support users in easily navigating the catalogue and identifying tools that best match their needs and preferences.

The categorization approach is being shaped through a Delphi study involving a panel of experts from across the COMFORTage consortium. The Delphi method is a structured, iterative process used to gather input and reach consensus among experts through multiple rounds of surveys. It is particularly well-suited for complex topics where evidence is limited and expert judgment is essential.

In the context of TEM, the Delphi study aims to identify and validate a set of categories that will serve as the basis for the platform's underlying ontology. These categories will reflect key aspects such as the function of the application, and the thematic focus.

The results of the Delphi study will inform the final categorization scheme, ensuring that it is comprehensive, relevant to real-world needs, and aligned with the broader objectives of the COMFORTage project. Once finalized, this categorization framework will be implemented within TEM to enhance the usability, searchability, and overall value of the platform.

Currently the first round of the Deplhi study has been completed. 34 participants evaluated the proposed categories. To evaluate consensus among participants in the Delphi survey, several statistical measures were applied: median, interquartile range (IQR), percentage agreement, and standard deviation (SD). These were calculated for each proposed category and subcategory following Round 1.

The median was used to assess the central tendency of ratings. The IQR, which measures the dispersion of the middle 50% of responses, was calculated by identifying the 25th percentile (Q1) and 75th percentile (Q3) of the ordered responses, and computing the difference between them: $IQR=Q3-Q1$

Given the use of a 1–10 Likert scale, which allows for broader response variability, a more flexible threshold of IQR ≤ 3 was adopted to define consensus. This approach is consistent with prior Delphi studies employing wider rating scales, where a stricter threshold (e.g., IQR ≤ 2) may fail to capture meaningful agreement (Diamond et al., 2014; Niederberger & Spranger, 2020).

In addition to IQR, percentage agreement was calculated as the proportion of participants who rated an item within the 8–10 range, reflecting strong endorsement. A threshold of ≥70% agreement was used to indicate consensus, following common Delphi guidelines (Hasson et al., 2000). This measure complements the IQR by highlighting agreement even when a small number of outliers increase the spread of responses.

Standard deviation (SD) was also calculated for each item to assess variability. While not used as a primary determinant of consensus, lower SD values (e.g., <1.5) were considered to indicate greater clustering of responses.

An item was considered to have achieved consensus if it met either of the following criteria:

- IQR ≤ 3 and median ≥ 8, or
- ≥70% of responses in the 8–10 range

The outcome of this proceedure led to having several categories being approved as concensus was reached. For the ones that were not reached, these categories were revised, omitted or better explained. Currently, the second round of the Delphi study is ongoing.

The categories and subcategories agreed by experts are:

- **Technology type**
  - Mobile Apps
  - Web-based Platforms
  - AI-Powered Tools
  - Virtual Reality (VR) and Augmented Reality (AR)
  - Telehealth Systems
  - Assistive Technologies
- **Functionality**
  - Cognitive Assessment and Training
  - Frailty Monitoring
  - Caregiver Support
  - Symptom Management
  - Disease Education and Awareness
  - Medication Management
  - Emergency and Safety
  - Lifestyle Management
- **Condition stage**
  - dementia
  - mild cognitive impairment
- **Evaluated in clinical trials**
  - clinically validated
- **Language support**
- **Accessibility guidelines**
  - visual accessibility
  - cognitive and learning accessibility
  - auditory accessibility

The full list of suggested categories and the results of the analysis can be found in Annex II.

5.4 First TEM prototype

The first prototype of the TEM was launched in April 2025 (available at: https://comfortage-tem.med.auth.gr/) has been developed, marking an important milestone in the implementation of the platform. This initial version provides a functional demonstration of the core concept and is intended to serve as a foundation for further development and stakeholder feedback.

The prototype includes an indicative catalogue of digital applications relevant to frailty and dementia (Figure 15). Users can explore the catalogue using basic search and filtering capabilities, which allow them to browse tools based on preliminary categories and keywords (Figure 16). While the content is currently illustrative, it demonstrates the envisioned user experience and overall structure of the platform.

This early version lays the groundwork for the integration of more advanced features in subsequent phases, such as personalized recommendations, user accounts, ratings, and the full ontology-based categorization currently under development. It also provides a basis for internal review, usability testing, and iterative refinement in collaboration with project partners and end users.

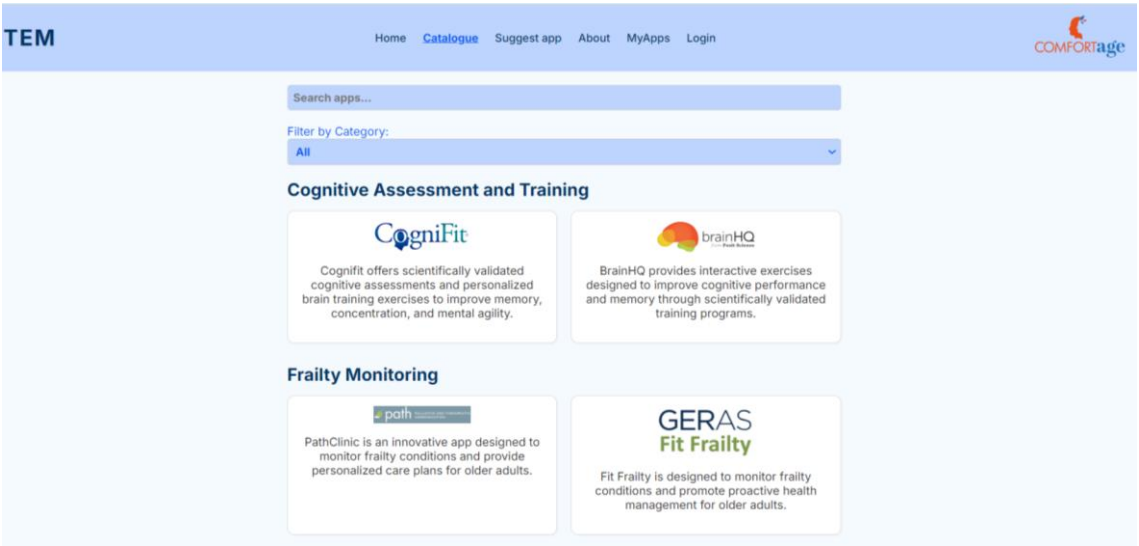

Figure 15: The main page of TEM

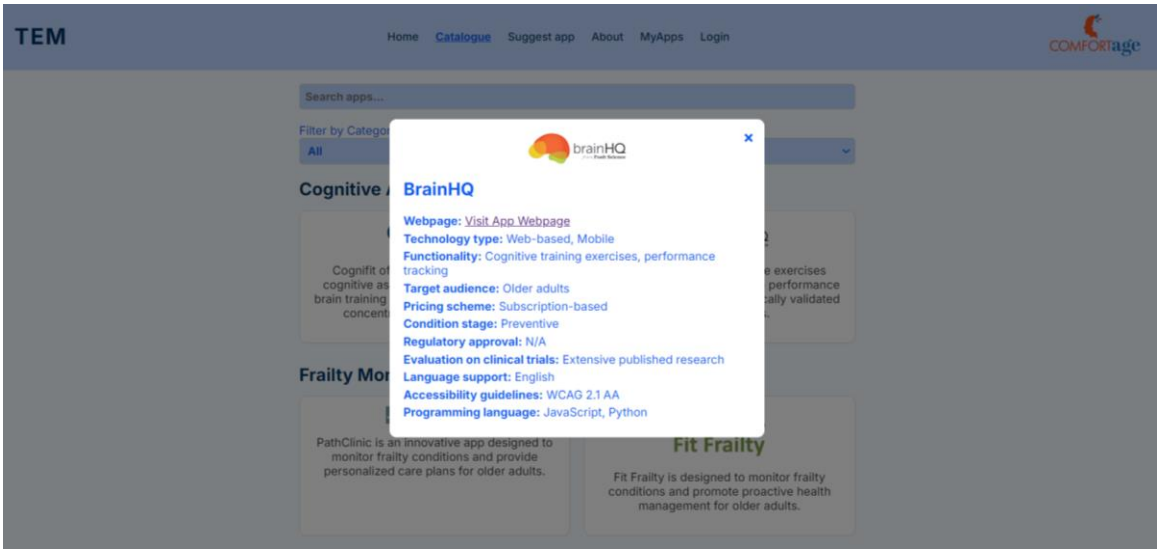

Figure 16: Detailed description of a particular app

6 Co-Validation Sessions with end-users

The first iteration of co-validation sessions of the COMFORTage Training Programme—including its educational curriculum, the Training & Educational Toolkit (TET), and the Training & Educational Marketplace (TEM)—were carefully designed to engage end-users in a structured, participatory process aimed at assessing the relevance, usability, accessibility and engagement potential of the proposed digital learning ecosystem. These sessions were conducted, between May-June 2025, across five COMFORTage pilot sites—AUTH (Greece/Thessaloniki), ANA (Romania), CING (Cyprus), INTRAS (Spain), and VSTE (Slovenia), while also a sixth session was held by DEPAN partner (Greece/Athens), with the active involvement of the project's primary stakeholder groups: older adults, informal caregivers and healthcare professionals.

Specifically, each workshop involved 8–10 participants, selected to reflect the diversity of the COMFORTage end-user ecosystem: older adults (e.g. healthy, frail, or living with dementia), informal caregivers (e.g. family members or friends), and healthcare professionals (e.g., geriatricians, nurses, physiotherapists, psychologists). The sessions were facilitated by technical moderators, member of the partner hosting the activity, responsible for providing technical guidance, presenting the digital platforms and capturing structured observations. Local facilitators (one to two per site) coordinated recruitment, ensured the flow and timing of the session, followed the moderated discussions and collected participant feedback throughout.

6.1 Co-validation workshop structure and methodology

Each co-validation session lasted approximately 120 minutes and followed a pre-defined, structured agenda. This included an introduction to the COMFORTage project, an overview of the training curriculum's thematic areas, and demonstrations of the TET and TEM prototypes through pre-recorded videos. Pre-recorded video demonstrations were used in this initial co-validation iteration to ensure a consistent, controlled presentation of the prototypes. It is noted that in future iterations, participants will have the opportunity to interact with the platforms through hands-on exploration. Moreover, to ensure consistency across all sites, a shared explanatory script accompanied the demo videos, enabling local moderators to present the content using the same terminology and framing, regardless of language or context.

These presentations were followed by guided group discussions, using harmonized question sets designed to assess the relevance of the content, the usability of the platforms, and the overall user experience.

A shared methodological guide (Annex III), was provided in advance to all participating sites by AUTH (T5.1 leader), ensured consistency across all the co-validation sessions, while allowing adaptation to local needs and language.
Feedback was gathered through a combination of structured questionnaires, moderated discussion, and observational notes, covering five key areas:

- Relevance and clarity of training content
- Usability and accessibility of the TET & TEM platforms
- Format and design preferences
- Digital confidence and learning style

- Suggestions for improvement

In addition to verbal feedback, facilitators documented non-verbal reactions, navigation behaviours and emergent themes, enriching the qualitative insights.

Ethical procedures were respected: all participants received an information sheet outlining the voluntary nature of participation and confirming that no personal data would be collected. Formal consent was obtained only where required by institutional protocols. All responses were recorded in aggregated, anonymised format.

Following each session, local teams held internal debriefings to consolidate qualitative insights following the co-validation reporting methodology. These syntheses enabled the identification of common usability challenges, the validation of training themes and context-specific recommendations for refining both the TET and TEM platforms and the training curriculum.

Full documentation from each site—including session notes, localized insights, and full feedback reports—is included in the annexes:

- Annex IV – AUTH Report (Greece)
- Annex V – ANA Report (Romania)
- Annex VI - CING Report (Cyprus)
- Annex VII - DEPAN Report (Greece)
- Annex VIII – INTRAS Report (Spain)
- Annex IX - VSTE Report (Slovenia)

The following section builds on those inputs to provide a cross-site synthesis of user feedback, which will feed the next implementation iteration phase and guide the refinement of COMFORTage Training Programme, ensuring that both the educational content and the digital platform (TET/TEM) are user-driven and aligned with real-world needs.

6.2 Co-validation outcomes – synthesis of participant feedback

A total of 74 participants engaged in the co-validation sessions across the six involved sites (AUTH-Greece, ANA-Romania, CING-Cyprus, DEPAN-Greece, INTRAS-Spain, and VSTE-Slovenia) (Figure 17). The gender and user group breakdown is as follows in Table 8:

Table 8: Breakdown of co-validation sessions' participants by gender and user group type

USER GROUP	FEMALE	MALE	TOTAL
Older Adults	24	10	34
Informal Caregivers	11	4	15
Healthcare Professionals	17	8	25
TOTAL	**52**	**22**	**74**

Participants represented a diverse range of digital familiarity and health literacy. Older adults included first-time users and digitally experienced individuals, with several presenting mild frailty or cognitive limitations (AUTH, INTRAS). Informal caregivers, often close family members, frequently supported older users with digital tasks and health-related decision-making (CING, DEPAN, VSTE).

Healthcare professionals brought perspectives from community-based and clinical settings, many of them having prior involvement in digital literacy and empowerment initiatives (AUTH, ANA, VSTE, CING).

Figure 17: Shots from the 1st iteration of co-validation sessions across pilot sites

Regardless of user group, participants across all pilot sites consistently highlighted the need for culturally and linguistically localized content, intuitive navigation, and visually supportive interfaces. The importance of native language availability and clear visual cues emerged as recurring priorities, particularly for older adults and caregivers. The following sections synthesize the feedback gathered during the co-validation sessions, drawing out the most common themes, user preferences, areas for improvement, and illustrative testimonials from participants to reflect their lived experiences and expectations.

6.2.1 End-user feedback on training programme themes

A. General Impressions & Feedback

- **Agreement with Proposed Thematic Areas**
  Across all user groups, there was wide consensus on the relevance of the proposed thematic areas. Older adults particularly appreciated themes related to healthy lifestyle, emotional well-being, and cognitive stimulation. "It's comforting to know this is not just about disease but about how to live better", remarked an older adult from AUTH. Caregivers highlighted the importance of thematic areas such as stress management, navigating care transitions and building digital confidence. On their side, healthcare professionals validated the core themes, but expressed interest in modules that emphasize shared decision-making, prevention strategies and caregiver-professional collaboration. On their side, healthcare professionals (ANA) suggested the inclusion of preventive strategies and psychological support, such as methods for identifying predisposition and psychotherapy options. Moreover, there

was a strong emphasis from HCPs' side, especially in ANA and AUTH's sessions, on making the content more practical, ensuring its applicability in both caregiving and clinical settings.

- **Suggestions for Refinement or Expansion**
  Suggestions for refining the content centred around contextualisation and practical support. Older adults and caregivers in DEPAN and INTRAS recommended including culturally relevant scenarios, especially regarding daily routines. Professionals advocated for the addition of ethical guidance when using digital health tools, along with modules that address accessibility for vulnerable populations, including those with sensory impairments.
- **Past Training Experiences**
  Most older adults had limited prior exposure to digital training. Those who had engaged in previous programmes reported mixed results, with some expressing that the content was too technical or lacked personal relevance. "I remember one programme I attended; it felt like a computer science class", noted a participant at DEPAN's session. Healthcare professionals, on the other hand, often had prior experience with institutional e-learning modules and emphasized that the COMFORTage Training Programme stood out for its user-centric design.
- **Interest in Online Learning**
  Participants across all stakeholder groups expressed interest in participating in an online training programme. Older adults expressed preference for intuitive, visually rich formats, with one Spanish participant (INTRAS) saying, "If it's in videos or pictures, I'm all in". Caregivers were drawn to modular, time-flexible formats, suitable for their unpredictable routines. Professionals suggested the inclusion of certification and resources for further learning.

6.2.2 End-user feedback on TET

A. General Impressions and Engagement

Participants generally reacted positively to the demonstration of the TET platform. Older adults expressed a mixture of curiosity and cautious optimism, with some admitting to initial confusion that was soon alleviated by the structure of the demo. Caregivers, often more digitally confident, appreciated the logical flow and clear module categorisation. Healthcare professionals responded positively to the professional tone and clarity, noting that the structure could support both individual and group learning environments.

B. Navigation and Clarity

Users found the TET interface mostly intuitive. Caregivers and professionals could quickly identify how to navigate through courses and appreciated features such as the progress bar. However, several older adults, especially from AUTH and INTRAS, initially struggled to locate specific content without clear entry points or onboarding prompts. They suggested incorporating tooltips or a short orientation guide to help new users. However, they expressed the view that a hands-on session in later stages would might limit confusion, as for the moment they were exposed only to the one-shot demo video.

C. Readability and Accessibility

Across all sites, participants commended the platform's readable font size and simple layout. Older adults appreciated high-contrast visuals, which facilitated accessibility for those with vision issues. Nevertheless, some participants from AUTH and CING emphasized that some text/background combinations required stronger contrast, and professionals requested accessibility options like text-

to-speech or screen-reader compatibility (ANA). Moreover, older adults in the AUTH session emphasized the importance of smartphone compatibility, noting that they now rely on smartphones far more than tablets—and significantly more than laptops.

D. Learning Materials and Content Types

Participants expressed a clear preference for video content, storytelling elements, and interactive features. Older adults in particular valued relatable scenarios and step-by-step guides. Caregivers were enthusiastic about the quizzes and practical exercises, which allows them to test their understanding. Healthcare professionals advocated for layered content complexity, with basic overviews followed by deeper dives for advanced users. Also, HCPs emphasized the importance of video tutorials for supporting visual memory and simplifying complex instructions.

E. Confidence and Anticipated Use

Most participants indicated they would feel comfortable using the TET platform with minimal support, especially after introductory guidance (onboarding session). Caregivers felt particularly empowered, noting that the platform could even support their older family members' independent learning. Some older adults requested additional support features, like downloadable printed guides or phone-based help (AUTH). "*I would try it, especially if someone could explain it once,*" said an older adult participant from Spain (INTRAS).

F. Suggestions and Future Use

Overall, participants suggested the inclusion of a step-by-step onboarding video, greater visual cues, and clearer segmentation between beginner and intermediate content. Professionals advocated for embedded prompts that recommend next steps or connect users to related modules. All groups expressed interest in continued use, with one caregiver from Cyprus (CING) stating: *"This could become part of our weekly routine".* On the other hand, older adults in the AUTH session emphasized the need for a self-paced learning mode, explaining that their daily routines are already filled with other responsibilities. They expressed concern that a rigid, time-bound structure would create unnecessary stress and discourage consistent engagement.

6.2.3 End-user feedback on TEM

A. General Impressions

Participants reacted positively to the TEM demo, particularly its novelty as a tool for discovering and assessing health-related digital apps. Older adults appreciated the straightforward layout, even if some expressed uncertainty about the technical terminology. *"I had no idea these apps existed for people like me,"* one participant in INTRAS shared.

B. Visual Appeal and User Interface

The TEM platform was perceived as clean and minimalistic. Healthcare professionals and caregivers liked the clarity and organisational logic, but older adults, particularly from DEPAN, felt it lacked warmth and could benefit from more human-centered imagery. CING participants emphasized that strong visuals were key to trust: *"If it looks friendly, I feel safer using it".*

C. Presentation and Information Clarity

Users generally understood the purpose of each section, especially the filtering and app review features. Caregivers found the category-based browsing intuitive, and professionals appreciated the effort to structure content by purpose and health domain. Nevertheless, participants asked for

clearer explanations of each feature. Older adults expressed confusion around the difference between educational content and practical health apps.

D. Navigation and Feature Feedback
Caregivers and healthcare professionals easily followed the navigation logic and filtering tools. However, older adults, especially in AUTH and VSTE sessions, suggested larger clickable icons and clearer labels. Some requested more visual cues or guided walkthroughs to highlight key features.

E. Accessibility and Design
The majority found the design accessible, particularly due to readable fonts and simple page structure. Participants noted that icons and color contrasts were appropriate, but accessibility could be improved with features like adjustable font size or multilingual & audio support. Professionals also recommended enhancing visual elements with brighter colours and hover-based interactions to support older users.

