

EUROXR

Location: Valencia, Spain
Presented by: Dr. Muhammad Zeshan Afzal
Dates: 3rd-6th November 2026

dfki ai

Overview-Project Luminous

This project has received funding from the European. Union's Horizon Europe research and innovation programme under grant agreement No. 101135724

LUMINOUS : Summary



Capturing, Describing, and Extending Reality through Language-Augmented Intelligence

LUMINOUS will enable XR systems to understand and respond to users in real time by using natural language as a reasoning and interaction layer. This allows for personalized, adaptive experiences in unfamiliar environments, supporting inclusive applications in learning, healthcare, and beyond.



LUMINOUS : Overview (Innovations)



LUMINOUS : Conceptual Overview

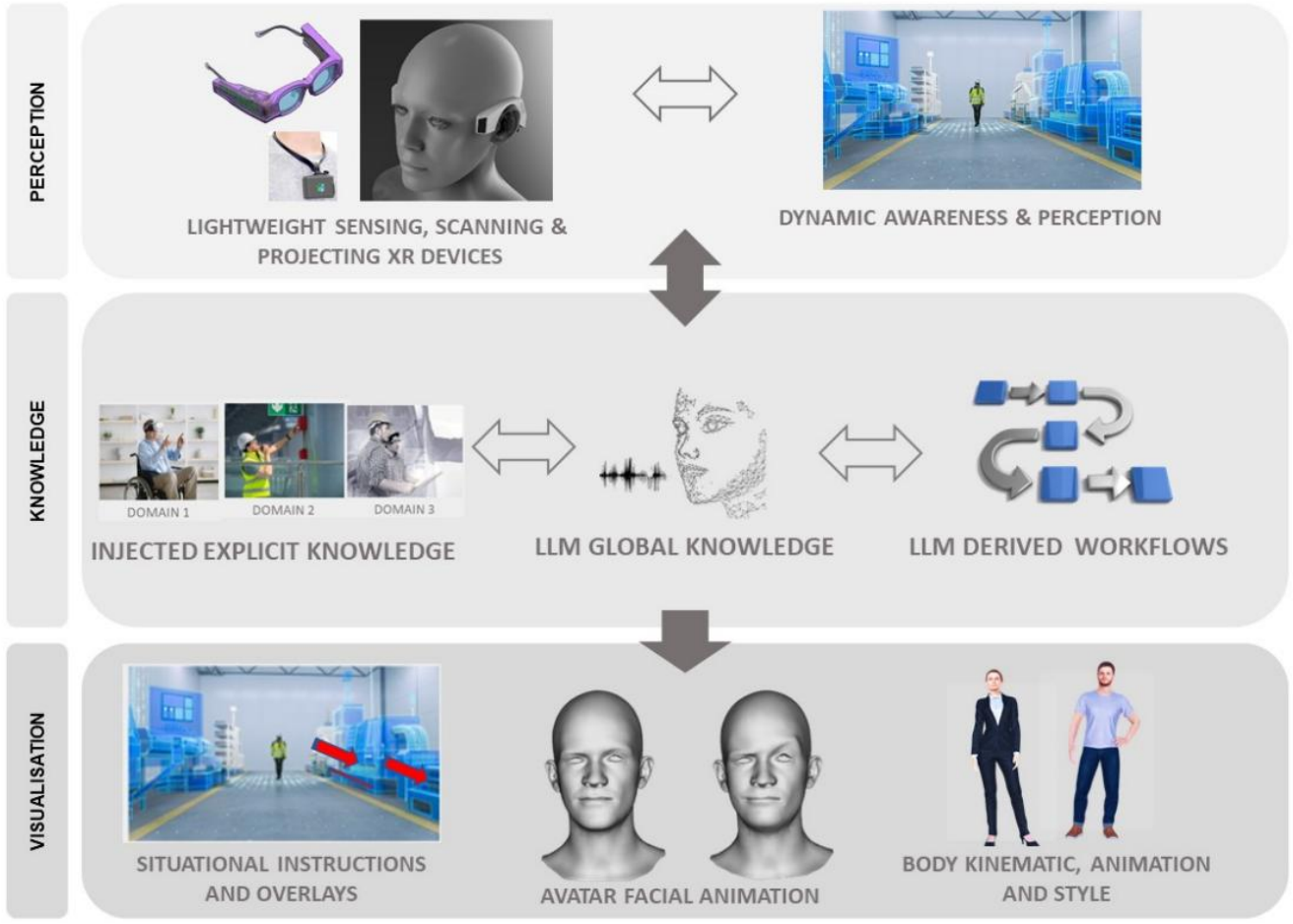


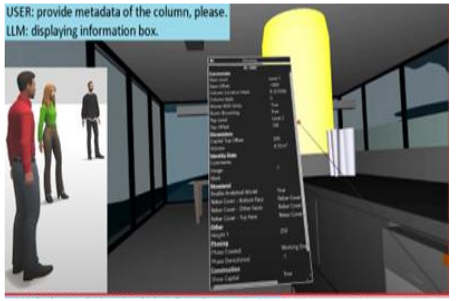
Figure 1: LUMINOUS conceptual overview



- Psychoeducation
- Aphasia
- Cognitive Demo



- Health and Safety Training



- Architecture Design Review

Agenda

Total Duration: *90 mins*

Elapsed time	Session	Duration
00:00–00:05	**LUMINOUS: General Introduction** Project vision, objectives, and the transition towards context-aware situational intelligence in XR.	05 min
00:05–00:25	**XR in Neurorehabilitation** Application requirements, user-aware interaction, personalised support, and lessons learned.	20 min
00:25–00:40	**XR in Safety Training** Context-sensitive guidance, hazard awareness, and adaptive training experiences.	15 min
00:40–01:00	**XR in Building Information Modelling (BIM)** Contextual model interaction, spatial understanding, and collaborative design review.	20 min
01:00–01:08	**Future Directions: Language Augmentation** Vicomtech	8 min
01:08–01:16	**Future Directions: Visualization and Beyond** Fraunhofer HHI	8 min
01:16–01:24	**Future Directions: Instruction generation and Embedding in XR** DFKI	8 min
01:24–01:29	**Conclusion and Closing Discussion** Cross-domain lessons, shared research priorities, and final audience questions.	5 min

