MICHIGAN STATE UNIVERSITY

Alpha Presentation

Shoving Moves

The Capstone Experience

Team PS Technology

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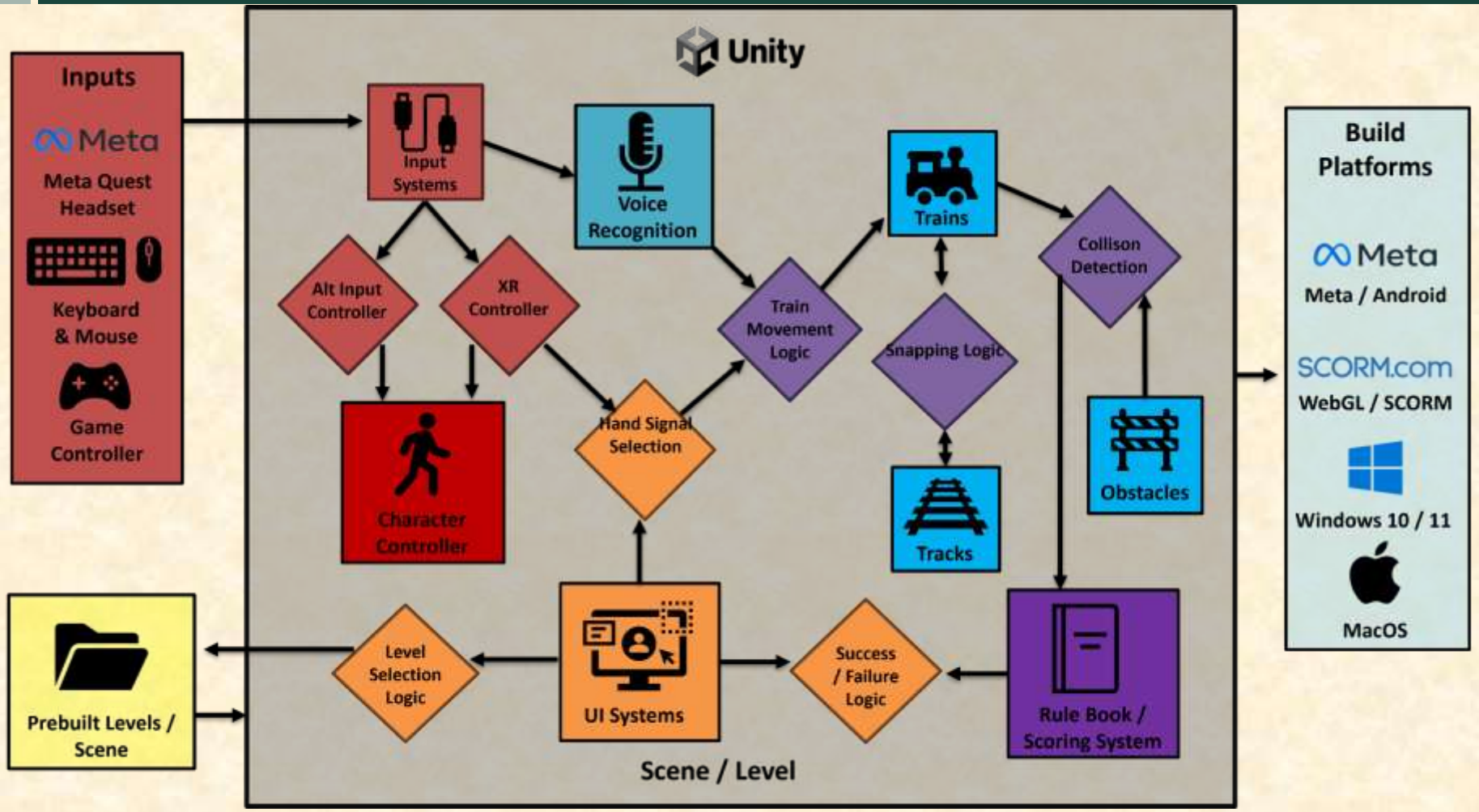
Spring 2026