F. Suggestions and Future Use
Participants recommended adding app tutorial videos, clearer app descriptions, and privacy indicators. All groups saw value in using TEM regularly—especially if integrated with personal learning needs identified through TET. *"This could be the Google Maps of digital health"* noted a Slovenian (VSTE) professional. It was also proposed by healthcare professionals in ANA to align TEM recommendations with previously completed training modules from TET to create a cohesive user experience.

This synthesis of the session outcomes illustrates that across diverse user groups and country contexts, the COMFORTage Training Programme -Training Curriculum, TET and TEM platforms, although in a first prototype version were met with strong interest and engagement potential. Participant feedback offers practical pathways for refinement, ensuring that future iterations remain accessible, empowering and aligned with real-life caregiving and self-management needs.

6.3 Contribution to training programme development and future steps

The first iteration of co-validation sessions with end-users provided valuable insights that will directly inform the refinement of the COMFORTage digital training ecosystem. Feedback collected across all pilot sites revealed practical considerations regarding the platforms' usability, accessibility and learning structure. These insights will be used to enrich the training curriculum, improve the clarity and cultural relevance of content, and fine-tune both the TET and TEM platforms to better match the needs and expectations of older adults, informal caregivers, and healthcare professionals.

The second iteration will focus on transitioning from observational feedback to active user interaction with functional platform prototypes. This hands-on engagement will allow for real-time testing of the updated interfaces, learning pathways, and support features, enabling the validation of enhancements made in response to the first iteration. Participants will explore the platforms independently, offering deeper insight into navigation patterns, content comprehension, and user confidence. Additional evaluation tools—such as follow-up questionnaires and tracking—will be integrated to assess engagement and perceived value. This iterative process will culminate in a more robust, user-informed version of the training programme, ready for its final piloting across the COMFORTage pilots.

7 Conclusions and Next Steps

This deliverable, i.e. D5.1 – "Training and Educational Toolkit I", outlines the foundational phase of the COMFORTage training programme (under Task 5.1), presenting a robust and inclusive pedagogical framework designed to address digital and health literacy gaps among older adults, caregivers and healthcare professionals. Through a modular, user-centred curriculum informed by participatory methodologies, the programme promotes self-awareness, empowerment and behavioural change. The design process has been deeply informed by literature review, a needs assessment, co-validation workshops with end-users, and an online survey, ensuring alignment with the diverse learning preferences and real-world challenges of the targeted population groups. The development of the first prototypes of the TET and the TEM marks a significant milestone in delivering an integrated, scalable and user-friendly training infrastructure within the COMFORTage ecosystem.

To ensure the programme's successful implementation and impact, the next steps will involve the finalisation of the curriculum materials, localisation and multilingual adaptation across pilot sites, and the further development and technical enhancement of the TET and TEM platforms. These activities will be followed by structured pilot testing in real-life environments, allowing for iterative improvement based on end-user feedback. Thus, the future phases will maintain strong stakeholder engagement, especially involving end-users in testing, evaluation and refinement processes, to preserve the relevance, usability and inclusiveness of the training (Figure 18).

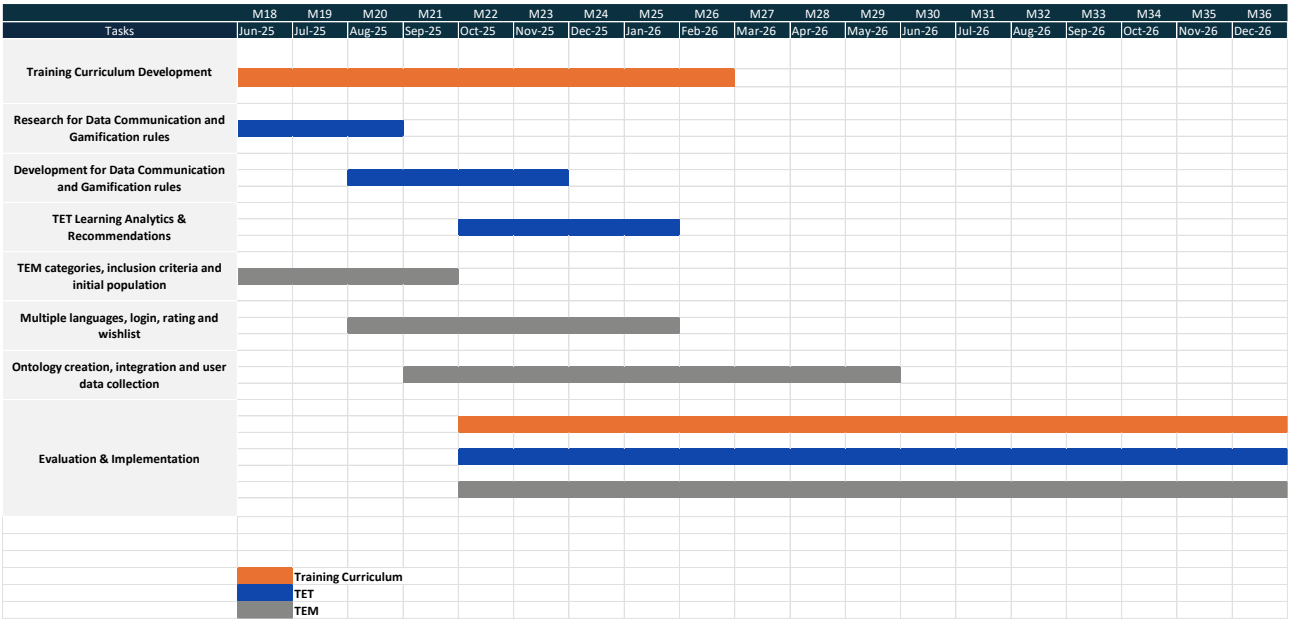

Figure 18: Future development phases of the COMFORTage Training Programme

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A detailed time plan of the proposed activities is provided below (Figures 19-21), outlining the next steps and expected outputs for each component of the COMFORTage Training Programme (Curriculum, TET, TEM).

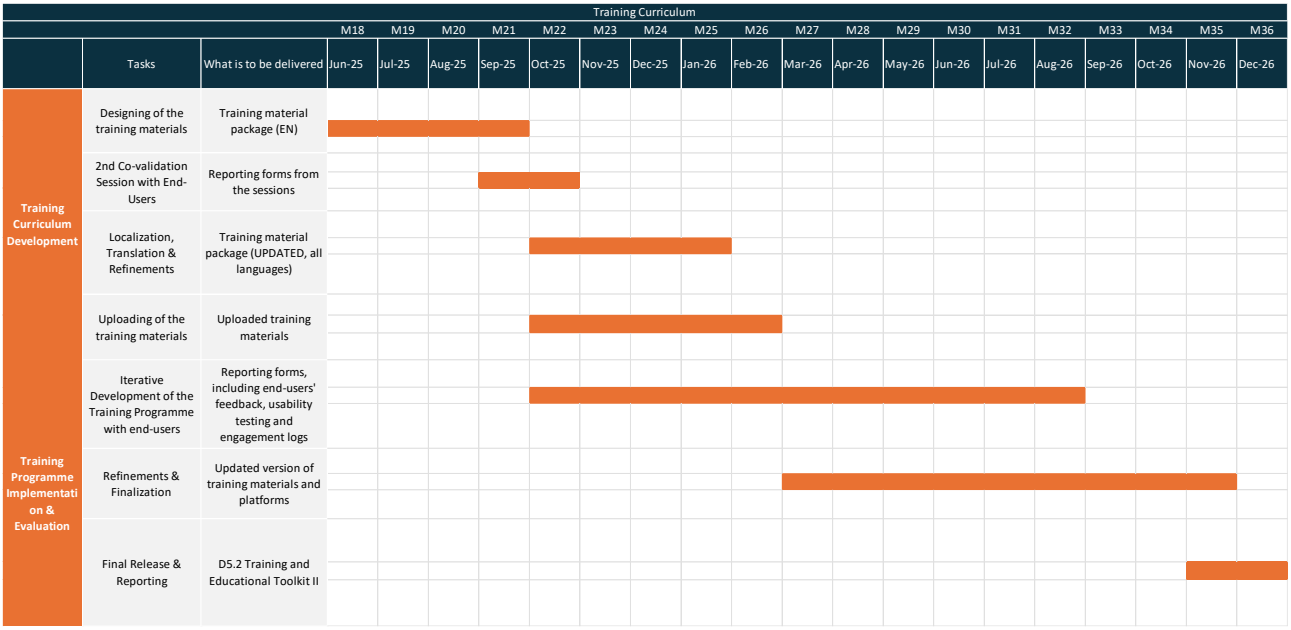

Figure 19: Future work related to the development of the Training Curriculum

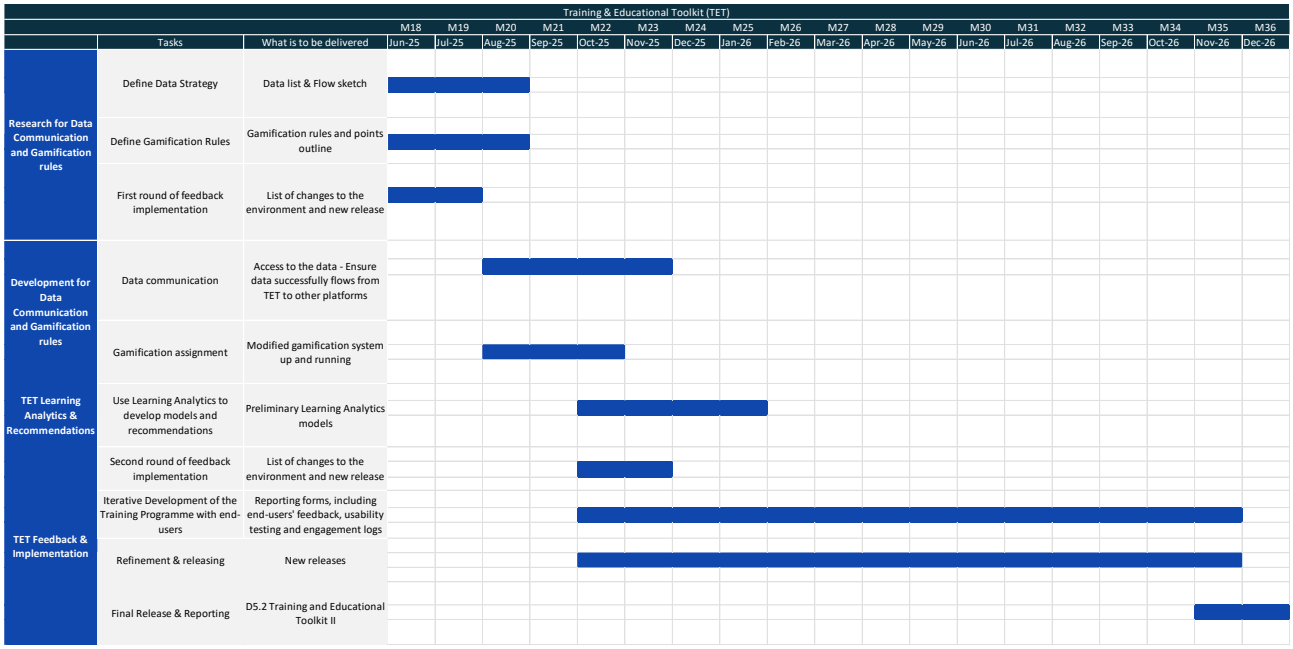

Figure 20: Future work related to the development of the TET

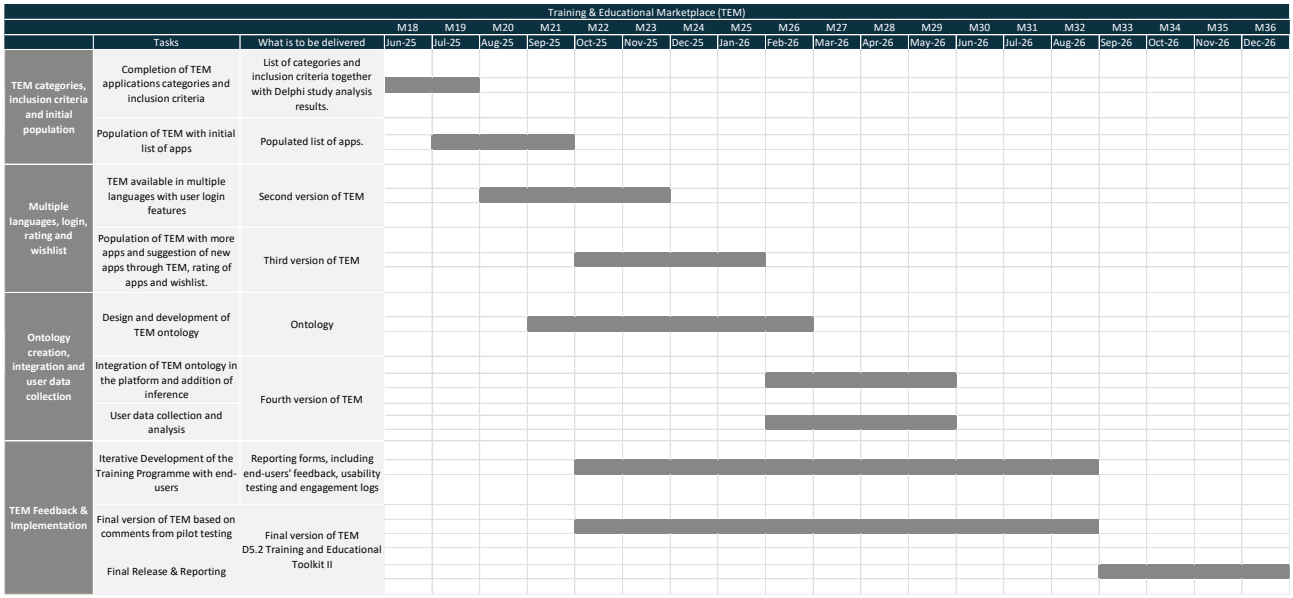

Figure 21: Future work related to the development of the TEM

Additionally, synergies with WP6 (Use Cases Adaptation, Validation and Evaluation) for the potential integration of the Training Programme -as a whole or partially, in pilot journeys, with WP7 (Health Technology and Impact Assessment), for the effective evaluation of TET/TEM, as well as with WP8 (Dissemination, Exploitation, Standardization and Adoption) for the market potential exploration of the Training Programme, will be important for aligning technical deployment and impact assessment during and after the lifecycle of the COMFORTage project.

As the project moves forward, particular attention will be paid to ensuring that the training content remains adaptable to user needs and delivery models. The inclusion of experiential learning, peer-to-peer interaction and real-life application scenarios will highly be promoted, supporting users not only in acquiring digital skills but also in building confidence and trust in health literacy and digital health tools.

A subsequent version of this report, i.e., D5.2 – "Training and Educational Toolkit II", will follow in M36, documenting the progress and lessons learned during the piloting phase, integration of digital resources and evaluation results. This next deliverable will serve as a capstone for the educational programme, showcasing the maturity, adaptability and potential transferability of the COMFORTage training and educational toolkit.

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Online resources & external links:

- Alzheimer's Foundation of America Online Academy: https://training.alz.org/
- COMFORTage TEM platform: https://comfortage-tem.med.auth.gr/
- COMFORTage TET platform: https://comfortage-tet.med.auth.gr
- GetSetUp.io: https://www.getsetup.io/
- mHealth-AD Erasmus+ project: https://mhealth-ad.eu/
- Moodle (LMS): https://moodle.org/
- Senior Planet: https://seniorplanet.org/
- UCLA Dementia Care: https://www.uclahealth.org/medical-services/geriatrics/dementia

Appendix

ANNEX I – COMFORTage – Survey on TET Thematic Areas

COMFORTage - Survey on TET Thematic Areas

Dear Pilot Leaders,

under T5.1, we are developing **the content for the COMFORTage TET**, focusing on health and digital literacy for older adults, caregivers, and healthcare professionals (with a special focus on dementia and frailty self-management and awareness).

We would greatly appreciate your feedback to ensure the thematic areas, identified after a scoping review, are relevant and comprehensive.
Your insights will help us refine the training and integrate any additional topics that could enhance the programme.
This short survey should take no more than **5-10 minutes** to complete.

* **1. Which pilot are you representing?**

- ○ Pilot 1
- ○ Pilot 2
- ○ Pilot 3
- ○ Pilot 4
- ○ Pilot 5
- ○ Pilot 6
- ○ Pilot 7
- ○ Pilot 8
- ○ Pilot 9
- ○ Pilot 10
- ○ Pilot 11
- ○ Pilot 12
- ○ Pilot 13

TET Proposed Thematic Areas

2. Do you agree with the proposed thematic areas of the training programme?

* **a. Health Literacy Empowerment** – Understanding barriers to health literacy and strategies to improve comprehension and communication.

- ◉ Yes, I agree with the proposed thematic area.
- ○ No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **b. Frailty and Dementia Literacy** – Identifying early signs, risk factors, and the impact of frailty and dementia.

- ◉ Yes, I agree with the proposed thematic area.
- ○ No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **c. Frailty and Dementia Self-Management** – Strategies for delaying symptoms, managing medications, doctor visits, and healthcare costs.
  - (●) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **d. Lifestyle Behavior Change** – The role of physical activity, nutrition, and social engagement in maintaining health and well-being.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **e. Digital Confidence and Basic Skills** – Building confidence in using digital devices for communication and accessing services.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **f. Data Protection and Privacy Awareness** – Safeguarding personal health information online and recognizing cybersecurity risks.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **g. Navigating and Evaluating Online Health Resources** – Identifying credible health information sources and avoiding misinformation.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **h. Digital Health Tools for Self-Management** – Using wearables, apps, and telehealth for health tracking and remote consultations.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **c. Frailty and Dementia Self-Management** – Strategies for delaying symptoms, managing medications, doctor visits, and healthcare costs.
  - (●) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **d. Lifestyle Behavior Change** – The role of physical activity, nutrition, and social engagement in maintaining health and well-being.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **e. Digital Confidence and Basic Skills** – Building confidence in using digital devices for communication and accessing services.
  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

* **f. Data Protection and Privacy Awareness** – Safeguarding personal health information online and recognizing cybersecurity risks.
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  - ( ) Yes, I agree with the proposed thematic area.
  - ( ) No, I think significant modifications are needed (please elaborate below).

Please, use the free text below, to add your comments/suggestions.

If you selected other, (please specify)

* **7. Do you have any additional comments, suggestions, or materials that you would like to share with us?**

Thank you for your time and valuable input!

Submit

ANNEX II: Complete results of the first round of the Delphi study

Analysis of the survey for TEM applications categories

To evaluate consensus among participants in the Delphi survey, several statistical measures were applied: **median**, **interquartile range (IQR)**, **percentage agreement**, and **standard deviation (SD)**. These were calculated for each proposed category and subcategory following Round 1.

The **median** was used to assess the central tendency of ratings. The **IQR**, which measures the dispersion of the middle 50% of responses, was calculated by identifying the 25th percentile (Q1) and 75th percentile (Q3) of the ordered responses, and computing the difference between them: IQR=Q3−Q1

Given the use of a **1–10 Likert scale**, which allows for broader response variability, a more flexible threshold of **IQR ≤ 3** was adopted to define consensus. This approach is consistent with prior Delphi studies employing wider rating scales, where a stricter threshold (e.g., IQR ≤ 2) may fail to capture meaningful agreement (Diamond et al., 2014; Keeney et al., 2011; Niederberger & Spranger, 2020).

In addition to IQR, **percentage agreement** was calculated as the proportion of participants who rated an item within the **8–10 range**, reflecting strong endorsement. A threshold of **≥70% agreement** was used to indicate consensus, following common Delphi guidelines (Hasson et al., 2000; Keeney et al., 2011). This measure complements the IQR by highlighting agreement even when a small number of outliers increase the spread of responses.

Standard deviation (SD) was also calculated for each item to assess variability. While not used as a primary determinant of consensus, lower SD values (e.g., <1.5) were considered to indicate greater clustering of responses.

