

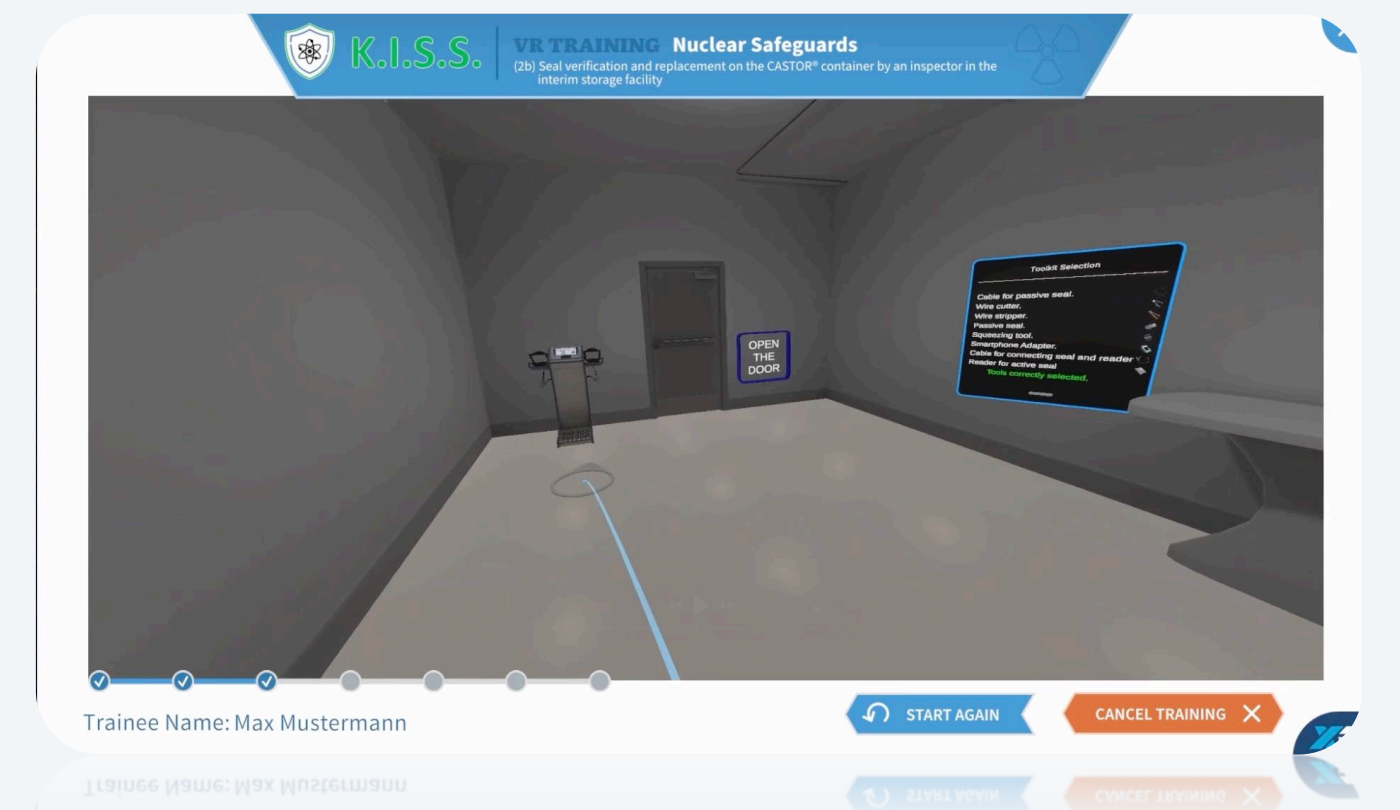
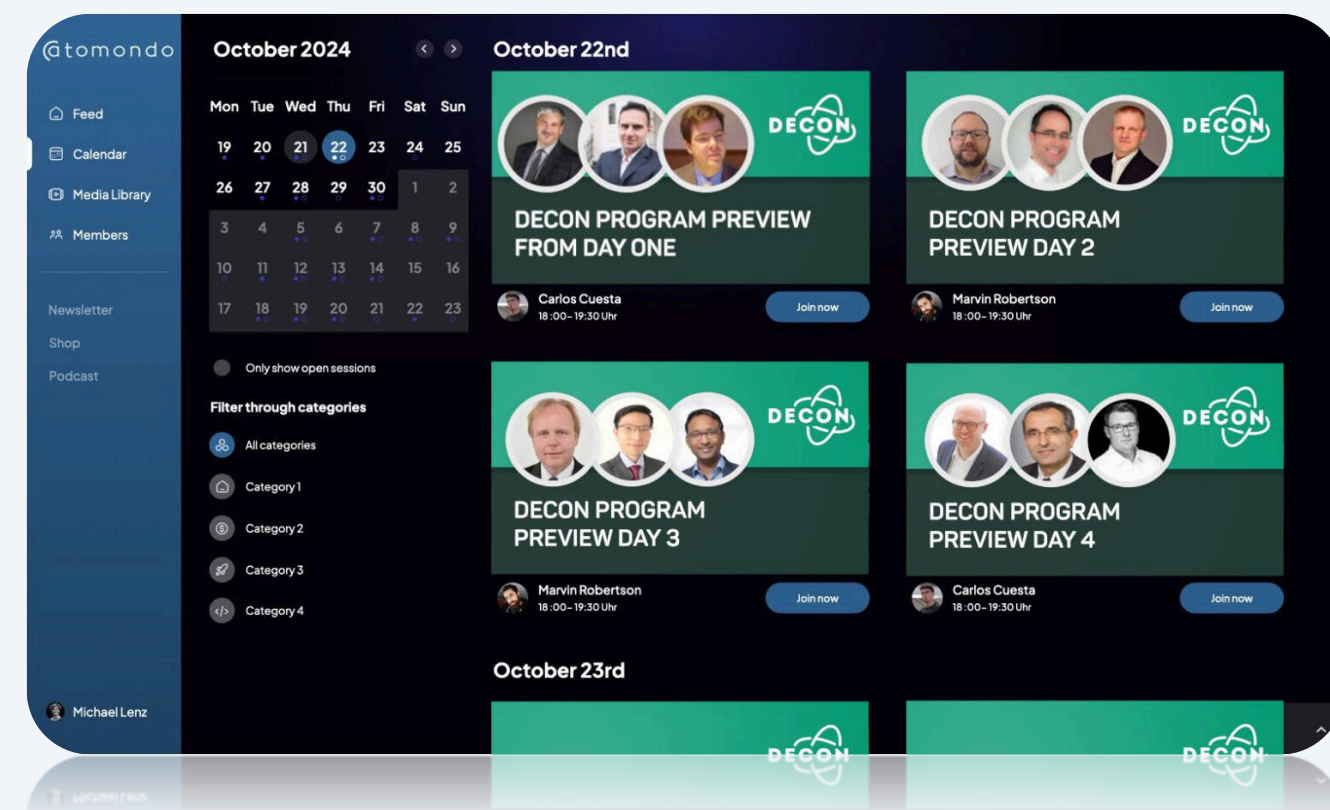
Digital and AI-supported Solutions for the Safe and Efficient Decommissioning of Nuclear Facilities