From Students…
…to Professionals

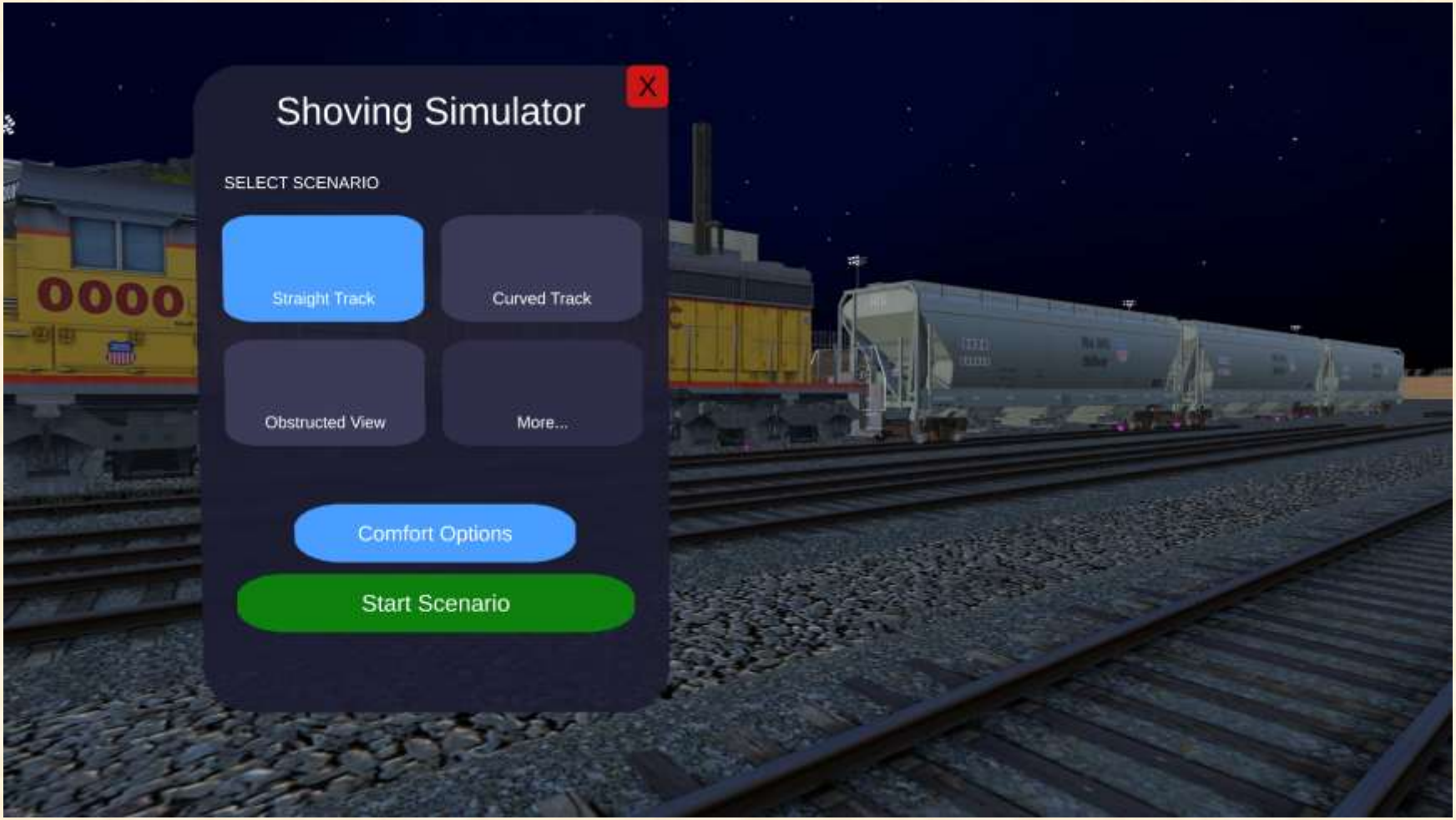
Project Overview

- PS Technology: Provider of railroad operations, compliance, and training software solutions
- Problem: Shoving movements are high-risk and require hands-on training
- Solution: Immersive VR simulator on Meta Quest 3 device
- Goal: Improve safety, realism, and skill retention