An item was considered to have achieved consensus if it met either of the following criteria:

- **IQR ≤ 3** and **median ≥ 8**, or
- **≥70% of responses in the 8–10 range**

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Question No.	Question	Median	IQR	% Agreement	SD	Consensus Achieved?	Action
1	How much do you agree with having categories based on technology type?	8	3	0,65	0,5	Yes	
1.1	How much do you agree with having Mobile Apps (apps available for smartphones and tablets) as a subcategory for "technology type"?	8	3	0,65	1,5	Yes	
1.2	How much do you agree with having Web-based Platforms (accessible via browsers, often including interactive tools) as a subcategory for "technology type"?	8	2	0,65	1	Yes	
1.3	How much do you agree with having Wearable Devices (apps or systems integrated with wearables (e.g., smartwatches, fitness trackers)) as a subcategory for "technology type"?	8	4	0,61	1,5	No	TEM will include applications related to wearable devices such as smart watches. Thus, this category should be kept but better explained.
1.4	How much do you agree with having IoT (Internet of Things) (systems that connect various devices (e.g., smart home systems for monitoring)) as a subcategory for "technology type"?	7	3	0,36	1,5	No	Similarly to the previous subcategory, it will be better explained.
1.5	How much do you agree with having AI-Powered Tools (applications using machine learning or AI for predictions, decision support, or	8	2	0,56	0,5	Yes	

	analytics) as a subcategory for "technology type"?						
1.6	How much do you agree with having Virtual Reality (VR) and Augmented Reality (AR) (tools that use immersive technologies for therapy or education) as a subcategory for "technology type"?	8	2	0,53	1	Yes	
1.7	How much do you agree with having Telehealth Systems (platforms facilitating remote consultations or health monitoring) as a subcategory for "technology type"?	9	3	0,68	1,5	Yes	
1.8	How much do you agree with having Assistive Technologies (tools designed for accessibility (e.g., speech-to-text, visual aids)) as a subcategory for "technology type"?	9	3	0,65	1,5	Yes	
2	How much do you agree with having categories based on functionality?	10	2	0,85	0,5	Yes	
2.1	How much do you agree with having Cognitive Assessment and Training (apps for memory exercises, brain games, and cognitive rehabilitation) as a subcategory of "functionality"?	10	2	0,79	1,5	Yes	
2.2	How much do you agree with having Frailty Monitoring (tools to track physical activity, nutrition, or frailty risk factors)	10	2	0,82	0,5	Yes	

	as a subcategory of "functionality"?						
2.3	How much do you agree with having Caregiver Support (platforms offering resources, community forums, or tools for caregivers) as a subcategory of "functionality"?	10	2	0,82	0	Yes	
2.4	How much do you agree with having Symptom Management (apps for managing behavioral symptoms, pain, or anxiety) as a subcategory of "functionality"?	9	3	0,71	0,5	Yes	
2.5	How much do you agree with having Disease Education and Awareness (tools providing information about frailty, dementia, or related conditions) as a subcategory of "functionality"?	10	2	0,79	2	Yes	
2.6	How much do you agree with having Medication Management (apps that support adherence, reminders, or medication tracking) as a subcategory of "functionality"?	8	3	0,74	1	Yes	
2.7	How much do you agree with having Emergency and Safety (tools with fall detection, emergency alert systems, or GPS tracking) as a subcategory of "functionality"?	9	2	0,79	0,5	Yes	
2.8	How much do you agree with having	9	2	0,85	0,5	Yes	

	Lifestyle Management (platforms promoting exercise, nutrition, or social engagement) as a subcategory of "functionality"?						
3	How much do you agree with having categories based on the pricing scheme?	8	4	0,61	2	No	TEM will include a wide variety of applications. It will not be limited to free apps. This will be better explained in the survey.
3.1	How much do you agree with having Free (apps available at no cost) as a subcategory of "pricing scheme"?	9	2	0,79	2,5	Yes	
3.2	How much do you agree with having Subscription-Based (monthly or annual subscription fees) as a subcategory of "pricing scheme"?	8	4	0,53	1	No	
3.3	How much do you agree with having Freemium (free apps with premium features available for purchase)as a subcategory of "pricing scheme"?	8	5	0,58	0,5	No	
3.4	How much do you agree with having One-Time Purchase (apps with a single upfront cost) as a subcategory of "pricing scheme"?	8	5	0,5	0	No	
4	How much do you agree with having categories based on condition stage?	9	3	0,7	1,5	Yes	
4.1	How much do you agree with having dementia as a subcategory for "condition stage"?	9	3	0,71	1,5	Yes	
4.2	How much do you agree with having	9	2	0,76	1,5	Yes	

	mild cognitive impairment as a subcategory for "condition stage"?						
4.3	How much do you agree with having frail as a subcategory for "condition stage"?	9	4	0,71	1	No	Frailty is clearly within the scope of the project.
4.4	How much do you agree with having healthy as a subcategory for "condition stage"?	9	4	0,65	2	No	It is reasonable to keep this category.
5	How much do you agree with having a category for regulatory approval?	8	4	0,61	1,5	No	MDR classes will be used instead.
5.1	How much do you agree with having CE-marked as a subcategory for "regulatory approval"?	9	4	0,67	1	No	
5.2	How much do you agree with having FDA-approved as a subcategory for "regulatory approval"?	8	5	0,55	2	No	
6	How much do you agree with having a category based on whether an app has been evaluated in clinical trials?	9	3	0,58	1,5	Yes	Only one category named "Clinical trial evaluation status" will be proposed instead.
6.1	How much do you agree with having clinically validated (Apps that have undergone one or more clinical trials)as a subcategory for "evaluated in clinical trials"?	9	3	0,67	1	Yes	
6.2	How much do you agree with having clinically tested but not validated (apps that have been included in pilot studies or feasibility trials,	8	5	0,55	1	No	

	but not in large-scale or peer-reviewed clinical trials) as a subcategory for "evaluated in clinical trials"?						
6.3	How much do you agree with having under clinical investigation (Apps currently being tested in ongoing clinical trials, registered in platforms like ClinicalTrials.gov or EU Clinical Trials Register) as a subcategory for "evaluated in clinical trials"?	7	5	0,42	1	No	
6.4	How much do you agree with having not evaluated in clinical trials (Apps that have not undergone any clinical testing but may be available commercially) as a subcategory for "evaluated in clinical trials"?	7	5	0,42	1,5	No	
6.5	How much do you agree with having real-world evidence based (Apps that collect and report on real-world usage and outcomes (e.g., patient-reported outcomes, adherence data) rather than traditional trials) as a subcategory for "evaluated in clinical trials"?	7	5	0,45	1	No	
7	How much do you agree with having a category for language support (specifying the languages that the app is translated to) and	9	2	0,82	1,5	Yes	

	geolocation restrictions (in which countries or geographical areas the app is available)?						
8	How much do you agree with having categories based on accessibility gudilines?	9	2	0,85	1	Yes	
8.1	How much do you agree with having visual accessibility (for users with visual impairments, including blindness, low vision, or color blindness) as a subcategory for "accessibility guidelines"?	9	1	0,85	1,5	Yes	
8.2	How much do you agree with having cognitive and learning accessibility (for users with cognitive disabilities, neurodivergence, or age-related cognitive decline) as a subcategory for accessibility guidelines?	9	2	0,85	1,5	Yes	
8.3	How much do you agree with having auditory accessibility as a subcategory for "accessibility guidelines"?	9	2	0,82	1,5	Yes	
9	How much do you agree with having a category for programming language used for the app?	7	5	0,4	2	No	Programming language will be deleted. Instead, platforms that support each app will be proposed. E.g., desktop, mobile, etc.
9.1	How much do you agree with having mobile app language as a subcategory for "programming language"?	7	5	0,45	1,5	No	
9.2	How much do you agree with having	7	5	0,42	1,5	No	

	web development language as a subcategory for "programming language"?						
9.3	How much do you agree with having general purpose language as a subcategory for "programming language"?	7	4	0,43	0	No	

ANNEX III – Facilitators' Guide (Co-Validation Sessions)

COMFORTage TET/TEM: 1ST Co-validation session with end-users

Facilitator Preparation

Roles

Technical Moderator / Facilitator:

The Technical Moderator/Facilitator is responsible for ensuring the smooth conduction of the co-validation workshop, as well as for taking notes, contributing to the session by leading technical presentations and support with the practical exercise for collecting feedback, and also an active role in the workshop by participating in the discussion and the interactive part.

Facilitators at Local Pilot Site:

1-2 persons at the Local Pilot site are responsible for recruitment and welcoming the participants (older adults/caregivers/healthcare professionals) and moderating the session (e.g., time keeping), and the follow-up discussion/ practical exercise for collecting feedback.

Participants:

8-10 participants per session (1 session per pilot site), representing the following COMFORTage stakeholder groups:

- older adults >60 y.o. (healthy, frail, dementia)
- informal caregivers (family members, friends etc.)
- healthcare professionals (clinicians, psychologists, nurses, physiotherapists, geriatricians etc.)

Materials

- COMFORTage T5.1 presentation
- Information Sheet
- Apps' demos (Videos and Narration Script) (see ANNEX)
- Feedback collection forms (see ANNEX)

Information Sheet

The use of a consent form and participant list is not mandatory. However, if required by the context or institutional policies, such tools may be used. What's important is that all participants are clearly informed about the purpose of the workshop, and that their participation is entirely voluntary. They should be made aware that they are free to leave at any point without any consequences. A short information sheet will be distributed after the registration of each participant.
No personal data such as names or other identifying information will be collected. However, facilitators ***are kindly asked to include in their report the total number of participants, the type of stakeholder groups represented, and the sex of participants (aggregated data only).***
If desired, photos may be taken as supporting documentation. In such cases, we recommend blurring the participants' faces to protect their privacy.

Instructions for running the session

Timeline/schedule (120' minutes)

Event structure	Duration	Description
REGISTRATION & WELCOME	5'	Participants sign in and are welcomed to the co-validation workshop
ICE-BREAKING	5'	Every person introduces themselves
INTRODUCTION & HOUSEKEEPING RULES	5'	Project overview & objectives of the co-validation workshop Practicalities concerning the co-creation sessions
TRAINING PROGRAMME THEMES	10'	Presentation of the Thematic Areas of the Training Programme & Feedback
SESSION 1 – TET PRESENTATION	5'	Demo Video of TET
	30'	Feedback Collection – Likes/Dislikes, New Ideas and Opportunities (Group Discussion)
Coffee break/ Technical setup	10'	Short break / Facilitators set up presentation for SESSION II
SESSION 2 – TEM PRESENTATION	5'	Demo of TEM Mock-ups
	30'	Feedback Collection – Likes/Dislikes, New Ideas and Opportunities (Group Discussion)

KEY TAKEAWAYS FROM THE SESSIONS and Q&A	10’	Facilitators take 5’ to summarize the main results from the two sessions, while the rest of the time is allocated for Q&A (if needed).
CLOSING	5’	Facilitators thank everyone for their participation -End of the co-validation workshop.

Ice-Breaking (5’)

The Facilitator asks the participants to do a small introduction of themselves. The facilitator starts first by introducing himself/herself. There is no specific information that the person is required to present.

Introduction & Housekeeping Rules (10’)

The Facilitator welcomes participants and introduces the topic of the Workshop by:

- A short presentation about COMFORTage and co-validation workshops (a special reference to Task 5.1 and the objectives of TET & TEM)
- A short statement about the goal of this session, the topic of discussion, etc.
- Housekeeping Rules

Training Programme Themes (10’)

Participants are invited to comment on the proposed thematic sections (included in the pptx file), suggest any missing topics, or provide feedback on any elements they found less appealing.

a. Health Literacy Empowerment – *Understanding barriers to health literacy and strategies to improve comprehension and communication.*

b. Frailty and Dementia Literacy – *Identifying early signs, risk factors, and the impact of frailty and dementia.*

c. Frailty and Dementia Self-Management – *Strategies for delaying symptoms, managing medications, doctor visits, and healthcare costs.*

d. Lifestyle Behavior Change – *The role of physical activity, nutrition, and social engagement in maintaining health and well-being.*

e. Digital Confidence and Basic Skills – *Building confidence in using digital devices for communication and accessing services.*

f. Data Protection and Privacy Awareness – *Safeguarding personal health information online and recognizing cybersecurity risks.*

g. Navigating and Evaluating Online Health Resources – *Identifying credible health information sources and avoiding misinformation.*

h. Digital Health Tools for Self-Management – *Using wearables, apps, and telehealth for health tracking and remote consultations.*

i. Supporting Peers and Informal Caregivers – *Empowering caregivers and using digital tools and best practices for coordinated care.*

- Do you agree with the proposed thematic areas of the training programme?
- Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?
- Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?
- Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.

Session 1 – TET Presentation & Focus Group Discussion (35')

The facilitator presents the TET demo video to the participants. This is followed by an open discussion, guided by the question guide provided below. The goal is to encourage all participants to share their thoughts and opinions by responding to the questions — specifically, to express what they like or dislike, whether they would consider using the TET and its educational content.

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each diffrent category -in bold letters)

Warm-up Questions

How did you feel while watching the demonstration? How does the platform look to you?

1. **Navigation & Clarity**
    - Was it clear how to move through the platform?
    - Did you understand how to find specific courses or activities?
2. **Readability & Accessibility**
    - Was the text, colors, and contrast easy to see and read?
    - Did the icons and buttons make sense to you?
3. **Types of Learning Materials**
    - The platform includes videos, written text, interactive exercises, and quizzes. Based on the demonstration, which format do you think would be the easiest for you to learn from?
    - Were there any content types that seemed difficult or overwhelming?
4. **Anticipation & Confidence Using the Platform**
    - Do you think you would feel comfortable using the platform on your own? Why or why not?

- Is there anything you saw in the demonstration that you think might be difficult for you to use?
- Do you believe you would need extra support (e.g., instructions, assistance, training) before using the platform?

Closing Open-Ended Questions

- Would you prefer to see more step-by-step instructions, or was the demonstration clear enough?
- What was the most interesting part of what you saw?
- What seemed unclear or confusing?
- Is there anything you would change or improve?
- Would you like to try using this platform yourself in the next session?
- Is there anything else you want to add that was not already covered in the previous questions?

Session 2 – TEM Presentation & Focus Group Discussion (35')

The facilitator presents the TEM demo video to the participants. This is followed by an open discussion, guided by the question guide provided below. The goal is to encourage all participants to share their thoughts and opinions by responding to the questions — specifically, to express what they like or dislike, whether they would consider using the TEM and for what purpose.

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each diffrent category -in bold letters)

General Impressions

- **Overall Reaction:**
  What were your overall impressions of the website after the demonstration?
  How did the presentation make you feel about the website?
- **Visual Appeal:**
  What do you think about the design and color scheme of the website look modern and trustworthy?
  What emotions or thoughts did the visual elements evoke?

Presentation & Clarity

- **Content Understanding:**
  Were you able to understand the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)?

Was the information conveyed during the demo sufficient to get a good idea of what the website offers?

Navigation & Structure (Based on the Demo)

- **Ease of Understanding Layout:**

How clearly did the demonstration convey the overall structure and organization of the website?
What were your impressions of the navigation menu and filtering options? Were they intuitive to use, or do you see any areas for improvement?

- **Key Features:**

How effectively were the main features—like search, filtering by category, and app details—showcased during the demo?
Were there any moments in the demonstration where you felt unsure about how a feature worked or thought something could have been presented more clearly?

Aesthetic & Accessibility (Perception from the Demo)

- **Visual Comfort:**
  How did you find the overall visual design in terms of color contrast and readability?
  Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?

Closing Open-Ended Questions

- Would you prefer to see more step-by-step instructions, or was the demonstration clear enough?
- What was the most interesting part of what you saw?
- What seemed unclear or confusing?
- Is there anything you would change or improve?
- Would you like to try using this platform yourself in the next session?
- Is there anything else you want to add that was not already covered in the previous questions?

Key Takeaways From The Sessions And Q&A - Closing (15')

At the end of the co-validation workshop, facilitators will dedicate five minutes to summarizing the key takeaways from both sessions, highlighting the main insights, recurring themes, and participant feedback. The remaining time will be available for any final questions or comments from participants. The workshop will conclude with a warm thank you from the facilitators, acknowledging everyone's valuable contributions and active participation.

Guidelines for Consolidation of information by Facilitators

After the session the facilitators of the same pilot site will meet and aggregate the information. Instructions for the feedback collection and interpretation are in the **T5.1_report_Co-Validation_WS.docx** file.

ANNEX

TET Demo Video & Script

Please use the following video file and accompanying script to present TET to your participants. The script is designed to guide your narration and help describe key components and features of TET during the demonstration. **While you are welcome to adapt the wording to suit your style, it is essential that the entire video is shown to participants, as it serves as the foundation for the subsequent feedback discussion.**

TET Video (.mp4)

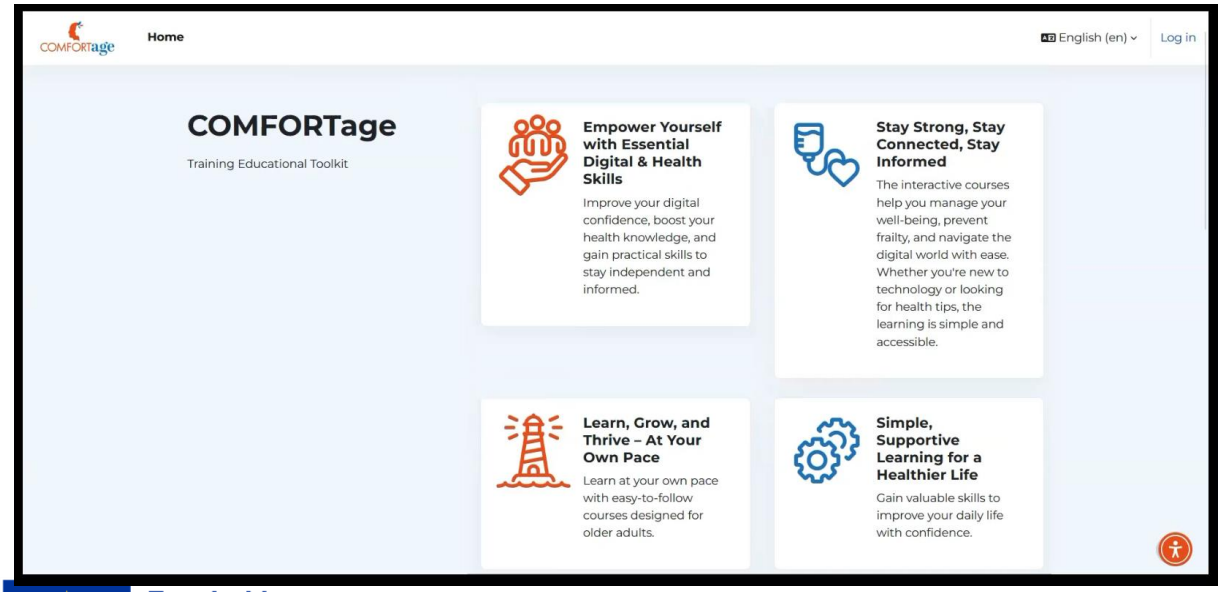
PROPOSED SCRIPT

The Training & Educational Toolkit (TET) is described as a comprehensive, tailored educational platform designed to enhance the digital and health literacy of older adults, caregivers, and healthcare professionals (HCPs) related to dementia and frailty. By incorporating interactive, accessible and personalized learning content, TET fosters an engaging and effective educational experience, empowering users, to improve self-management, modify lifestyle behaviors, enhance best practices for daily care, and confidently navigate and leverage digital healthcare technologies.

