

Alpha Presentation

VR Human-AI Multimodal Interaction

The Capstone Experience

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*From Students...
...to Professionals*

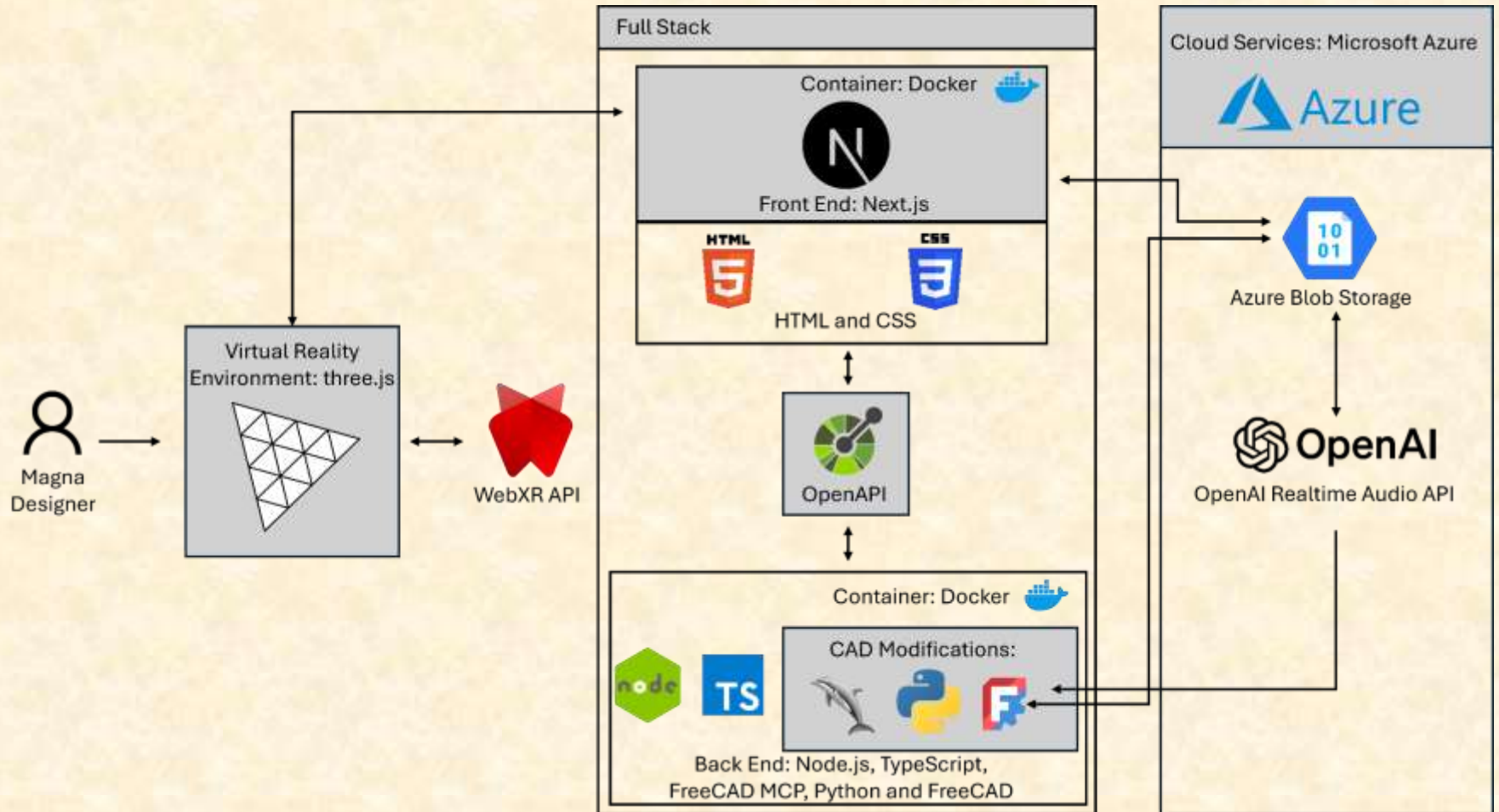
Fall 2025

Project Overview

