

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Railroad Switch Alignment Training

The Capstone Experience

Team Union Pacific

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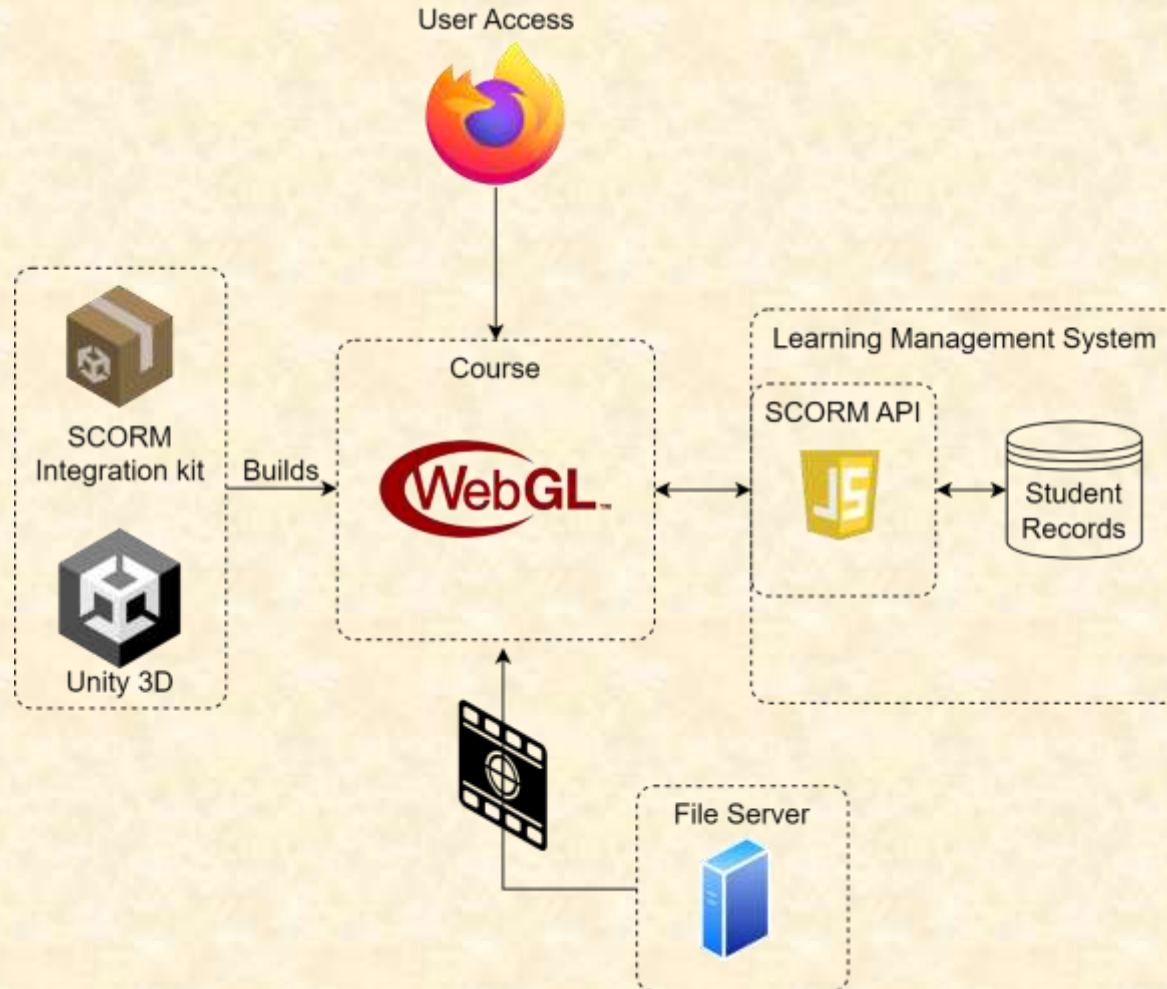
*From Students...
...to Professionals*

Project Overview

- ‘Railroad Switch Alignment Training’ sponsored by Union Pacific
- Correct switch identification is crucial
- Set of simulations for training purposes
 - Allows for efficient repetition
 - From a safe environment