The 'K.I.S.S.' Research and Development Project

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Module 1: Hybrid and innovative community platform

- Development of a mobile training station that combines face-to-face and online training (blended learning) and can be used on-site at nuclear facilities or public facilities.
- Development and integration of modern mixed reality technologies (VR + AR) to convey practical content and to realistically play through any scenario with the learners.
- Development of a community platform for modern training and learning management concepts with a focus on cross-generational knowledge transfer based on a knowledge pool semantically structured by ontologies
- Concept development for teacher training (Train the Trainers)



Module 2: Digital platform for approval projects

- Development and construction of a blockchain-based digital platform for the secure, integrity and transparent exchange of information in the context of approval and assessment procedures.
- Traceability of approval and assessment steps.
- Demonstration of the connection of document management systems of the stakeholders involved.
- Real-time tracking of document status for all stakeholders.

Solution Architecture

Concept of the digital platform for approval projects

Module 3: AI-supported process management for dismantling

- (Partial) Automated creation of quality-assured documents for decommissioning and nuclear waste management using AI.
- Identify "hidden knowledge" and make it usable.

Use-cases

Benchmarking Assistant: compares regulations, performs consistency checks, and supports adoption of international good practices.

Waste Management & Documentation: integrates waste characterization, conditioning, and documentation into an AI-supported solution.

Container Documentation: digitizes paper forms, guides users through completion, and validates entries with automated checks.

Regulatory Assistant: enriches regulatory requirements with version comparisons and background information for improved decision-making.



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