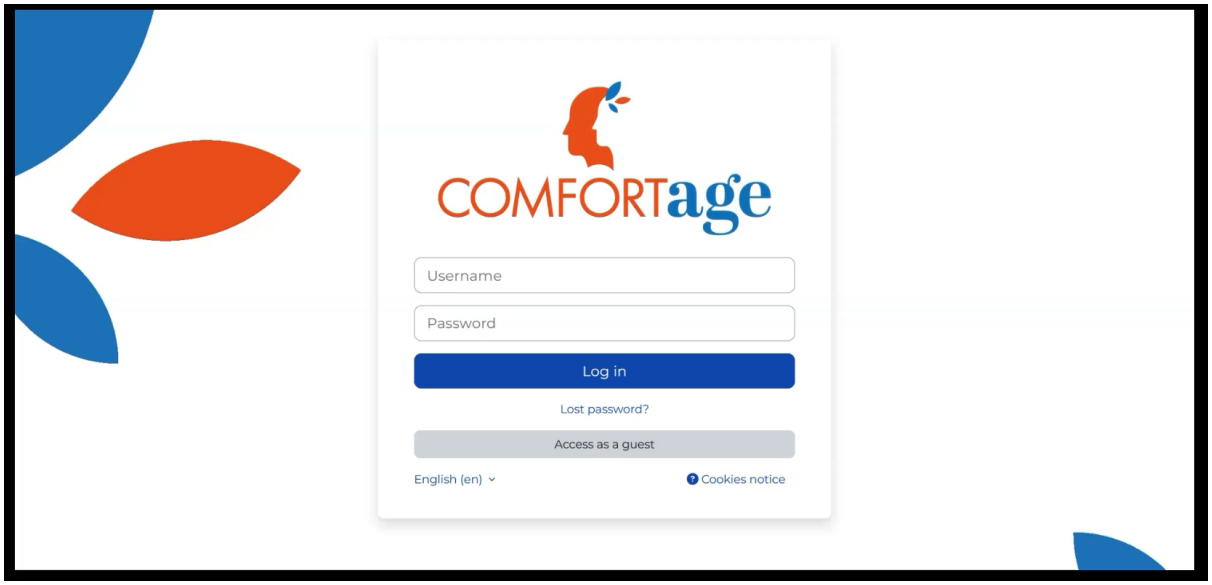
The video is demonstrating how to navigate within the COMFORTage TET environment. It provides a walkthrough of various functionalities. The recording captures different sections of the Moodle interface, including course pages, login, the accessibility widget, guiding through essential navigation steps.

Step-by-Step Guide for Navigating the TET Platform:

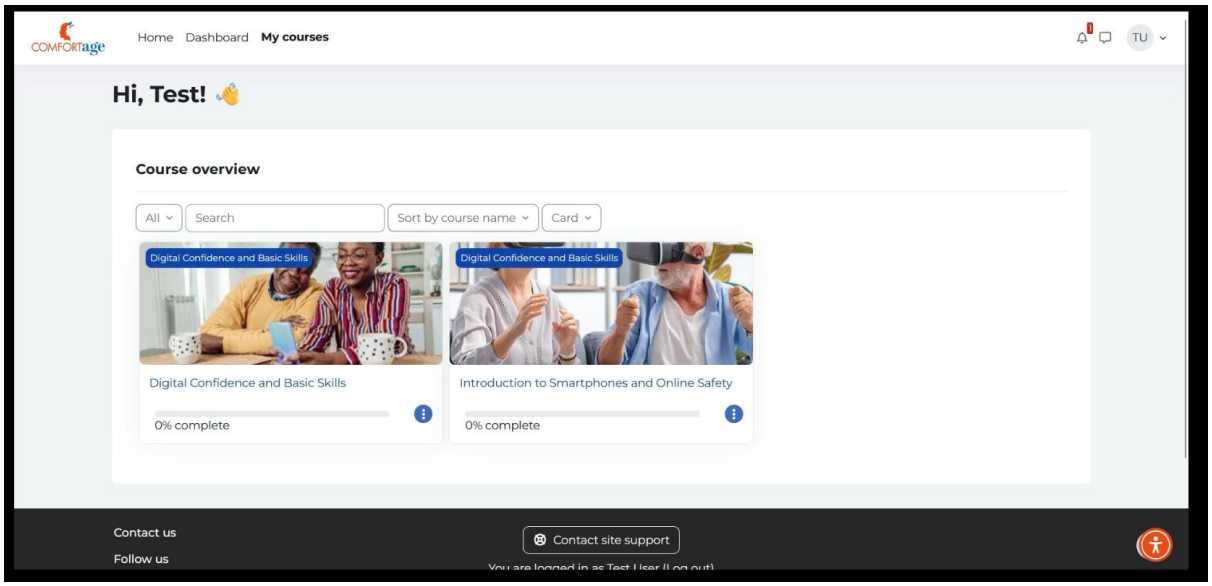
1. **The homepage 00:00 - 00:19**
    - The home page is shown before login
    - It shows some promotional materials at the beginning and while scrolling it shows all available courses to enrol and some wideside announcements.



2. **Logging into Moodle 00:19 - 00:22**
    - The video shows the login page of the platform.
    - The user enters their credentials (username and password).
    - Successful login takes the user to the My Courses page

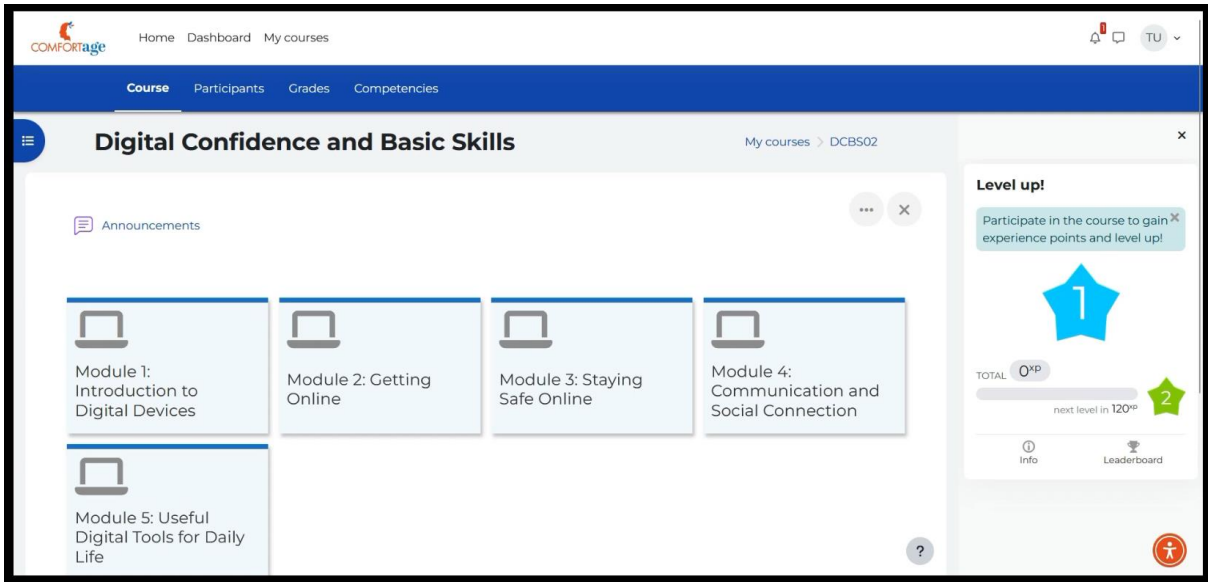


3. **My Courses 00:22 - 00:41**
    - This page shows all the courses that someone is already enrolled in.
    - On the top right corner you can see notifications. There is a welcome notification every time a user is enrolled for the first time in a course.

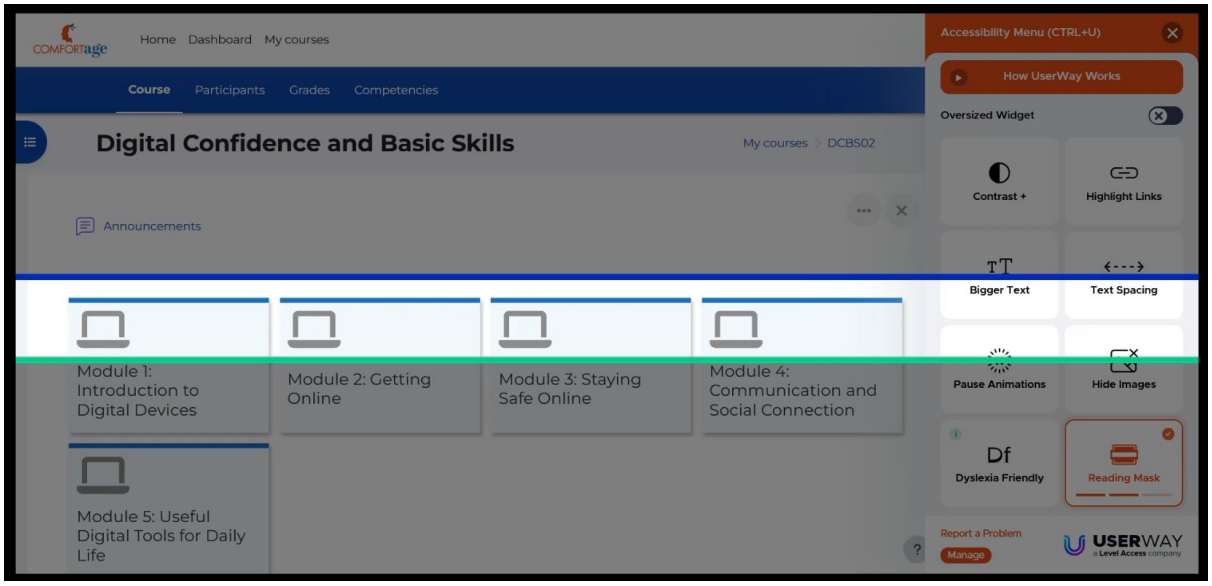


4. **Accessing a Course 00:41 - 00:50**
    - The user selects a course from their enrolments.
    - The course homepage layout is shown that is represented with tiles, including 5 modules/subtopics.

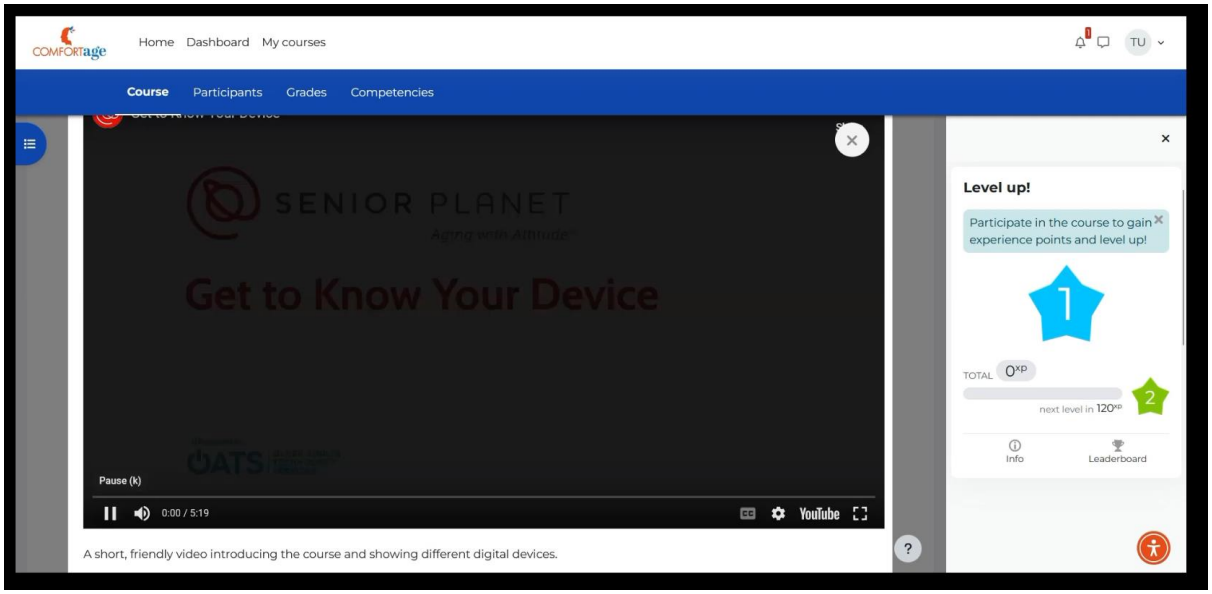
- There is a demonstration on how to navigate through modules, assignments, and materials.



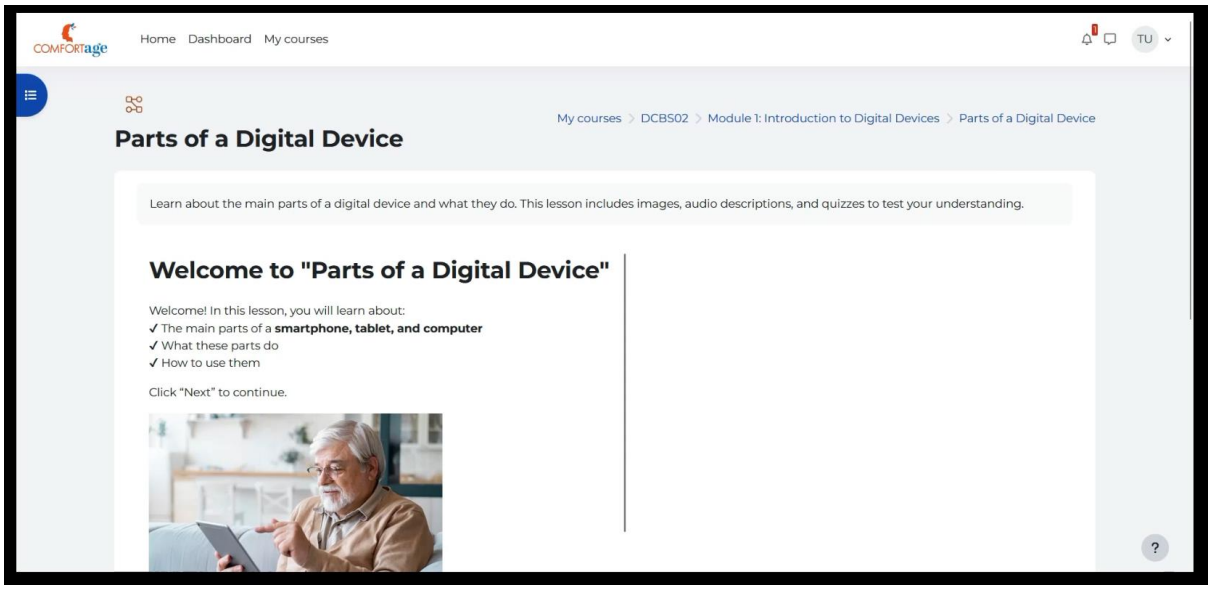
5. **Accessibility widget 00:50 - 01:27**
   - The accessibility widget is shown.
   - There are examples of Contrast that automatically transforms the colors of the platform
   - There are also examples of Cursor change to easily focus on specific areas



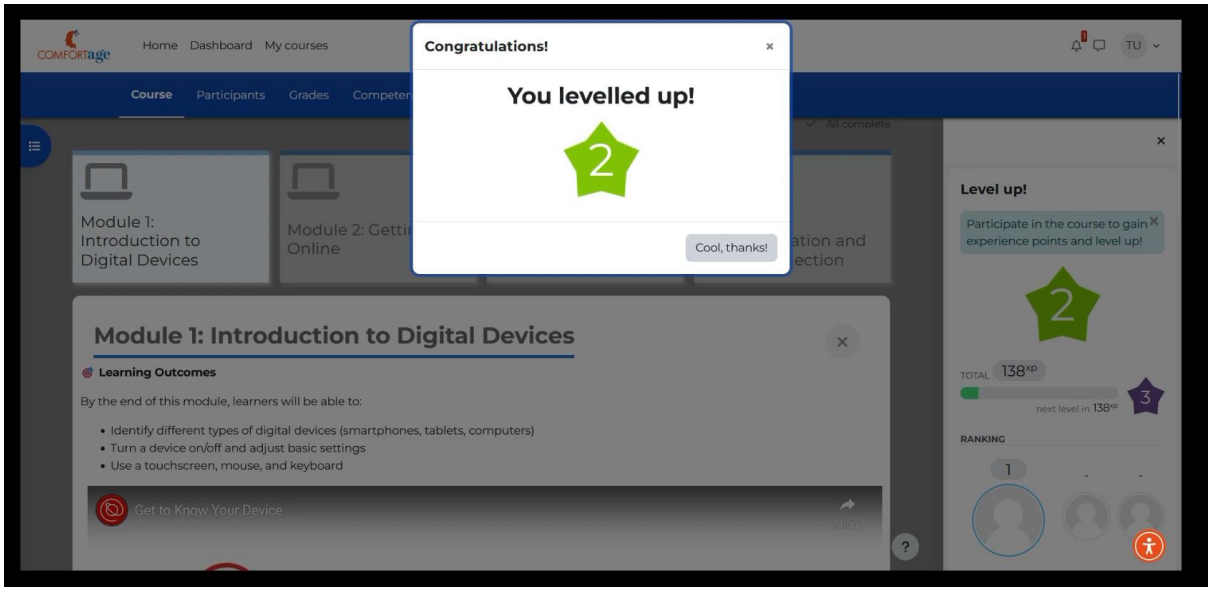
6. **Video viewing 01:27 - 02:14**
   - A video from youtube can be played.



7. **Lesson activity 02:14 - 04:08**
    - The lesson activity allows different branches to complete exercises. It also shows the progress
    - Page 1 - There are reading materials
    - Page 2 - Interactive materials to explain various ideas (Parts of a smartphone)
    - Page 3 - Quizzes to help users learn
    - Motivation quotes for completing the activities



8. **Level up gamification 04:08 - 04:19**
    - On the left side of the course there is a panel with the level up participation tracking where users earn points for trying and completing activities.
    - The system pops up messages when a new level up occurs.
    - There is also a leaderboard



TEM Demo Video & Script

Please use the following video file and accompanying script to present TEM to your participants. The script is designed to guide your narration and help describe key components and features of TEM during the demonstration. **While you are welcome to adapt the wording to suit your style, it is essential that the entire video is shown to participants, as it serves as the foundation for the subsequent feedback discussion.**

TEM Video (.mp4)

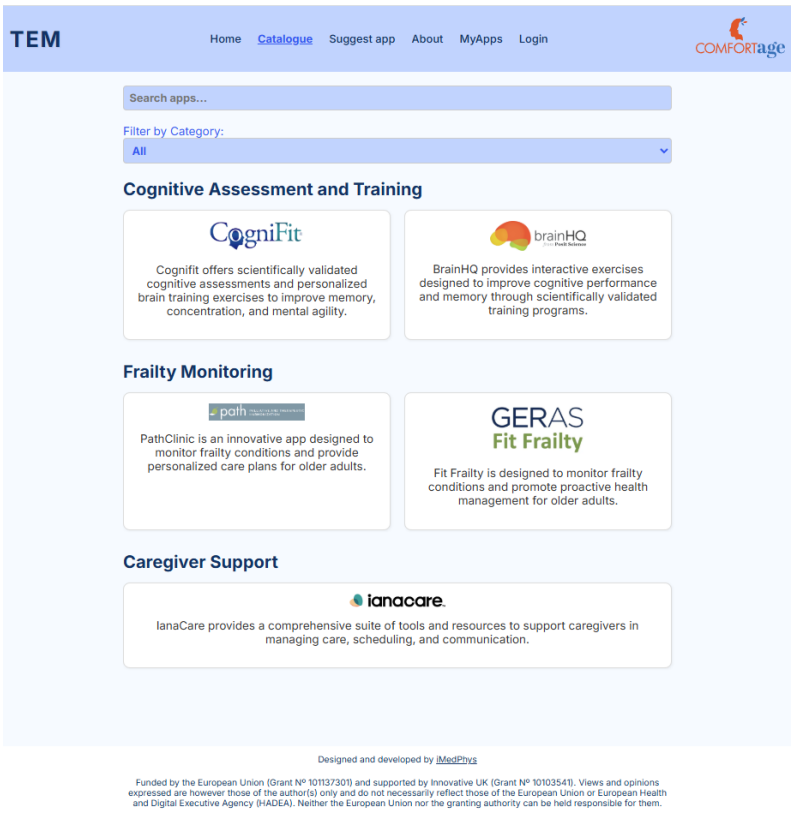
PROPOSED SCRIPT

Training and Educational Marketplace – TEM is a web platform containing a catalogue of digital health tools and applications specifically related to frailty and dementia. The applications themselves are not hosted in TEM, rather a detailed description and a reference to each application's website. applications are systematically categorized based on their content and scope, allowing users to easily navigate and identify relevant resources. In addition, TET resources may provide links to related tools available in the TEM platform, enhancing cross-platform utility. The platform incorporates personalization and recommendation features to tailor suggestions to individual users, while users can create a wish list of applications as well as to rate them. A quality assurance mechanism ensures that only reliable and effective tools are hosted.