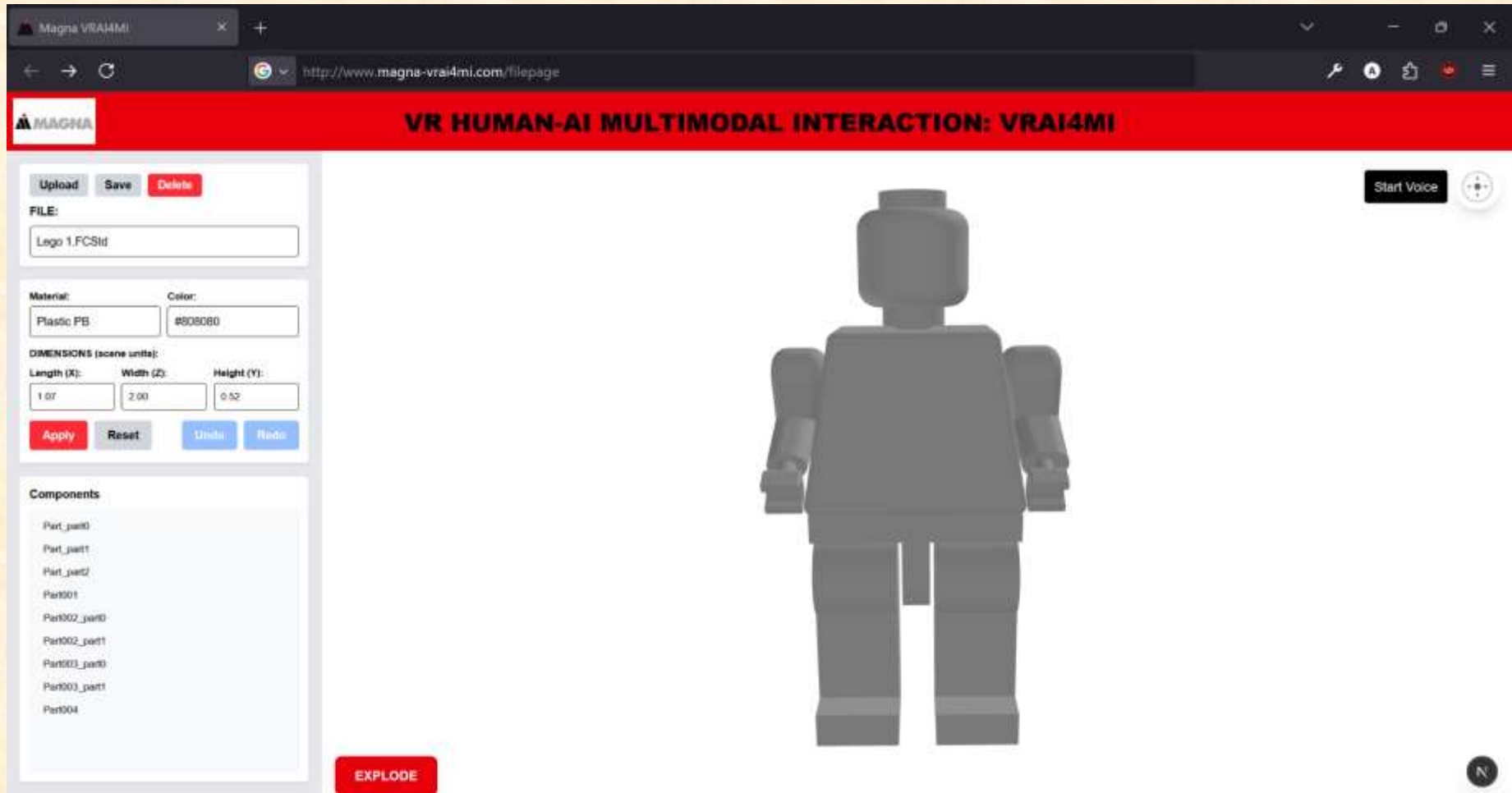
- CAD design is lengthy and gets held up in the corporate workflow
- Enable advanced CAD operations w/ human-AI interaction
- Expand CAD accessibility beyond experienced designers
- Simplifies the design process and reduces production time