System Architecture



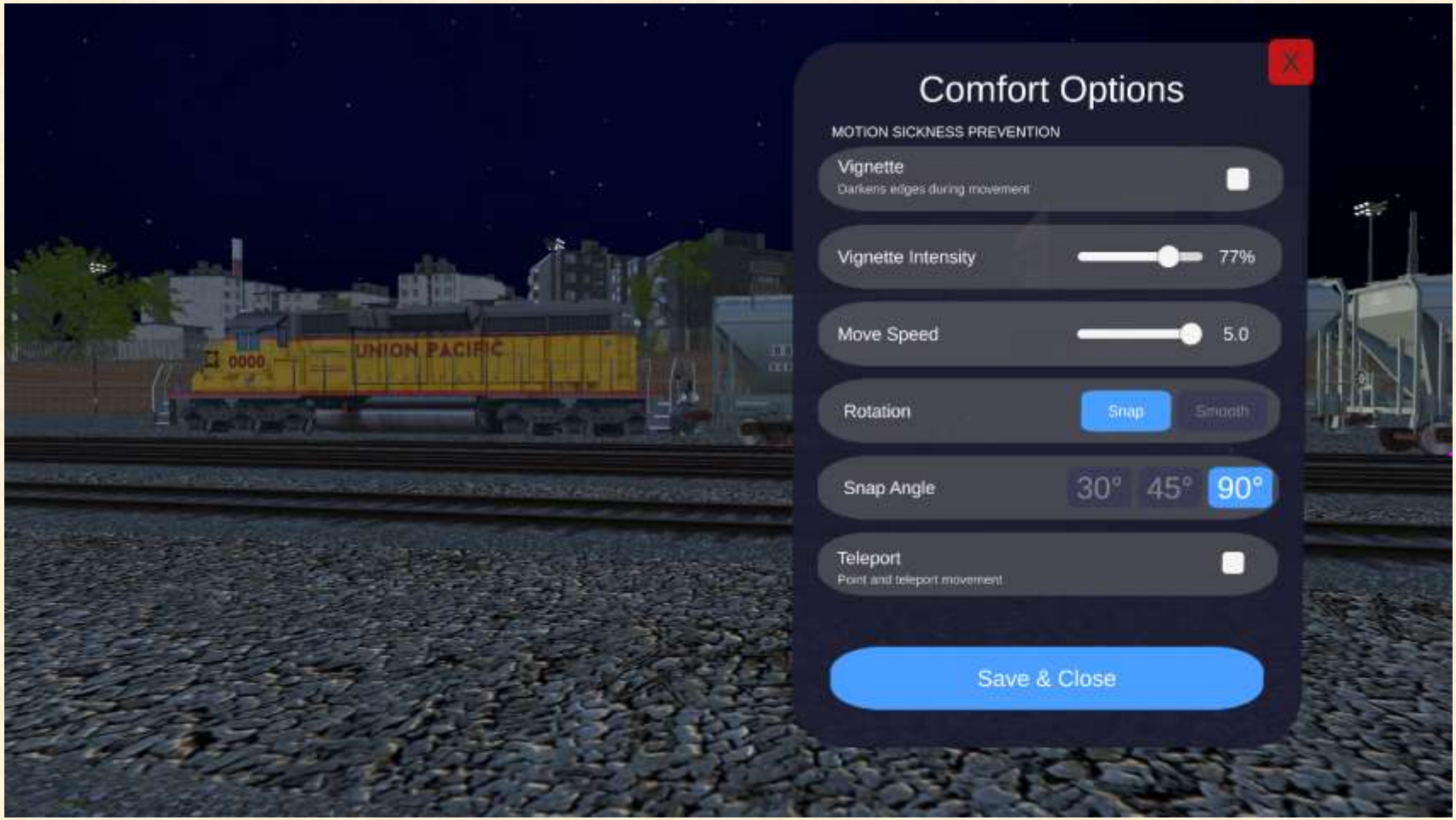
Scenario Selection Screen



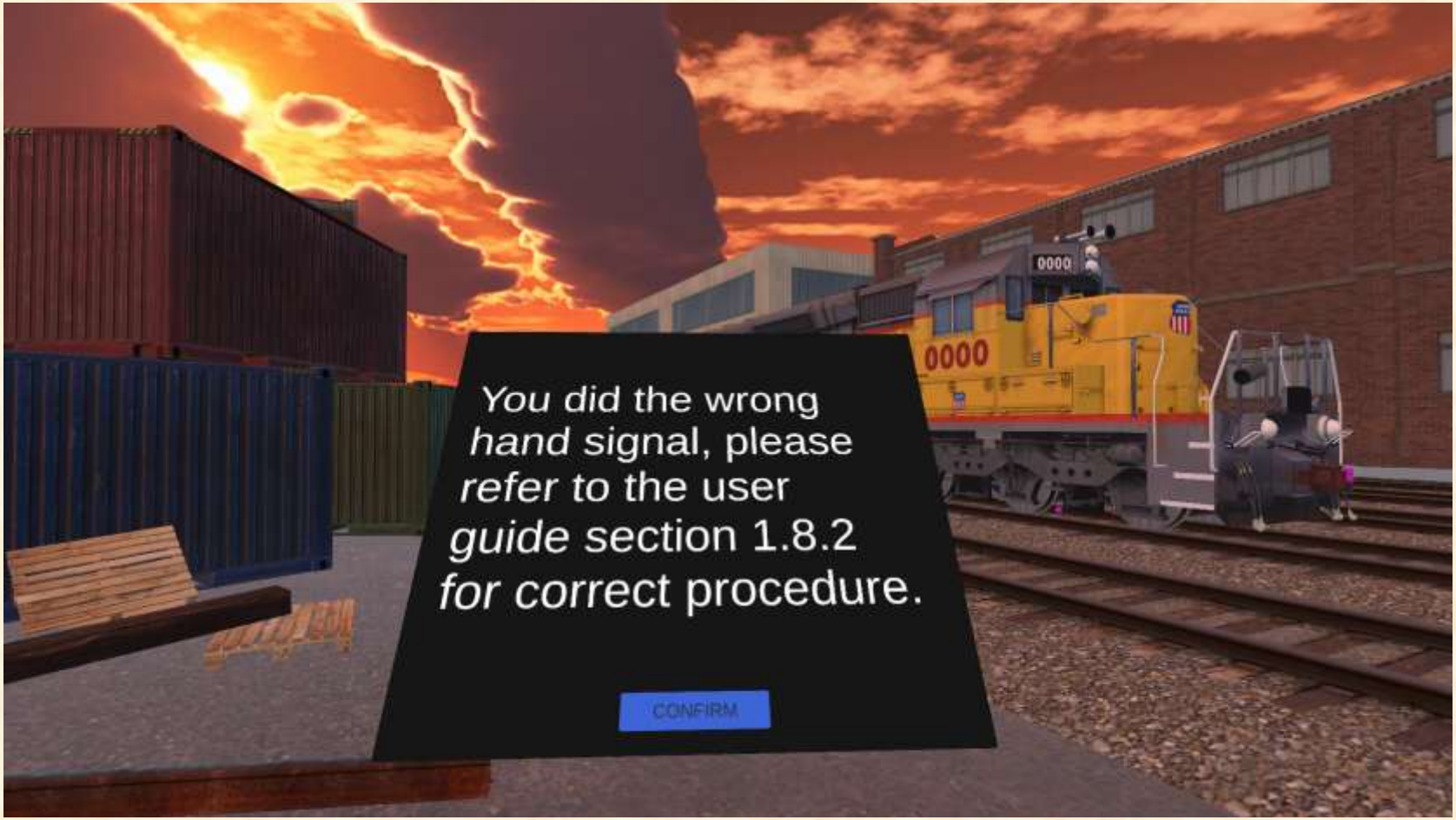
Hand Gesture (Forward)



Comfort Options



Incorrect Hand Signal Detection



What's Left To Do?

- Expand level design
- Increase number of levels
- Develop a rule system
- Training content UI
- SCORM integration

Questions?