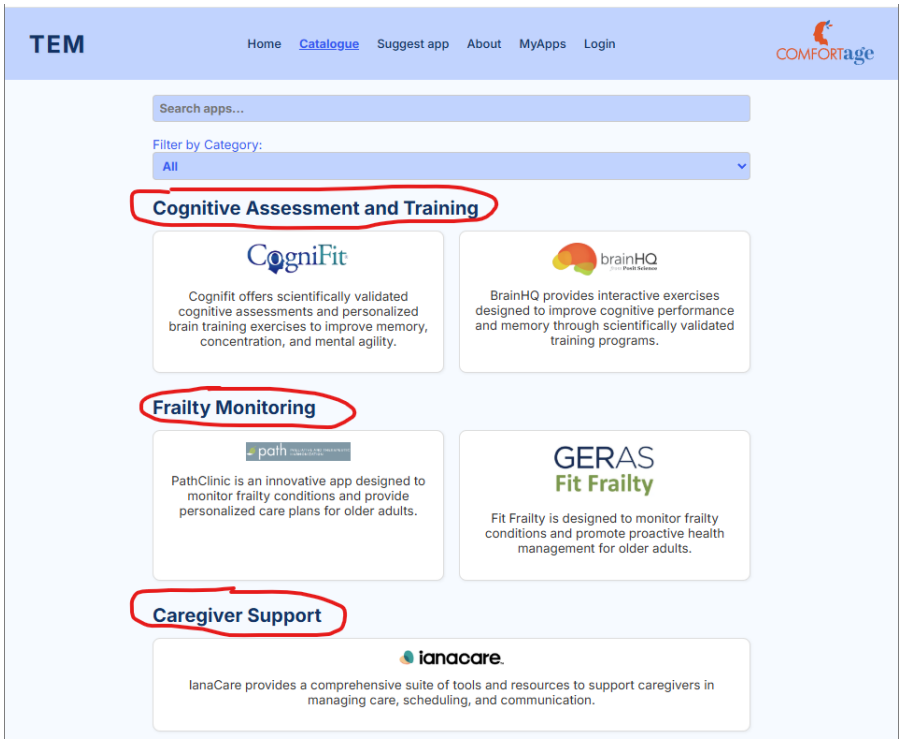
The following video provides an overview of the first version of TEM.

Step-by-Step Guide for Navigating the TET Platform:

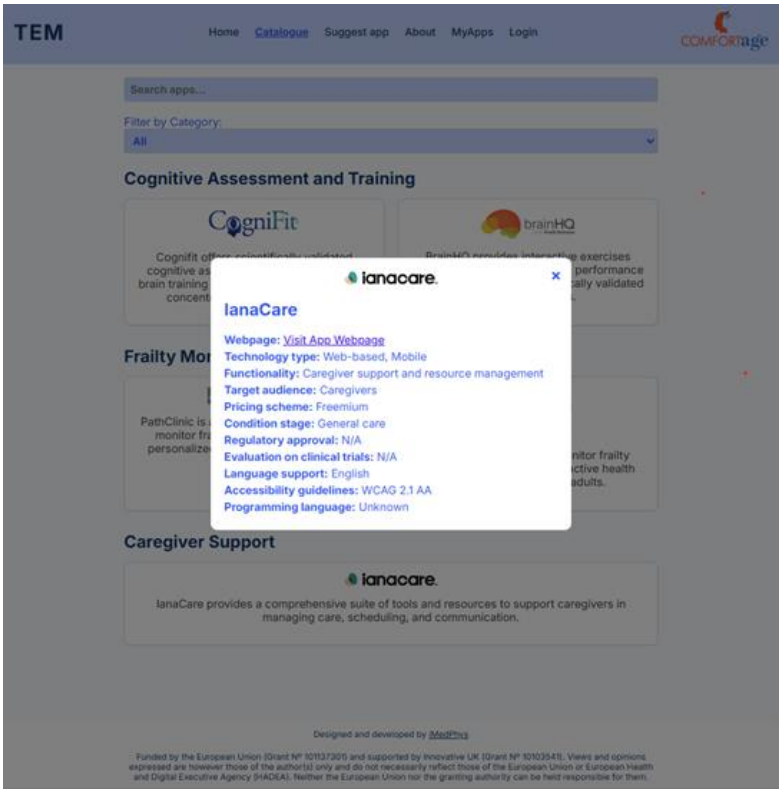
[0-0:13]: This is the current version of the platform. The main part of it is the catalog of applications.



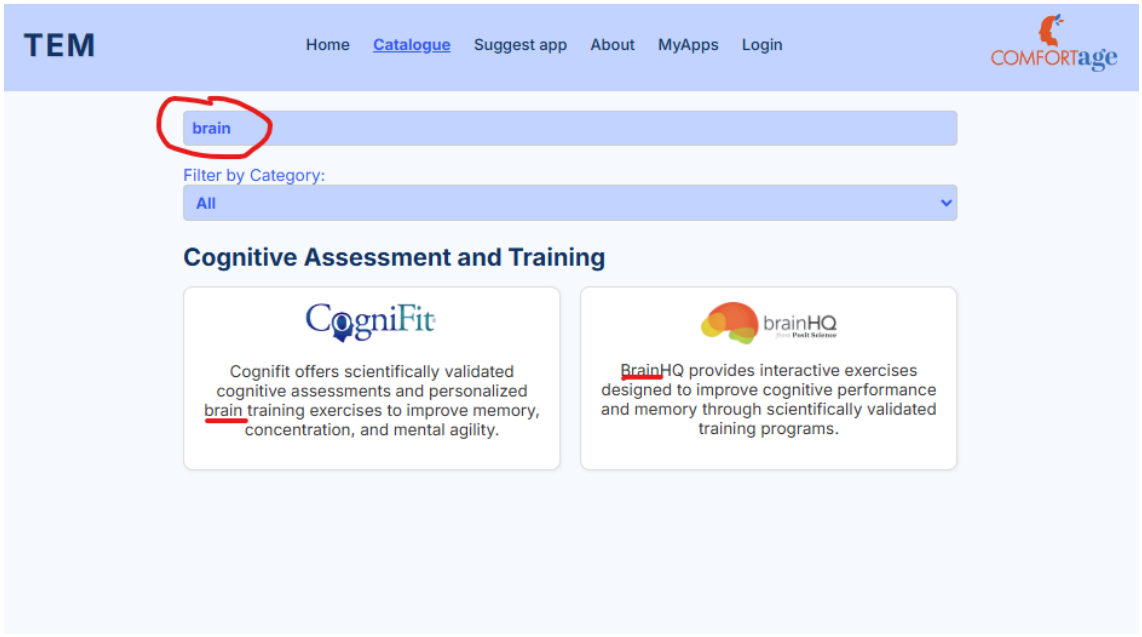
[0:14 – 0:23]: The catalog contains an initial set of application categorized under three indicative categories.



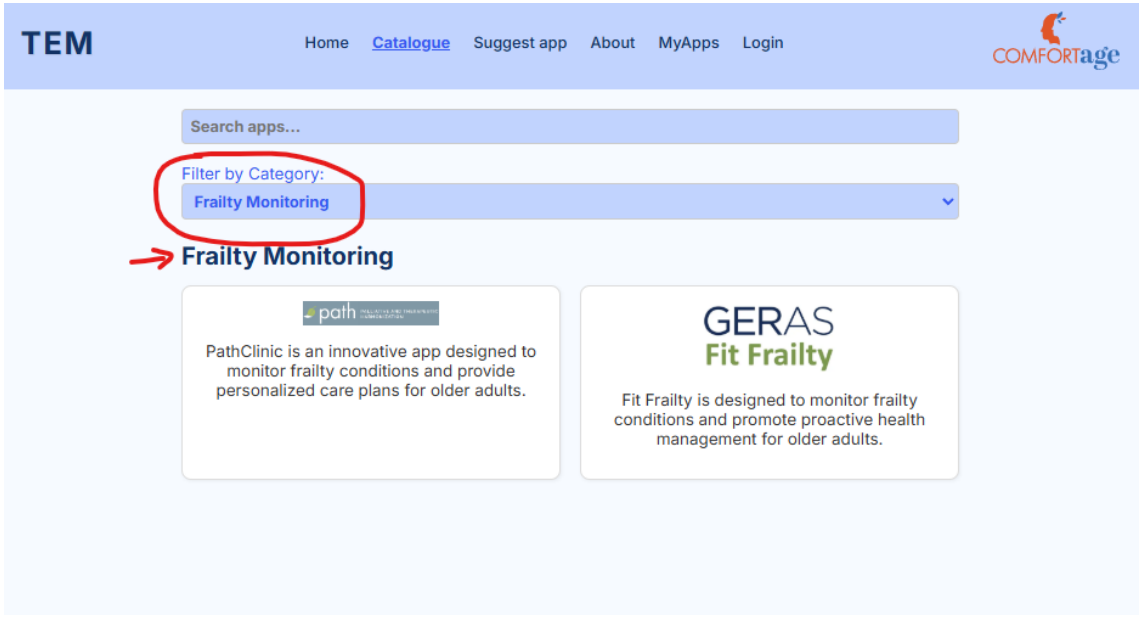
[0:24-0:41]: If you click on any of the apps a popup is shown containing more information about this app, including the link to the app's website. This is important since TEM does not host the applications themselves.



[0:42-1:00]: TEM permits the user to search the list of applications.



[1:01-1:27]: TEM also permits the user to filter the list of applications based on the app's category.



Reporting Form
PILOT SITE (ORGANISATION NAME)

Responsible person (name, email)	
Date of session (start and end date)	
Number of participants (total)	

Facilitator team

List the name of the facilitators involved in the session. Indicate their role in the session and their profile (e.g. gerontologist, nurse, occupational therapist, physiotherapist, etc.)

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults		
Caregivers		
Healthcare professionals		

Small summary

In this Section write a small summary of the session (1-4 lines) with an overall remark on how the participants felt, what was the main outcome and any output that you may find interesting (take home message). It is also useful to include some sentences that the participants used. The aim of this summary is to gather information for social media posts and dissemination purposes.

Training Programme Themes

A. General Impressions & Feedback	
1. Do you agree with the proposed thematic areas of the training programme?	*Provide a paragraph, summarizing the main findings* ***per stakeholder group (older adults/caregivers/healthcare professionals***.
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	*Provide a paragraph, summarizing the main findings per stakeholder group.*
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	*Provide a paragraph, summarizing the main findings per stakeholder group.*

4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	*Provide a paragraph, summarizing the main findings per stakeholder group.*

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	*Provide a paragraph, summarizing the main findings per stakeholder group.*
2. General first impressions about the platform (look & feel):	*Provide a paragraph, summarizing the main findings per stakeholder group.*
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	*Positive Feedback:*
	Challenges or Suggestions:
2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	*Positive Feedback:*
	Challenges or Suggestions:
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	*Positive Feedback:*
	Challenges or Suggestions:

4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	*Positive Feedback:*
	Challenges or Suggestions:
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Provide a paragraph, summarizing the main findings per stakeholder group.*
2. Most interesting part for participants:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
3. Unclear or confusing aspects:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
4. Suggestions for improvement / missing features or topics:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
5. Interest in using the platform in the future:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
6. Other participant comments not previously covered:	*Provide a paragraph, summarizing the main findings per stakeholder group.*

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	*Provide a paragraph, summarizing the main findings per stakeholder group.*
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	*Provide a paragraph, summarizing the main findings per stakeholder group.*
B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	*Positive Feedback:*
	Challenges or Suggestions:
2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	*Positive Feedback:*
	Challenges or Suggestions:
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	*Positive Feedback:*
	Challenges or Suggestions:

3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	*Positive Feedback:* *Challenges or Suggestions:*
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Provide a paragraph, summarizing the main findings per stakeholder group.*
2. Most interesting part for participants:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
3. Unclear or confusing aspects:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
4. Suggestions for improvement / missing features or topics:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
5. Interest in using the platform in the future:	*Provide a paragraph, summarizing the main findings per stakeholder group.*
6. Other participant comments not previously covered:	*Provide a paragraph, summarizing the main findings per stakeholder group.*

Photos (Optional)

In this Section add some photos of the event (5-6). It is nice to have some photos depicting the whole event, including all the people and some focusing on the working materials (You may also include blurred photos or images without visible faces of participants for documentation and/or dissemination purposes. Please confirm whether the provided images can also be used for dissemination).

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ANNEX IV – AUTH Report (Greece)

COMFORTage
Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE (AUTH)

Responsible person (name, email)	Despoina Mantziari, Emmanouil Rigas, Vassiliki Kalfa (AUTH)
Date of session (start and end date)	28th of May, 2025 – 10-12CEST
Number of participants (total)	8

Facilitator team

List the name of the facilitators involved in the session. Indicate their role in the session and their profile (e.g. gerontologist, nurse, occupational therapist, physiotherapist, etc.)

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	1	3
Caregivers	/	/
Healthcare professionals	2	2

Small summary

In this Section write a small summary of the session (1-4 lines) with an overall remark on how the participants felt, what was the main outcome and any output that you may find interesting (take home message). It is also useful to include some sentences that the participants used. The aim of this summary is to gather information for social media posts and dissemination purposes.

Training Programme Themes

A. General Impressions & Feedback

1. Do you agree with the proposed thematic areas of the training programme?	*Older adults – Agreed that the proposed categories cover a very wide ranges of topics and are related to their needs.* *HPCs - Agreed that the proposed categories cover a very wide ranges of topics and are related to their needs*
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	*No new categories were proposed*
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	*Older adults – No similar training programmes*
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	*Older adults – They agreed that they would be interested if it is not very time consuming*

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	*Older adults – They were curious to understand how this tool will help them* *HPCs – They were curious to understand how this tool will help them*
2. General first impressions about the platform (look & feel):	*Older adults – They think that it looks interesting.* *HPCs – They think that it looks interesting.*
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	*Positive Feedback:* *Older adults – Found interesting the pathway.* *HPCs – They think it was clear enough.*
	Challenges or Suggestions: *Older adults – They would like to have a hands-on experience to make futher comments*

	HPCs – They would like to have a hands-on experience to make futher comments
2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	*Positive Feedback:* *Older adults – They were readable. They were interested with the accessibility widget that enhances the letters*
	Challenges or Suggestions: *Older adults – They have only access to smartphones*
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	*Positive Feedback:* *Older adults - Video is really helpful.*
	Challenges or Suggestions: *Older adults – They prefer to take notes themselves with pen and paper.*
4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	*Positive Feedback:* -
	Challenges or Suggestions: *Older adults – When they are on their own, they are worried for frauds and malicious activity. They prefer to have face-to-face sessions on how to use the platform (onboarding). They also like to have a call support to help them* *HPCs- They would like to have a maintenance team to keep the platform active at all times. They believe that no extra support is needed for their onboarding*
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Older adults – They would like to have a hands-on experience to have a conrete opinion*
2. Most interesting part for participants:	*Older adults – The games/puzzles and the quizzes*

3. Unclear or confusing aspects:	*Older adults – Nothing* *HPCs - Nothing*
4. Suggestions for improvement / missing features or topics:	-
5. Interest in using the platform in the future:	*Older adults – They would like to have a hands-on experience and test the tool* *HPCs – They would like to have a hands-on experience and test the tool*
6. Other participant comments not previously covered:	*Older adults – They want to learn about things in their everyday life, that are useful to them* *HPCs – They would recommend this platform to their patients.*

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	*Older adults – They find it very useful to have everything together* *HPCs – They find it very useful to have everything together*
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	-
B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	*Positive Feedback:* *HPCs – They were very interested in the information provided per tool. Especially, for examples of use.*
	Challenges or Suggestions:

2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	*Positive Feedback:* *Older adults – They find it very clear on how to navigate to each tool* *HPCs – They find it very clear on how to navigate to each tool*
	Challenges or Suggestions:
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	*Positive Feedback:*
	Challenges or Suggestions:
3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	*Positive Feedback:*
	Challenges or Suggestions:
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	-
2. Most interesting part for participants:	-
3. Unclear or confusing aspects:	-
4. Suggestions for improvement / missing features or topics:	*Older adults – After choosing a tool they need help with installation on their smartphone. They don't know how to do it themselves*

5. Interest in using the platform in the future:	*HPCs – They were very interested to test the platform*
6. Other participant comments not previously covered:	-

Photos

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ANNEX V – ANA Report (Romania)

COMFORTage
Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE (ANA)

Responsible person (name, email)	**Andreea Stamate, andreea.stamate@anaaslan-academy.ro**
Date of session (start and end date)	20th of May, 2025
Number of participants (total)	8

Facilitator team

List the name of the facilitators involved in the session. Indicate their role in the session and their profile (e.g. gerontologist, nurse, occupational therapist, physiotherapist, etc.)

Andreea Stamate – lead facilitator - researcher (PhD in experimental Psychology and Cognitive Neuro-sience)
Veronica Badea – assistant

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	-	-
Caregivers	-	-
Healthcare professionals	3	5

Small summary

In this Section write a small summary of the session (1-4 lines) with an overall remark on how the participants felt, what was the main outcome and any output that you may find interesting (take home message). It is also useful to include some sentences that the participants used. The aim of this summary is to gather information for social media posts and dissemination purposes.

Participants responded positively to the platform demonstration, describing it as "intuitive," "pleasant," and "easy to navigate." Many appreciated the clear structure and visual design, with one noting that "everything was at hand and straightforward." Key suggestions included adding audio guidance and step-by-step instructions to support senior users. In addition to discussing the proposed training themes, participants were invited to prioritise them—placing emphasis on self-management of frailty and dementia, digital confidence, and lifestyle change—highlighting a strong interest in tools that promote autonomy, prevention, and caregiver support.