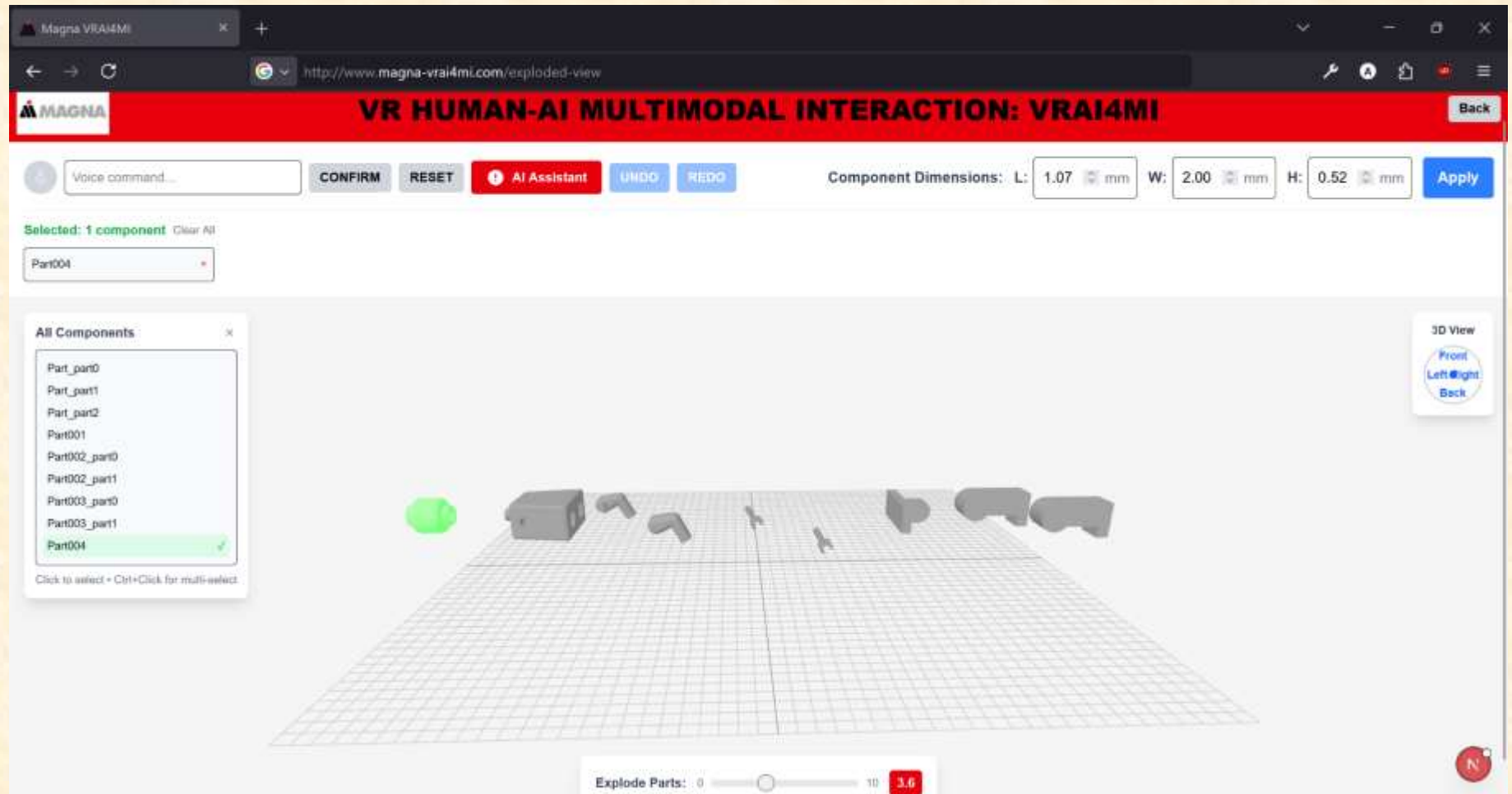
System Architecture



Object Overview Page



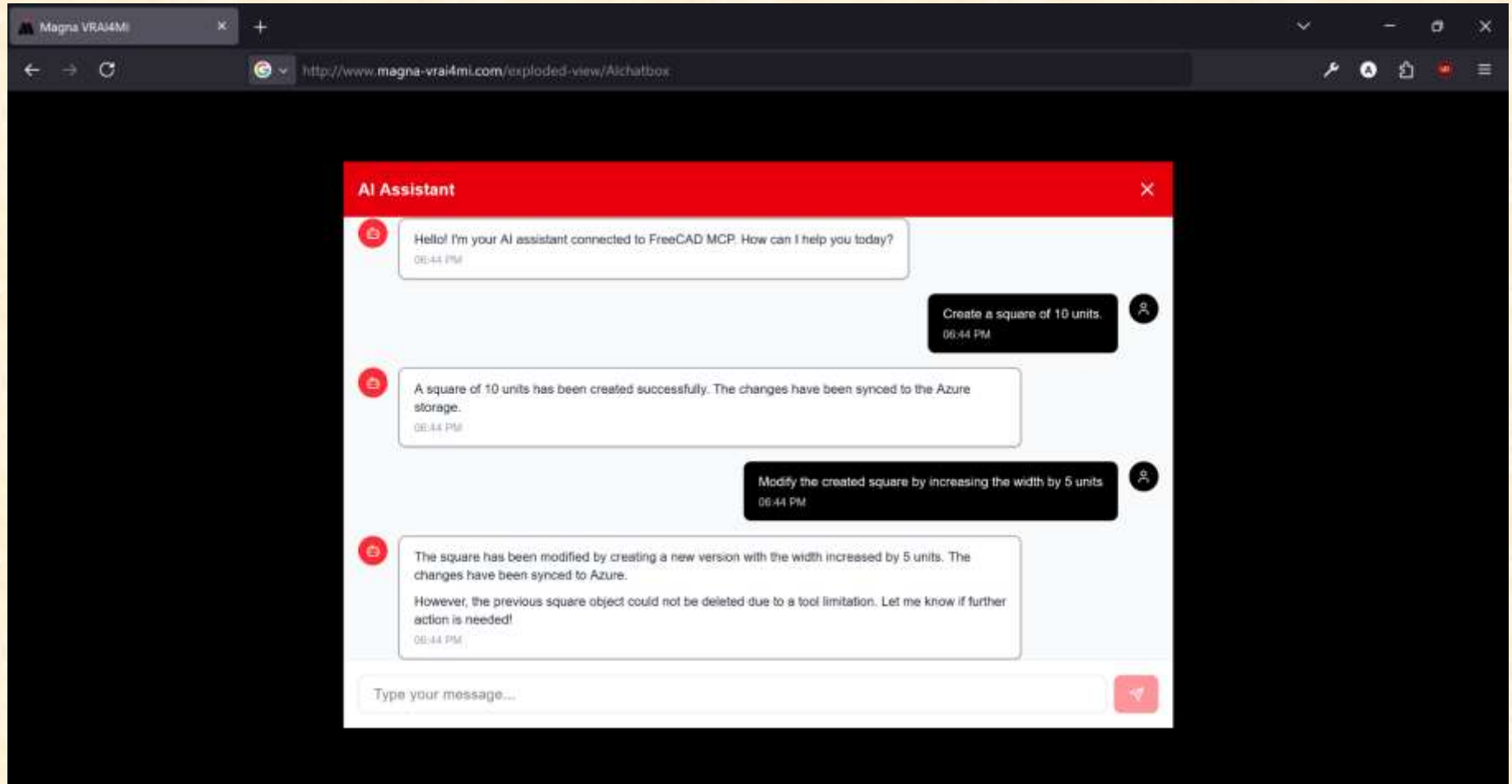
Exploded Object Page



Exploded Object VR View



AI Chatbot Assistance Page



What's left to do?

- FEM simulation
- User login
- Enhancing MCP functionality
- Voice-prompting for AI
- VR parallels
- UI elements
 - ViewCube
 - Undo/Redo
 - Additional properties dropdown



Questions?

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