Training Programme Themes

A. General Impressions & Feedback	
1. Do you agree with the proposed thematic areas of the training programme?	*Healthcare professionals expressed overall agreement with the proposed thematic areas, particularly emphasizing the relevance of self-management of frailty and dementia, trust and basic digital skills, and navigating and evaluating online health resources. These topics were consistently ranked among the most important, reflecting a strong interest in empowering both older adults and caregivers with knowledge and tools for autonomy and informed decision-making. The training programme was perceived as well aligned with real-world clinical needs and current care priorities in ageing populations.*
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	*Participants proposed two key additions: "methods for prevention and identifying predisposition" and "psychotherapy for individuals in difficulty". These suggestions underline the importance of integrating preventive health strategies and mental health support alongside existing topics. Professionals also recommended strengthening the practical dimension of each module, ensuring that content can be easily applied in clinical or caregiving settings, and expanding support materials tailored for informal caregivers.*
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	*Several healthcare professionals had experience with similar training programmes, particularly in the areas of e-health and geriatric care. While they appreciated the foundational knowledge provided in past programmes, they noted a lack of hands-on tools, interdisciplinary case examples, and*

	real-life applicability. Another recurring theme was the need for more inclusive content that accounts for varying levels of digital literacy and clearer frameworks for caregiver engagement and patient support.
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	*There was strong interest in participating in an online course—provided it is well-structured and practical. Participants expressed a preference for topics such as lifestyle change and health behaviour, peer support and informal caregiver empowerment, and effective use of digital health resources. The most appreciated formats included interactive webinars, case-based learning, short video tutorials, and downloadable resources that could also be used for patient education or interdisciplinary training.*

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	*Overall, participants had a generally positive impression of the platform, describing it as well-designed, pleasant, and intuitive. Several users appreciated the welcoming visual design and perceived the platform as potentially informative and helpful. However, there were also recurring suggestions for improving guidance and usability for older adults. Participants recommended including audio instructions alongside written ones to support accessibility, adding more visual cues or hints to clarify the next steps, and creating a step-by-step user guide. These insights suggest that while the platform feels engaging and user-friendly, its ease of use could be significantly enhanced with additional instructional support tailored to seniors' needs.*
2. General first impressions about the platform (look & feel):	*Participants generally had a positive impression of the platform following the demonstration. Many described it as "pleasant," "simple," and "easy to use," highlighting the clean layout and intuitive navigation. The interface was seen as welcoming and accessible, with one participant noting that*

	"everything was at hand and straightforward." Suggestions for improvement included increasing font size, using more vivid colors, and adding audio support to enhance accessibility for older adults. Overall, the look and feel of the platform contributed to a sense of clarity and user-friendliness.
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	*Most participants reported that the platform was generally intuitive and that they would be able to navigate it and locate specific content. Several noted that the layout and structure made it relatively easy to use, particularly for users already familiar with digital tools. Customisation options and clear section positioning were also appreciated, as was the overall welcoming design. A few participants confirmed that the navigation felt accessible even across different age groups.*
	Despite the overall positive tone, participants raised several usability concerns, particularly in relation to older adults. Suggestions included: • *Making buttons and text larger and using more vivid colours to enhance visibility;* • *Introducing clearer visual cues and audio instructions to guide users through key sections;* • *Creating a simpler, more focused demonstration video without unnecessary contrast settings;* • *Improving cursor visibility;* • *Adding intermediate steps or tooltips for users less confident with technology;* • *Reinforcing navigation through repetition or user guides, especially since some users forgot the steps shortly after learning them.* *Overall, participants agreed that while the platform is usable, additional support features would improve clarity and ease of navigation for older users.*

2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	*Many participants found the text and contrast to be generally clear and legible. Several noted that the platform offered useful features such as theme customization and dyslexia support, which were seen as valuable additions for accessibility. Users also appreciated that multiple display modes were demonstrated, making the platform more approachable for seniors. Regarding icons and buttons, most participants found them intuitive and easy to recognize in general, with some explicitly stating that they were straightforward to use.*
	Participants suggested several improvements to enhance accessibility, especially for older adults: • *Increase font size and boldness, and allow users to adjust these settings according to their needs.* • *Use stronger colour contrast and more vivid hues to help highlight key elements.* • *Provide a clear legend or introductory guide explaining the function of each icon and button before users start navigating.* • *Avoid hiding buttons within menus or behind other elements; all main functions should be visible upfront.* • *Consider reducing the number of buttons/icons to prevent visual overload.* • *Improve spacing and boundaries between buttons to prevent accidental taps and enhance clarity.* *These suggestions highlight the importance of customizable design and clear visual communication to ensure that older users feel confident navigating and using the platform.*
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	*Across the board, participants strongly favoured video-based materials as the most effective learning format for older adults. They cited several reasons: videos are visually engaging, support visual memory, allow for repetition and self-paced learning, and provide clearer demonstrations of tasks or steps. One participant specifically highlighted the*

	usefulness of video tutorials for learning smartphone functions. Overall, videos were seen as intuitive and accessible for seniors, facilitating understanding through both imagery and guided explanation.
	While most participants did not find the content overwhelming, several pointed out areas that could pose difficulties for older users: • *Text-heavy pages or content with too much detail may be confusing or cognitively demanding.* • *Questionnaires were mentioned multiple times as a challenging format, particularly for older adults with lower digital or cognitive skills.* • *Suggestions included increasing visual impact to guide the user more easily and ensuring key concepts are highlighted or presented in larger fonts for those with neuro-cognitive difficulties.* *These insights suggest a strong preference for visual, interactive formats and a need to simplify or scaffold more complex or text-based content.*
4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	*Several participants felt confident they could use the platform on their own, particularly if they had clear explanations or access to video tutorials. They described the platform as user-friendly, accessible, and well-explained, with some noting that the design seemed familiar and easy to follow. For users who already feel comfortable with technology, the platform was perceived as engaging and manageable.*
	A number of participants raised concerns about independent use, especially for older adults with low digital literacy. Some felt that seniors would likely need a guided introduction or the support of a caregiver during

	the initial use. Challenges mentioned included: • *Navigating complex menus;* • *Managing a high number of buttons or features;* • *Accessing questionnaires;* • *Adjusting accessibility settings;* • *Understanding app customization options.* ***Support Needs Identified:*** *Most participants indicated that some form of additional support would be helpful before using the platform independently. Suggestions included:* • *One-on-one assistance or guided onboarding;* • *Introductory training sessions;* • *Step-by-step tutorials;* • *Ongoing help options for clarification.* *This feedback highlights the importance of offering multiple layers of support—especially during onboarding—to build users' confidence and reduce technology-related anxiety among older adults.*
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Most participants felt that the demonstration, while helpful, would benefit from more detailed, step-by-step instructions. Several users expressed a clear preference for guided support, especially during initial platform use, suggesting the inclusion of tutorials, walkthroughs, or audio-narrated instructions to improve understanding. Although a small number of participants found the video clear enough on its own, the majority indicated that additional, intuitive guidance—preferably in multiple formats—would make the experience more accessible and less overwhelming, particularly for older adults or those less familiar with digital platforms.*

2. Most interesting part for participants:	*Participants found different elements of the demonstration engaging, with video content emerging as the most frequently mentioned highlight. Several users appreciated the use of visual materials such as videos and images, which were seen as helpful and appealing. Others pointed to the interactive features of the platform—such as customizable display options (text size, cursor, contrast)—as particularly interesting. The visual simulation of a phone interface and the structured nature of the learning process also captured participants' attention. These responses suggest that participants were most engaged by content that was both visually rich and adaptable to individual needs.*
3. Unclear or confusing aspects:	*While several participants felt that the platform was generally clear and well-structured, others identified specific elements that could cause confusion. The menu structure was mentioned multiple times as a potential source of difficulty, particularly for older adults. One participant noted that the overall use of the platform was unclear, suggesting a need for better guidance. Visual tracking issues were also raised, with a request for a more visible cursor to support ease of following along during demonstrations. Additionally, the customization features of the app were perceived as complex or insufficiently explained. These insights suggest that while the platform's core layout was appreciated, its usability could be improved through clearer navigation structures and more accessible presentation tools.*
4. Suggestions for improvement / missing features or topics:	*Participants offered several constructive suggestions to enhance the platform's usability and accessibility. A common theme was the need for more guided support, including step-by-step instructions and audio guidance to assist users with low digital literacy. One participant proposed the addition of an AI-based help feature to provide real-time assistance with login and navigation. Other suggestions included increasing visual content, improving the structure and clarity of*

	customization options, and avoiding reliance on external platforms like YouTube due to disruptive ads. A few users recommended streamlining the platform to focus on one learning pathway at a time, with the questionnaire appearing automatically at the end. While not all participants felt changes were necessary, the feedback highlights a clear desire for simplification, guidance, and a more seamless user experience, particularly for older users.
5. Interest in using the platform in the future:	*The vast majority of participants expressed interest in trying the platform themselves in a future session. Their willingness was often linked to curiosity and a desire to explore features more thoroughly, particularly aspects they may have missed or not fully understood during the demonstration. This positive response indicates both engagement with the concept and openness to further interaction, suggesting that with the right support and onboarding, users would be motivated to continue exploring the platform independently.*
6. Other participant comments not previously covered:	*Participants did not offer further comments beyond what was already addressed in the previous questions. Most responded with "No" or left the section blank, indicating that the structured questions successfully captured their main feedback and concerns.*

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	*Participants generally had a positive impression of the website following the demonstration. Many described the platform as simple, clear, and easy to use, with a clean layout that avoids overwhelming users with too much detail. The site was perceived as accessible for users of various ages and educational backgrounds, and one participant*

	highlighted its usefulness for maintaining cognitive activity. Suggestions for improvement included using larger fonts, more vibrant colours, and adding audio support to make the experience more engaging and accessible, particularly for older adults. *In terms of emotional response, participants mostly felt comfortable, confident, or curious after the presentation. One participant, however, reported feeling anxious, highlighting the importance of ensuring a supportive and reassuring onboarding experience. Overall, the demonstration made participants feel interested and capable, reinforcing the platform's potential to be well-received by senior users with the right adaptations in place.*
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	*Design & Colour Scheme:* *Most participants found the website's design to be pleasant, well-organized, and modern. The colour scheme was described as welcoming, balanced, and non-overwhelming, with one participant noting that it inspired trust, evoking the look of a medical application. However, several suggestions for improvement were made: participants recommended using more vibrant or contrasting colours to better highlight frequently used or important features, and some noted a need for more diverse visual elements and icons to make the platform more engaging and intuitive.* *Emotional Reactions to Visual Elements:* *The visual components elicited mostly neutral to positive feelings. Some participants felt the interface was trustworthy or modern, while others indicated they would need more time using the platform to form a clearer impression. A few participants felt there were too few visual elements, which limited the platform's ability to fully capture their attention or elicit stronger emotional responses. These insights suggest that while the current design is functional and appealing, adding more engaging and dynamic visual cues could enhance user experience and emotional connection.*

B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	*Most participants reported that they were able to understand the purpose of each section of the platform, including the app catalogue, filtering options, and navigation menu. They described the platform as clear, intuitive, and easy to navigate, with content that felt accessible and well-positioned. Several participants appreciated the straightforward design and found it easy to locate and interpret the available features. Many also said that the demonstration helped them grasp the general offerings of the website.*
	A few participants noted that while the structure was understandable, it may not be sufficiently intuitive for older adults, especially those with limited digital experience. There were calls for more detailed explanations and the inclusion of audio or video-based guidance to reinforce clarity. Some users indicated their understanding was superficial or general rather than detailed, and one respondent wished there had been more specific information about the programs available on the site. These insights suggest that while the initial presentation was helpful, there is a clear need for layered, multi-format guidance to ensure all users—especially seniors—can fully grasp and confidently explore the platform's functions.
2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	*Most participants found the structure and organization of the website to be clear, logical, and easy to follow during the demonstration. Several users described the layout as well-organized, intuitive, and accessible, with particular appreciation for the ease of locating and filtering content. The majority agreed that the platform's sections were well presented and generally on par with what users expect from a modern digital environment. The simplicity of the interface was praised as making it easier for users of varying backgrounds to engage with the platform.*

	Despite the overall clarity, a few participants noted that older users might still benefit from a dedicated user guide or tutorial to better support their navigation. Specific suggestions included increasing font size and improving the suggestiveness of icons, which some found too subtle or not intuitive enough. Another participant mentioned the need for deeper exploration of the platform's layout beyond the surface-level overview presented in the demo. These points suggest that while the structure is well-designed, further accessibility enhancements and scaffolded guidance could improve usability for seniors and those less familiar with digital tools.
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	*The majority of participants found the navigation menu, filtering options, and search functionalities to be intuitive and accessible. Several users highlighted that these features were presented clearly during the demonstration and appeared simple to use. The layout and categorisation were perceived as straightforward, with participants appreciating how easily they could locate relevant information.*
	Despite the general positivity, some participants suggested enhancements to improve usability, particularly for older adults. These included: • *Adding more pictograms and vivid colours to help highlight text or buttons when hovered over;* • *Implementing autocomplete or search suggestions to simplify the typing and search process;* • *Making the interactive elements more visually distinctive, especially during mouse-over interactions.* *One participant noted that while the features are already functional and intuitive,*

	their visual design could be further refined to better support users with limited digital experience. Overall, the core functionalities were well received, but improvements in visual feedback and user guidance could enhance their effectiveness for the target audience.
3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	*Most participants described the platform's visual design as clean, pleasant, and easy to follow. They appreciated the aerated layout, good contrast, and elegant overall appearance, which helped avoid visual fatigue. Several users noted that the fonts, icons, and images were displayed in a way that felt accessible and user-friendly, with many finding the design visually clear and suitable for a broad range of users.*
	Some participants highlighted areas for improvement to better accommodate older adults or users with lower digital comfort: • *Larger fonts and icons were suggested to enhance readability;* • *More suggestive icons and illustrative images could improve comprehension and ease of use;* • *A few users recommended more vibrant colours or hover effects to highlight key interactive elements and make the platform more dynamic and intuitive;* *Providing font size adjustment options was also seen as a useful accessibility feature. Overall, while the visual design was well-received, feedback suggests that greater customisability and visual cues would further improve accessibility for senior users.*
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Most participants found the demonstration generally clear, especially in terms of explaining the platform's basic structure and functionality. Several users felt confident in their understanding and did not perceive a need for additional instructions. However, a significant portion of respondents—particularly those reflecting on older users' needs—*

	emphasised the importance of more step-by-step guidance. They suggested including audio narration, repetitive exposure, or dedicated walkthroughs to support users with limited digital skills. While the clarity of the demonstration was acknowledged, the overall feedback indicates that layered guidance (visual, audio, and interactive) would enhance understanding and usability, particularly for seniors less familiar with digital platforms.
2. Most interesting part for participants:	*Participants highlighted a range of features they found particularly engaging during the demonstration. The search function received praise for its placement and ease of use, while others appreciated the "Cognitive Fit" section, suggesting interest in features that support cognitive assessment or matching. Some users pointed to the minimalist design and intuitive navigation as strengths that made the platform appealing. One participant found the social support assistance feature particularly valuable, indicating that practical tools addressing real-life needs are seen as meaningful. Overall, the most appreciated elements were those that were well-structured, easy to navigate, or directly relevant to users' daily functioning and autonomy.*
3. Unclear or confusing aspects:	*The majority of participants reported that they did not find anything unclear or confusing during the demonstration, indicating a generally positive perception of the platform's usability and clarity. Several explicitly stated that everything was well-explained and easy to follow. However, one participant mentioned the menu as a point of confusion, suggesting that the navigation structure could still be refined to ensure greater intuitiveness, especially for first-time users. Overall, the feedback reflects a strong sense of clarity, with minor indications that some interface elements may benefit from additional visual or structural adjustments.*

4. Suggestions for improvement / missing features or topics:	*Participants offered several constructive ideas to enhance the platform's accessibility and user experience. Key suggestions included improving the visual interface—specifically the menu layout, font size, and use of colour—to make content more legible and engaging. Others recommended the addition of an AI-based support feature to assist users with questions related to platform functionality. Several users also called for additional guidance, such as brief step-by-step instructions or pop-up text tooltips that appear when hovering over certain areas. The inclusion of audio support was proposed to aid users with visual or cognitive limitations. While a few participants felt no changes were needed, the overall feedback points to the value of multi-sensory guidance and improved visual cues to support diverse user needs.*
5. Interest in using the platform in the future:	*Nearly all participants expressed a clear interest in trying the platform personally in a future session. Their responses suggest a high level of engagement and curiosity, with many open to exploring the platform's features more directly. This willingness indicates that the demonstration successfully sparked users' motivation and confidence to interact with the platform, laying a strong foundation for future testing or training sessions.*
6. Other participant comments not previously covered:	*Participants did not provide any further comments beyond what was already addressed in the structured questions. Most responded with "No" or left the section blank, indicating that the existing questions were comprehensive and covered all relevant aspects of their experience and impressions.*

Photos (Optional)

In this Section add some photos of the event (5-6). It is nice to have some photos depicting the whole event, including all the people and some focusing on the working materials (You may also include blurred photos or images without visible faces of participants for documentation and/or dissemination purposes. Please confirm whether the provided images can also be used for dissemination).

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ANNEX VI - CING Report (Cyprus)

Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE (The Cyprus Institute of Neurology and Genetics -CING)

Responsible person (name, email)	**Soteroulla Ellina (soteroullae@cing.ac.cy) and Eleni Loizidou (eloizidou@cing.ac.cy)**
Date of session (start and end date)	4th of June, 2025
Number of participants (total)	10

Facilitator team

List the name of the facilitators involved in the session. Indicate their role in the session and their profile (e.g. gerontologist, nurse, occupational therapist, physiotherapist, etc.)

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	1	4
Caregivers	-	1
Healthcare professionals	2	2

Small summary

In this Section write a small summary of the session (1-4 lines) with an overall remark on how the participants felt, what was the main outcome and any output that you may find interesting (take home message). It is also useful to include some sentences that the participants used. The aim of this summary is to gather information for social media posts and dissemination purposes.
The particular workshop exceeded expectations in terms of participants' engagement. Take home messages include the need of translation in their own language and an even more user-friendly experience in terms of TET and TEM appearance.

Training Programme Themes

Funded by the European Union

1. Do you agree with the proposed thematic areas of the training programme?	*Provide a paragraph, summarizing the main findings per stakeholder group (older adults/caregivers/healthcare professionals.* ***Yes, participants agree.***
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Additional area including video demonstrations explaining the use and content of TET and TEM***
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***No***
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Yes but only if it is pre-recorded so they can do it on their own pace***

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Participants were concentrated in the demonstration as they were curious to understand the content***
2. General first impressions about the platform (look & feel):	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***They found that this is an interesting platform and has a promising purpose****.*
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform?	*Positive Feedback:* ***Yes, participants were able to understand how to navigate.***

• Did they understand how to find specific courses or activities?	
	Challenges or Suggestions: ***They noted that it is possible for their friends of same age to not be able to do so as most of them are not familiar with the use tablets.*** ***In terms of navigation some of them would prefer to see a drop-down menu. Others preferred bulletpoints. Thus, they suggested that the user has the option to choose the way of display***
2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	*Positive Feedback:* ***Icons and buttons made sense***
	Challenges or Suggestions: ***They said that the colors were not engaging and they felt that they were being examined. They suggested the use of more lively colors***
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	*Positive Feedback:* ***They liked the existence of interactive exercises***
	Challenges or Suggestions: ***Suggested the addition of cross word puzzles and sudoku***
4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	*Positive Feedback:* ***Yes, comfortable using the platform***
	Challenges or Suggestions: ***Ideally, they would like an initial video demonstation introducing and showing the use of the platform***
C. Closing Discussion	

1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Ideally more step by step guidance***
2. Most interesting part for participants:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Gamification as a tool against dementia***
3. Unclear or confusing aspects:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***All of the stakeholder groups were engaged in a common conversation and their opinions were aligned. Confused about the availability of the platform (tablet, pc, mobile phone?) and whether it will be free.***
4. Suggestions for improvement / missing features or topics:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***All of the stakeholder groups were engaged in a common conversation and their opinions were aligned. Native language is very important. Better explanation on the way it can help each stakeholder group***
5. Interest in using the platform in the future:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Yes***
6. Other participant comments not previously covered:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***They believe that dementia patients would have great difficulty in handling the platform***

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction:	*Provide a paragraph, summarizing the main findings per stakeholder group.*

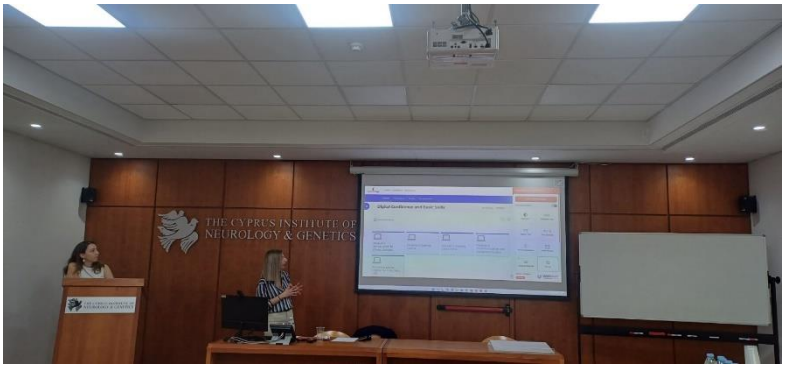
• What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	***They found its existence interesting and quite encouraging.*** ***The presentation gave them a better understanding although they would prefer a more detailed demonstration***
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***A bit cold based on the colors. They prefer them more vivid***
B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	*Positive Feedback:* ***Games and applications used by healthy people, patients with dementia and their carers.***
	Challenges or Suggestions: ***More specific information on the advantages of its use***
2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	*Positive Feedback:* ***Nice icons***
	Challenges or Suggestions: ***They would prefer a friendlier navigation which would not require them to type the name of the application needed***
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	*Positive Feedback:* ***Effective showcase of the main features. No confusion was noted during the demonstration***
	Challenges or Suggestions: ***They felt that the category of user should be written in a more clear way.***
3. Aesthetic & Accessibility (Perception from the Demo)	*Positive Feedback:*

Visual Comfort: • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	***Existence of choice for contrast and the size of the letters was welcomed. The ruler was also found very useful.***
	Challenges or Suggestions: ***They prefer more vivid colors and images as they did not feel it very friendly of the user.***
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***They prefer a more step by step guidance. They highlighted the importance of it being in their language***
2. Most interesting part for participants:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***The use of youtube inside the marketplace***
3. Unclear or confusing aspects:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***What is the range of age for older adults. Can the applications being used interchangeably between older adults and people with cognitive impairment?***
4. Suggestions for improvement / missing features or topics:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***They found difficulties in searching for specific tools. More specifically that they need to type on their own the name of the tool. They would prefer more images***.
5. Interest in using the platform in the future:	*Provide a paragraph, summarizing the main findings per stakeholder group.* ***Yes, given a training is provided in advance***
6. Other participant comments not previously covered:	*Provide a paragraph, summarizing the main findings per stakeholder group.*

	When they give a right answer it would be nice to have a pop up message congratulating them and not just when they are upgrading a level.

Photos (Optional)

In this Section add some photos of the event (5-6). It is nice to have some photos depicting the whole event, including all the people and some focusing on the working materials (You may also include blurred photos or images without visible faces of participants for documentation and/or dissemination purposes. Please confirm whether the provided images can also be used for dissemination).



Presentation slides

COMFORTage

Agenda:

- Παρουσίαση θεματικών ενοτήτων της εκπαιδευτικής πλατφόρμας
- Παρουσίαση Training and Educational Toolkit (TET) και Συζήτηση
- Παρουσίαση Training and Educational Marketplace (TEM) και Συζήτηση

TEM	TET
Κατάλογος ψηφιακών εργαλείων και εφαρμογών σχετικές με την άνοια	Διάθεση καινοτόμων εκπαιδευτικών πηγών

Funded by the European Union

Θεματικές Ενότητες

- *Ενδυνάμωση της Παιδείας στον τομέα της Υγείας*
- *Παιδεία στον τομέα της Άνοιας*
- *Αυτοδιαχείρηση στον τομέα της Άνοιας*
- *Αλλαγή για πιο υγιή τρόπο ζωής*
- *Απόκτηση βασικών ικανοτήτων και αυτοπεποίθησης κατά την χρήση ψηφιακών συσκευών*
- *Προστασία Δεδομένων και γνώσεις για Ιδιωτικότητα*
- *Πλοήγηση και Αξιολόγηση online πηγών με θέμα την υγεία*
- *Ψηφιακά εργαλεία για αυτοδιαχείρηση (self-management) πχ wearables*
- *Υποστήριξη σε φροντιστές*

COMFORTage TET

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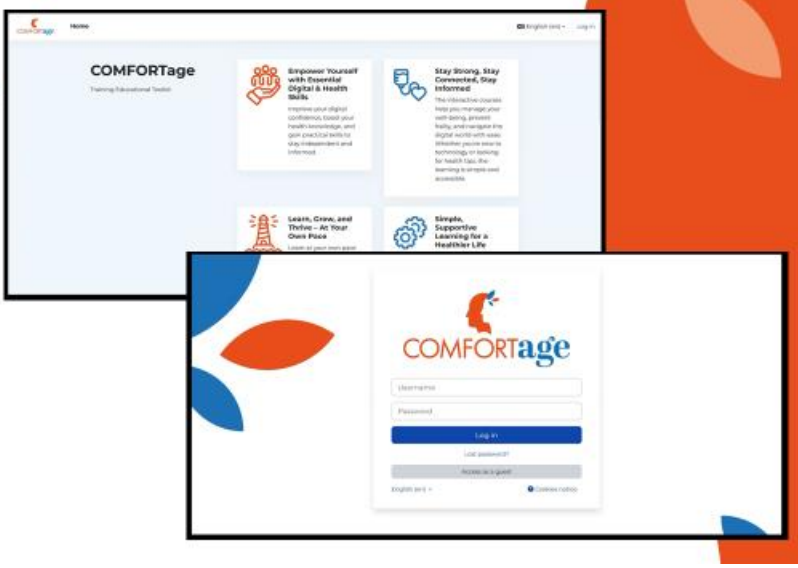

COMFORTage TEM

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Συζήτηση

Q&A


COMFORTage
THANKS
For your attention
Ask us everything
info@comfortage.eu
www.comfortage.eu
Follow us in social media
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ANNEX VII - DEPAN Report (Greece)

Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE (DEPAN & Community Center of the Municipality of Amphipolis)

Responsible person (name, email)	Athanasios Politis (a.politis@depan.gr)
Date of session (start and end date)	3ed of June, 2025 & 4th of June, 2025
Number of participants (total)	8

Facilitator team

The main facilitator involved in both sessions was Mr. Athanasios Politis (Social Scientist/Economist) whereas in the second session that took place in a hybrid mode in Community Center of the Municipality of Amphipolis Mrs. Anna Kochliaridou (Psychologist) assisted.

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	3	1
Caregivers	2	1
Healthcare professionals		1

Small summary

The sessions were conducted in a good atmosphere and participants are anticipating to further discover the two platforms in the future. Both platforms TET & TEM seemed interesting to the target groups. The thematic topics, the gamified features of the TET Platform together with the TEM platform dynamic constitute innovative elements that can engage stakeholders.

Training Programme Themes

A. General Impressions & Feedback

1. Do you agree with the proposed thematic areas of the training programme?	***older adults:*** *All agreed with the proposed thematic areas of the training programme.* ***caregivers:*** *All agreed with the proposed thematic areas of the training programme.* ***healthcare professionals:*** *Agreed with the proposed thematic areas of the training programme.*
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	***older adults:*** *The proposed* thematic areas seem to cover most of our concerns and needs. No suggestions at the moment. ***caregivers:*** *The proposed* thematic areas seem to cover most of our concerns and needs. No suggestions at the moment. ***healthcare professionals:*** No suggestions at the moment.
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	***older adults:*** *The participants have previously attended other training programmes (most of them in person). Interaction and participation was a key takeaway in most of them.* ***caregivers:*** *The participants have previously attended other training programmes (most of them online). Gamified aspects did not exist and is a nice feature! They commonly agreed that online training programmes can play a positive success factor nowadays due to flexibility offerings.* ***healthcare professionals:*** *The participant has previously attended several online training programmes. Some asynchronous features are the same like the ones on our Video demonstrated.*
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	***older adults:*** All seemed interested in attending an online course focused on health and digital literacy. Gamified features, short Videos, microlearning approach. ***caregivers:***

	Attending an online course focused on health and digital literacy can enhance their skills. Videos seem to be very helpful, Gamified features, reward systems etc would facilitate the engagement. ***healthcare professionals:*** Videos seem to be very helpful, Gamified features, reward systems, quizzes, etc would facilitate the engagement.

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	***older adults:*** This category felt mostly curious, waiting from the facilitator to further explain them and translate certain parts of the demontration. ***caregivers:*** For this category the participants seemed more familiar with many aspects during the presentation. ***healthcare professionals:*** *The participant felt familiar with such a platform.*
2. General first impressions about the platform (look & feel):	***older adults:*** They would expect to practice it on their own to further discover it and understand it better. ***caregivers:*** Positive ***healthcare professionals:*** The participant felt familiar with such a platform.
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	*Positive Feedback:* In principle yes
	Challenges or Suggestions: More tutorials (short videos for key actions might be needed and inserted as a Guide where participants can go and find certain actions – like FAQs)
2. Readability & Accessibility	*Positive Feedback:*

• Were text, colors, and contrast clear? • Did icons and buttons make sense?	All were clear (Accessibility Menu makes it even better). *Challenges or Suggestions:* It might be useful to add an info sign with more information in some buttons when you scroll over it/click it.
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	*Positive Feedback:* Ranked by preferance: 1. *Videos* 2. *Quizzes* 3. *Interactive Exercises* 4. *Texts* *Challenges or Suggestions:* Micro learning approach can be useful for participants
4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	*Positive Feedback:* Yes, if they feel confident and know what steps to take *Challenges or Suggestions:* More tutorials (short videos for key actions might be needed). The level of ICT literacy of each participant would be a challenge.
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	***older adults:*** A more step-by-step guidance would be definately helpful. ***caregivers:*** A more step-by-step guidance would be helpful. ***healthcare professionals:*** A more step-by-step guidance would be helpful.
2. Most interesting part for participants:	***older adults:*** The gamified aspects of the platform ***caregivers:*** The gamified aspects of the platform ***healthcare professionals:*** *The gamified aspects of the platform*
3. Unclear or confusing aspects:	***older adults:*** Hands on Practice activity was not presented during the video and Option buttons were not all clear on the lesson for participants. ***caregivers:***

	Hands on Practice activity was not presented during the video and Option buttons were not all clear on the lesson for participants. ***healthcare professionals:*** Hands on Practice activity was not presented during the video and Option buttons were not all clear on the lesson for participants.
4. Suggestions for improvement / missing features or topics:	***older adults:*** A more step-by-step guidance would be definately helpful. ***caregivers:*** A more step-by-step guidance would be definately helpful. ***healthcare professionals:*** A more step-by-step guidance would be definately helpful.
5. Interest in using the platform in the future:	***older adults:*** All participants seemed interested in using the platform in the future. ***caregivers:*** All participants seemed interested in using the platform in the future. ***healthcare professionals:*** The participant seemed interested in using the platform in the future.
6. Other participant comments not previously covered:	***older adults:*** Translations would help all participants. ***caregivers:*** Translations would help all participants. ***healthcare professionals:*** Translations would help all participants.

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	***older adults:*** This category felt mostly curious, waiting from the facilitator to further explain them and translate certain parts of the demontration.

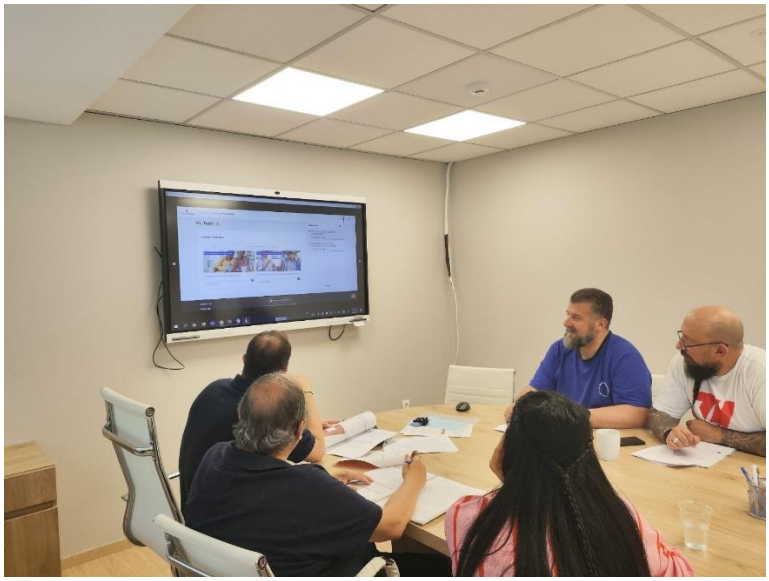
	caregivers: For this category the participants seemed more familiar with many aspects during the demonstration. ***healthcare professionals:*** *The participant felt familiar with such a platform.*
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	***older adults:*** The design is nice. ***caregivers:*** The design seems modern. ***healthcare professionals:*** The design seems trustworthy.
B. Feedback by Category	
1. Navigation & Structure Content Understanding: • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	*Positive Feedback:* *The Navigation & Structure of the catalogue menu was clear enough.* *Challenges or Suggestions:* *N.A.*
2. Navigation & Structure (Based on the Demo) Ease of Understanding Layout: • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	*Positive Feedback:* *The Navigation & Structure of the catalogue menu was clear enough.* *Challenges or Suggestions:* *N.A.*
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	*Positive Feedback:* *The main key features were clear enough from the demonstration.* *Challenges or Suggestions:* *N.A.*

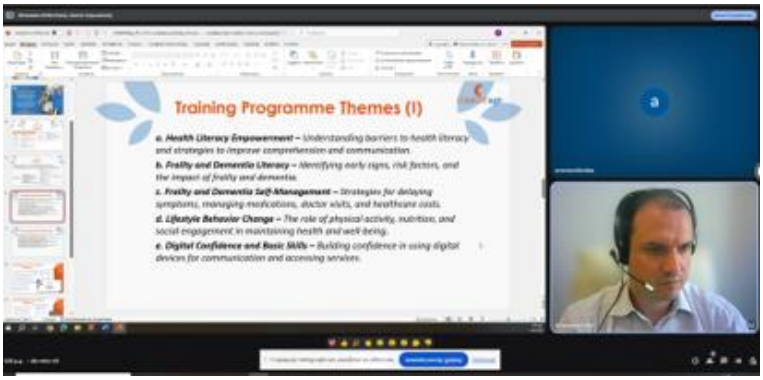
3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	*Positive Feedback:* *Ye, the Aesthetic & Accessibility of the website was good.* *Challenges or Suggestions:* *Accessibility feature should exist if not already.*
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	***older adults:*** Not required. ***caregivers:*** Not required. ***healthcare professionals:*** Not required.
2. Most interesting part for participants:	***older adults:*** The catalogue. ***caregivers:*** The filtering by categories. ***healthcare professionals:*** Description of the apps
3. Unclear or confusing aspects:	***older adults:*** Needs registration to use TEM; If yes the same as TET; ***caregivers:*** Needs registration to use TEM; If yes the same as TET; ***healthcare professionals:*** What are the criteria/process for the tools to be uploaded?
4. Suggestions for improvement / missing features or topics:	***older adults:*** *Accessibility feature should exist if not already.* ***caregivers:*** *Accessibility feature should exist if not already.* ***healthcare professionals:*** *Accessibility feature should exist if not already.*
5. Interest in using the platform in the future:	***older adults:***

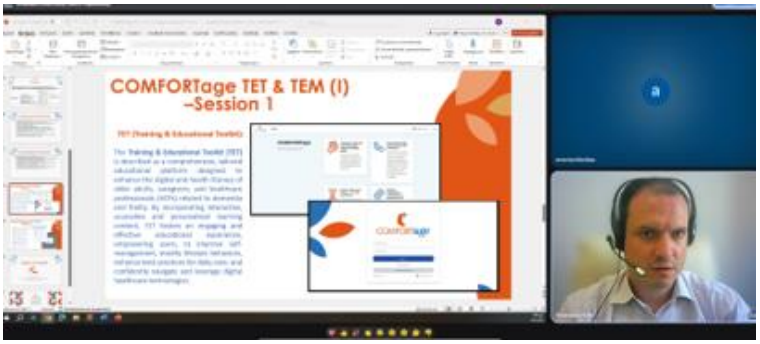
	All participants seemed interested in using the platform in the future. ***caregivers:*** All participants seemed interested in using the platform in the future. ***healthcare professionals:*** The participant seemed interested in using the platform in the future.
6. Other participant comments not previously covered:	***older adults:*** Translations would help all participants. ***caregivers:*** Translations would help all participants. ***healthcare professionals:*** Translations would help all participants.

Photos (Optional)

In this Section add some photos of the event (5-6). It is nice to have some photos depicting the whole event, including all the people and some focusing on the working materials (You may also include blurred photos or images without visible faces of participants for documentation and/or dissemination purposes. Please confirm whether the provided images can also be used for dissemination).




Training Programme Themes (I)
a. Health Literacy Empowerment – Understanding barriers to health literacy and strategies to improve comprehension and communication.
b. Frailty and Dementia Literacy – Identifying early signs, risk factors, and the impact of frailty and dementia.
c. Frailty and Dementia Self-Management – Strategies for delaying symptoms, managing medications, doctor visits, and healthcare costs.
d. Lifestyle Behavior Change – The role of physical activity, nutrition, and social engagement in maintaining health and well-being.
e. Digital Confidence and Basic Skills – Building confidence in using digital devices for communication and accessing services.


COMFORTage TET & TEM (I)
–Session 1


You levelled up!
Module 1: Introduction to Digital Devices

ANNEX VIII – INTRAS Report (Spain)

COMFORTage
Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE INTRAS

Responsible person (name, email)	**Sofía Ballesteros, sofiabr@intras.es**
Date of session (start and end date)	5th of May, 2025
Number of participants (total)	11

Facilitator team

Sofía Ballesteros, social worker from the R&D&I department of the INTRAS foundation. During the session, she contextualised the participants about the activity to be carried out (to avoid confusion with other activities in which they can participate) and explained the materials and contents. She guided the session through all its phases and opened questions for discussion.

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	1	8
Caregivers	1	1
Healthcare professionals		

Small summary

During the session, participants were very interested and 'engaged' with the activity. On several occasions they expressed that they would have liked to have had the opportunity to test the platforms in their own homes first, as they felt that this would have given them a more complete feedback. They pointed out that, although the videos made everything look 'easy', they were not sure if they could use them on their own at home. As a result, they expressed an interest in following the development of the platforms closely and in being able to test them personally at home when possible.

Training Programme Themes

A. General Impressions & Feedback

1. Do you agree with the proposed thematic areas of the training programme?	**They feel that all the issues proposed are necessary and are good.** *'There are a lot of issues already proposed'.* **They talk about the actually difficulties in accessing healthcare using technology** 'I am more in favour of not everything having to be done by telephone, that there are both possibilities ' 'Internet healthcare is complicated, as there are many people who do not understand the machine and the information is not given to you properly ' **They comment that it is necessary for a person to guide you to use the healthcare services using technology** 'I would need a person to guide me ' 'It is necessary to learn because the trend, as everything is developing, it takes you that way '(**That's the direction things are going)** 'A person to guide you and not treat you like you don't know anything ' "Otherwise, they are leaving part of society behind." 'something that helps to understand these platforms could be an activity like the one we are doing now" **They comment that in Spain in some areas such as banks there is a senior programme, that if they detect that it is an elderly person who is trying to carry out a transaction, they contact them to help them.** 'Include a senior programme, so that if they detect that the person connecting is a senior and not a professional, they can simplify the page and guide you'. 'It is necessary that the terms of the contents are adapted to a normal vocabulary, something that we can all understand ' 'For example, in a hospital in Madrid there is a stewardess who accompanies you through the whole process and explains things to you if you don't understand them'

	They comment that it would be very positive to have this kind of support and personalisation. **They talk about these types of supports that they have had and that have helped them but that can be taken to this type of platform (e.g. virtual guide, virtual assistant).** **During this part of the session, the participants agree with the proposed themes and talk about possible aids that make it easier for them to access the contents and to be able to manage easily on platforms with this objective.**
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	**They begin by talking about other topics that could be included that are not normally talked about** 'Taboo topics could be included' 'training about our body, about how it works and how it evolves (menopause, urine leakage, mood changes...)' "how to face death. I would like to hear different opinions and talk about it, it is such a natural thing that we have to go through it, there are many ways of dealing with it and it all depends on how you approach it ' 'go prepared, only when a friend dies and it overwhelms you and you don't accept it' 'I have heard people speak who have given me so much peace when facing death that they have taken a weight off my shoulders ' 'it is a reality and you have to prepare for it" **One of the participants is an informal carer of a person with Alzheimer's and comments on his experience in a mutual support group.** 'I go to meetings of relatives with Alzheimer's and we are working on and promoting the living will' **It is mentioned that another important topic could be training on this kind of possibilities and explaining how it is done**. 'In cognitive cases, we know that there are some diseases that are not known, it would

	be very good to explain to people how this happens, the first symptoms of cognitive diseases to be able to detect it in the person next to you, your husband, your wife, you need training in this to be able to detect it and go to the doctor' "I, for example, the people I meet, some of them have been caring for a person with this disease for many years and they are getting experience, but others who are new to the disease think it's going to be easy, and we warn them that it is going to be very hard and we give them strategies" **Another participant is an active volunteer in another association and works a lot with this issue:** "There is another important issue: Who takes care of the carer? 'there are very hard moments and decisions and we have to teach people about it' **(Like a Caragiver for example, deciding to take the person to a nurse home)** 'a friend who has had a stroke has had some tests done by her family when they have seen strange things, so I think it could be very positive to know how to do these 4 simple tests (stick out your tongue...etc.) to know how to apply them at home and be able to detect it early and take her to the doctor quickly' 'memory can be training, it can be taught" "and prevention can be taught in the same way as physical exercise' **We talk about training in a more specific way, for example: Knowing that, for example, it is good for your back to do X exercise.** **All participants agreed that including topics that are not normally talked about or topics that prepare them to detect symptoms would be very beneficial.**
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was	**Some of the participants have attended some kind of training programme on these issues.**

there anything you felt was missing or could have been improved?	'All kinds of training, last week I had one on who cares for the carer and what the person who has a mental illness needs' 'also on first aid' 'there are some courses on the internet on cognitive cases and I have done these courses and then they give you a test and they are given by health professionals, it is worth it'. 'I've done (**first aid' course**) it and I don't remember anymore because it's been about five years since I did it'.
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	'I like everything that involves learning' 'the only thing is that you have to remember everything afterwards'

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	Provide a paragraph, summarizing the main findings per stakeholder group. **As the video of the platform was shown in English, watched the video step by step, translating and explaining each section as we went. The participants were satisfied with the platform and its parts and seemed to understand the explanation well.**
2. General first impressions about the platform (look & feel):	Provide a paragraph, summarizing the main findings per stakeholder group. **First impressions were good but they mentioned that they would like to be able to test it autonomously to see if it is really easy to use.**
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	Positive Feedback: **They said that from the look of the video it seemed very easy to use.** **Yes, they seemed to understand it perfectly and found it very intuitive.**
	Challenges or Suggestions:

2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	Positive Feedback: **In general, they rate the visual design positively: they consider that the font size is adequate, the colours are well chosen and the contrasts are appropriate.** 'I can see it well because it is black on white'. **They highlight that** 'the icons are very important' and that they are clear.
	Challenges or Suggestions: **However, they fail to identify the accessibility icon; they do not recognise it as a symbol associated with accessibility, which leads to confusion.** 'Maybe they explain it when you enter the platform'.
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	Positive Feedback: **They like interactive materials and especially value active participation:** "You need to interact with it, not just watch a video explaining things." 'it's the only way to retain'. **They consider that the contents are not difficult and think that they are aimed at older people. They think that they could feel comfortable using them, although they also mention that they cannot be sure without having put them into practice.**
	Challenges or Suggestions:
	Positive Feedback:

4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	**The instructions seem clear to them, although they indicate that they would like to be able to access them easily and repeat them if necessary.** As they comment: 'The first time is always going to be complicated, you lack security', 'I prefer to explore freely, as long as I can go back if needed…I don't like so much to be given instructions, but to be able to go forwards and backwards without the danger of "messing up"'.
	Challenges or Suggestions:
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	Provide a paragraph, summarizing the main findings per stakeholder group. **They think the demonstration is clear but would like to be able to access it whenever they want, i.e. have it somewhere on the platform so they can see it again and remember how to use it.**
2. Most interesting part for participants:	Provide a paragraph, summarizing the main findings per stakeholder group. **They showed a lot of interest in the content of the platform and how to expand it (as indicated in the first columns) and when they saw the accessibility option, they thought it was a very good idea.**
3. Unclear or confusing aspects:	Provide a paragraph, summarizing the main findings per stakeholder group. **They showed no confusion with any other part only with the accessibility icon.**
4. Suggestions for improvement / missing features or topics:	Provide a paragraph, summarizing the main findings per stakeholder group.

5. Interest in using the platform in the future:	Provide a paragraph, summarizing the main findings per stakeholder group. **Almost all participants (Only two people did not show an interest) commented that they would like to be able to test the platform in the future.**
6. Other participant comments not previously covered:	Provide a paragraph, summarizing the main findings per stakeholder group.

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	Provide a paragraph, summarizing the main findings per stakeholder group. **They liked the platform, its purpose, and the presentation, but suggested that the video should remain available for future reference**
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	Provide a paragraph, summarizing the main findings per stakeholder group. **They agreed with the appearance of the platform.**
B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	Positive Feedback: **Participants expressed interest in including content related to emotional well-being and mental health:** 'Something to do with general mental well-being, relaxation'. **They also highlighted the importance of addressing how the physical changes associated with age can affect them emotionally:** "when you are of a certain age you have certain difficulties, because you know how it

	affects you mentally, for example, I used to be able to climb on a chair to clean the lamp in the living room and now I can't, and that depresses me and affects me', 'dependency burns me'. **(Being dependent really wears me down)** **It was suggested to include practical information on emergency situations at home:** 'first aid when we are at home and something happens, how to react and communicate with emergencies'.
	Challenges or Suggestions:
2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	Positive Feedback: **In terms of the overall design, they consider the structure to be well thought out. However, they insist on the need to be able to use the tool to better identify areas for improvement.** **They describe the interface as** 'simple but elegant'**, which reflects a good overall impression in terms of usability and aesthetics.**
	Challenges or Suggestions:
Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	Positive Feedback: **They find the search form very useful, although they would like to include more sections as mentioned above.** **They found the personalized suggestions interesting**
	Challenges or Suggestions:

3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	Positive Feedback: **This is the same as in the previous case. They believe that it is an accessible platform, although they should make sure they try it out, they comment that like everything the first time it can be difficult and that the issue of making the platform accessible is very good, but you have to know how to use these accessibility options.**
	Challenges or Suggestions:
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	Provide a paragraph, summarizing the main findings per stakeholder group. **They were informed that this is a first version, which is why only a general overview was presented** **They think it was clear.**
2. Most interesting part for participants:	Provide a paragraph, summarizing the main findings per stakeholder group. 'The objective of this platform is very important'.
3. Unclear or confusing aspects:	Provide a paragraph, summarizing the main findings per stakeholder group.
4. Suggestions for improvement / missing features or topics:	Provide a paragraph, summarizing the main findings per stakeholder group. **Some health and wellbeing topics as discussed above**
5. Interest in using the platform in the future:	Provide a paragraph, summarizing the main findings per stakeholder group. **They are open and interested**
6. Other participant comments not previously covered:	Provide a paragraph, summarizing the main findings per stakeholder group.

Photos (Optional)

Funded by
the European Union

ANNEX IX - VSTE Report (Slovenia)

COMFORTage
Prediction, monitoring and personalized recommendations for prevention and relief of dementia and frailty

COMFORTage TET/TEM:
1ST Co-validation session with end-users

Reporting Form
PILOT SITE Mind & Mouth (co-validation performed by VSTE)

Responsible person (name, email)	Špela Glišović Krivec, spegli@gmail.com
Date of session (start and end date)	9th of May, 2025; 16:00-18:30
Number of participants (total)	10

Participants' profile

Fill in each participants' profile in a different row, provide the total number:

END-USER TYPE	GENDER	
	Male	Female
Older Adults	1	2
Caregivers	/	3
Professionals	1	3

Summary & observations

We explored COMFORTage TET & TEM through engaging session on 9th of May 2025. The content was presented to 10 participants representing older adults, carers and professionals, and discussed. We used video presentations and materials provided by AUTH with the presentation text as Annex 1. Key Takeaways:

- Strong approval for balanced thematic areas
- Dementia-friendly focus on self-management
- Positive feedback on video demonstrations with a call for hands-on testing
- Preferred formats: short videos, guides & interactive elements

What was most engaging: mobile device tutorials & consolidated resources!

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VSTE proposes to check if printable guides for users can be done, and to double-check relevant standards, relying also on ISO/TR 25555:2024 that provides a collection of design considerations from existing international standards as well as best practices and observations to be used for designing accessibility and usability of home healthcare products and associated services, designed for non-professional users.

Training Programme Themes

A. General Impressions & Feedback	
1. Do you agree with the proposed thematic areas of the training programme?	Most participants generally agreed with the thematic areas, with particular appreciation for the balanced focus on different skills. The professionals claimed that integrated approaches addressing different aspects simultaneously can yield better outcomes. Participants emphasized the importance of the "Self-Management", specifically requesting empowerment and autonomy. The professionals also highlighted the value of "supporting peers, frail older adults and informal carers".
2. Are there any additional thematic areas you would propose? Do you have any suggestions for refining or expanding the current ones?	There were also some proposals to be included either in the separate session or as subsection of the presented ones: (1) Emotional and Psychological well-being as for managing anxiety, and isolation (if possible); (2) Navigating Care Systems as to understand rights and services, accessing community resources, and advocating within complex healthcare environments (if possible).
3. Have you previously attended any similar training programmes (either online or in-person)? If yes, what were your key takeaways? Was there anything you felt was missing or could have been improved?	Some participants said that they were included previously in some programs and agreed that peer support elements are to be considered highly valuable, particularly hearing directly from others managing similar conditions, maybe as stories or videos/podcasts (preferably in native language). Some participant noted that some programs often move too quickly through (digital skills) training, and that they prefer having clearly seen the option to temporary stop the video or content (if needed). The general notice was that follow-up support is preferred, and some easy-to-use troubleshooting support (if a person doesn't know after a while how to use it) – if possible, in a format that is downloadable and printable.
4. Would you be interested in attending an online course focused on health and digital literacy? Please share any specific topics or formats you would find most useful.	The answers on the delivery format were mixed: some prefer hybrid models with option to have also in-person support, some appreciate the flexibility of online modality. It was noted that they may best benefit from short sessions with consistent structure and having an option for contacting someone to help if navigation would be too much after a while and/or having simple guide to be accessed from all points. The professionals mentioned that they value content they can immediately apply in practice. The best Format preferences were as: short videos

	(up to 5-7 minutes), downloadable simple guides and check-lists, interactive elements, and having an option for support for troubleshooting. People also like to have an option to download and print some materials.

A. TET Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. How did participants feel while watching the demonstration? *(e.g., engaged, confused, curious)*	Participants responded positively to the platform introduction, with older adults and carers particularly appreciating the visual walkthrough approach. They were feeling engaged. The professionals valued seeing the range of topics, noting the platform appears well-organized. The participants expressed curiosity about exploring deeper.
2. General first impressions about the platform (look & feel):	The multi-thematic approach receives praise for acknowledging the interconnected nature thematic areas.
B. Feedback by Category	
1. Navigation & Clarity • Were participants able to understand how to navigate through the platform? • Did they understand how to find specific courses or activities?	Positive Feedback: Participants found video nice.
	Challenges or Suggestions: Suggestion: a categorical color-coding or memorable icons for each section. It was noted that it would be great if we would be able to have explicit "Now try this" option at the video's conclusion.
2. Readability & Accessibility • Were text, colors, and contrast clear? • Did icons and buttons make sense?	Positive Feedback: Participants gave feedback that it is clear, the accessibility presentation was great, the presented options to change the visualization would need to be explored on hand.
	Challenges or Suggestions: The text on the available courses was reported to be a little small and not readable, however participants understood that this would be arranged and personalized with options for the visualization (shall be tried on hand at the next sessions). They were a little overwhelmed by different options when showing accessibility menu and so many variants, they asked if someone would help to set all that at the beginning. Professionals proposed that the comlpetition part shall be more colourful (the levels). They also mentioned that for the users it would be great if relevant buttons

	can clearly look "clickable" – for example, as it is in the part showing the phone management.
3. Types of Learning Materials • What formats did participants prefer (video, text, interactive exercises, quizzes)? • Did any content types seem difficult or overwhelming?	Positive Feedback: Older adults responded that video approach like it was presented is good for them. Carers noted that they would prefer also audio content in Slovenian language they can listen to while performing other tasks. Quizzes are preferred by both groups. Professionals preferred modular content they can reference selectively based on need.
	Challenges or Suggestions: Format preferences varied.
4. Anticipation & Confidence Using the Platform • Would participants feel comfortable using the platform on their own? • What challenges or support needs did they mention?	Positive Feedback: Most answers were that they would appreciate if after the video we could try it together – hands on – the real version of the platform, so that they could comment by real-life experience.
	Challenges or Suggestions: Follow-up support was mentioned to be crucial, maybe also offering option for navigating and troubleshooting on demand, and/or having a simple document (like pdf) with basic steps for download and print.
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	We needed to go through the video step-by step during the discussion. General impression was very well, however, participants were asking to test it on hand to see it real and be able to comment by their own experience.
2. Most interesting part for participants:	Intro to using a phone device.
3. Unclear or confusing aspects:	/ Check above.
4. Suggestions for improvement / missing features or topics:	See above.
5. Interest in using the platform in the future:	Yes.
6. Other participant comments not previously covered:	/

B. TEM Suggested Questions (There is no need to use all the questions, but it is essential to collect feedback for each different category -in bold letters)

A. Warm-up and General Impressions	
1. Overall Reaction: • What were participants' overall impressions of the website after the demonstration? • How did the presentation make participants feel about the website?	The participants were naive in the context of the pages presented. They would like to check what they offer. However, some reacted a little sceptic that it would help to improve cognitive decline. Professionals were taking notes. They welcomed to have everything in one place.
2. Visual Appeal: • What do participants think about the design and color scheme of the website? • What emotions or thoughts did the visual elements evoke?	The older participants would have more space in text to be readable and more contrast, perhaps the accessibility option that was shown in TET is applied also here and they would prefer that someone would help to set it at the beginning. Professionals mentioned avoiding blue text on white background. In general, people were happy to be introduced to the website and are looking forward to test in in real version.
B. Feedback by Category	
1. Presentation & Clarity **Content Understanding:** • What do participants think is the purpose of each section (e.g., the app catalogue, filtering options, navigation menu)? • How do they feel about the information conveyed during the demo? What is missing?	Positive Feedback: Great. Filters are fine, options and navigation the same.
	Challenges or Suggestions: Comment on double-checking the requirements for seniors – see above. Participants would like to test on hand and they would probably easier comment by their own experience.
2. Navigation & Structure (Based on the Demo) **Ease of Understanding Layout:** • How clearly did the demonstration convey the overall structure and organization of the website? • What were participats' impressions of the navigation menu and filtering options? Were they intuitive to use, or do participants see any areas for improvement?	Positive Feedback: Fine, clear.
	Challenges or Suggestions: Fine. Some comments as above.

Key Features: • How effectively were the main features—like search, filtering by category, and app details—showcased during the demo? • Were there any moments in the demonstration where participants felt unsure about how a feature worked or thought something could have been presented more clearly?	Positive Feedback: Fine, nice presentation. Challenges or Suggestions: No special comments, mainly as already provided and clarity will come when testing on hand.
3. Aesthetic & Accessibility (Perception from the Demo) **Visual Comfort:** • How did you find the overall visual design in terms of color contrast and readability? • Were the fonts, icons, and images displayed in a way that felt accessible and user-friendly?	Positive Feedback: Fine, nice intro. Challenges or Suggestions: Fine. Some comments as above (a proposal to colour code the content (for example Module 1, Module 2…), and if possible, provide a quick instruction manual that can be accessed from all sections (as an individual tab). – preferably downloadable and printable for older adults).
C. Closing Discussion	
1. Was the demonstration clear enough or is more step-by-step guidance needed?	The presentation was clear. As commented above, we went step-by step.
2. Most interesting part for participants:	The most interesting part was the brief intro to using phone device. The professionals mentioned that this demonstration was so good as it had marked buttons that look clickable and was understandable. The topics need to be investigated in real life testing.
3. Unclear or confusing aspects:	Nothing special to report. Some comments provided above.
4. Suggestions for improvement / missing features or topics:	See above.
5. Interest in using the platform in the future:	Users were looking forward to real life testing.
6. Other participant comments not previously covered:	/

Text for the presentations

Predstavitveni video in scenarij TET

Pogledali si bomo video o Usposabljanje in izobraževanje (TET) kot izobraževalni platformi, zasnovani za izboljšanje digitalne in zdravstvene pismenosti za starejše odrasle, svojce in strokovnjake v oskrbi starejših. Videoposnetek prikazuje, kako se znajti v okolju COMFORTage TET. Ponuja pregled različnih vsebin in funkcij platforme. Posnetek zajema različne dele vmesnika Moodle, vključno s stranmi tečajev, prijavo, pripomočkom za dostopnost in vodenjem skozi korake navigacije, da se znajdete kje ste in si lahko platformo tudi prilagodite.

Koraki:

9. **Domača stran 00:00 - 00:19**
    - Domača stran se prikaže pred prijavo
    - Na začetku prikazuje nekaj promocijskih gradiv, med pomikanjem pa razpoložljive tečaje.

10. **Prijava v Moodle 00:19 - 00:22**
    - tukaj vidimo prijavno stran platforme.
    - na primer: kot uporabnik vnesete uporabniško ime in geslo.
    - Uspešna prijava vas preusmeri na stran Moji tečaji

11. **Moji tečaji 00:22 - 00:41**
    - Na tej strani so prikazani tečaji, v katere je nekdo že vpisan.
    - V zgornjem desnem kotu si lahko ogledate obvestila. Vsakič, ko se prvič vpišete v tečaj, se prikaže pozdravno obvestilo.

12. **Dostop do tečaja 00:41 - 00:50**
    - izberete tečaj izmed svojih vpisov.
    - Prikazana je postavitev domače strani tečaja, ki je predstavljena s ploščicami, vključno s 5 moduli/podtemami.
    - Na voljo je demonstracija, kako se premikati po modulih, nalogah in gradivih.

13. **Pripomoček za dostopnost 00:50 - 01:27**
    - Prikaže se pripomoček za dostopnost.
    - Obstajajo primeri kontrasta, lahko se na primer spremeni barve platforme
    - Obstajajo tudi primeri spreminjanja kurzorja za lažje fokusiranje na določena območja

14. **Ogled videa 01:27 - 02:14**
    - tukaj je posnetek z YouTuba.

15. **Dejavnost lekcije 02:14 - 04:08**

- Zdaj gledamo dejavnost lekcije. Prav tako se lahko tudi kaže napredek
- Stran 1 - Na voljo so bralni materiali
- Stran 2 - Interaktivni materiali za razlago (npr. deli pametnega telefona)
- Stran 3 – Kvizi za pomoč pri učenju
- Motivacijski citati

16. **Gamifikacija na višjo raven 04:08 - 04:19**
    - Na levi strani tečaja je plošča s sledenjem udeležbe na višjih ravneh, kjer lahko zbirate točke.
    - Sistem prikaže sporočila, ko pride do nove stopnje - torej: višje.
    - Na voljo je tudi na primer lestvica najboljših

Predstavitveni video in scenarij za TEM

Tako imenovana tržnica za usposabljanje in izobraževanje – TEM je spletna platforma, ki vsebuje katalog različnih digitalnih orodij in aplikacij, posebej vezanih na tematike krhkosti in demence. Same aplikacije niso gostovane v TEM-u, temveč je vgrajen sklic na spletno mesto vsake aplikacije. Aplikacije so sistematično kategorizirane glede na njihovo vsebino in obseg, kar vam omogoča enostavno navigacijo in prepoznavanje virov, ki vas zanimajo. Poleg tega lahko viri TET nudijo povezave do sorodnih orodij, ki so na voljo na platformi TEM, ki smo je porej pogledali. Platforma vključuje funkcije prilagoditev – rečemo personalizacije, pa tudi priporočila za prilagajanje. Lahko ustvarite seznam želja za aplikacije in jih ocenite.

[0–0:13]: To je trenutna različica platforme. Glavni del je katalog aplikacij

[0:14 – 0:23]: Katalog vsebuje začetni nabor aplikacij, razvrščenih v tri okvirne kategorije

[0:24–0:41]: Če kliknete katero koli od aplikacij, se prikaže pojavno okno z več informacijami o tej aplikaciji, vključno s povezavo do spletnega mesta aplikacije. To je pomembno, ker TEM sam ne gosti aplikacij.

[0:42–1:00]: TEM vam omogoča iskanje po seznamu aplikacij

[**1:01–1:27]:** TEM omogoča tudi filtriranje seznama aplikacij glede na kategorijo aplikacije.