System Architecture



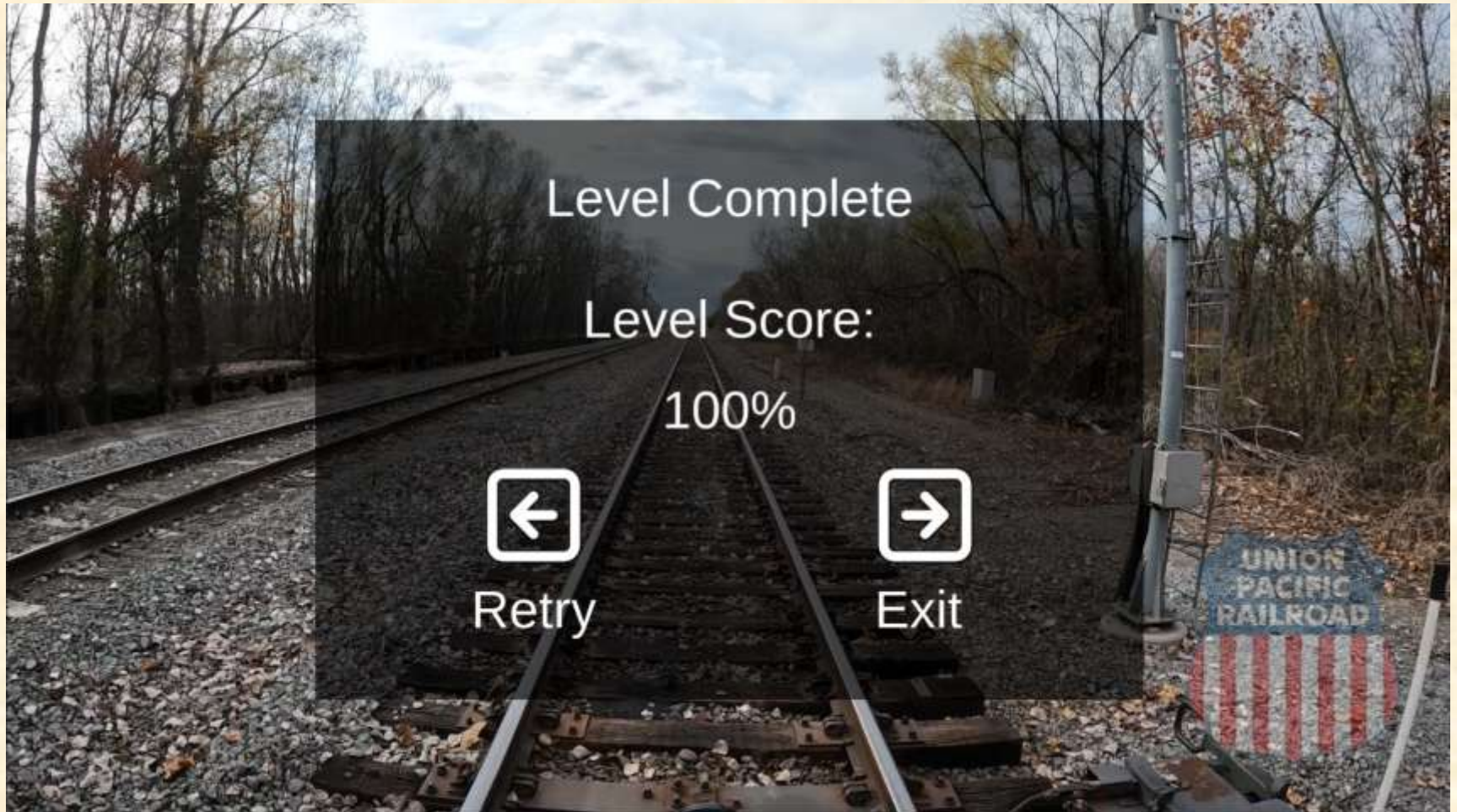
Tutorial Pause



Gameplay



Level Complete



SCORM results

The screenshot displays the SCORM Cloud interface for a user named Joseph Potila. The main content area shows the course 'Railroad Switch Alignment Training Alpha' with the following details:

- Created on October 8, 2023, 08:24 PM
- Application: SCORM Cloud
- Course ID: a17145e9-221e-49f0-b182-19b67432ad47
- Learning Standard: SCORM 2004 4th Ed.
- Course Tags: [tag icon]

The course status is shown in a 'Course Sandbox' section with the following metrics:

Metric	Value
Completion	complete
Success	passed
Score	100.00 %
Total Time	6m 31s

Below the metrics, there are buttons for 'Reset Progress', 'Reset Globals', 'View Registration State', and 'View Launch History'. A 'Launch' button is also present in the top right of the sandbox section.

The 'Debug Logs' section shows a list of session end times:

- Session Ended October 8, 2023 at 8:34 PM
- Session Ended October 8, 2023 at 8:31 PM
- Session Ended October 8, 2023 at 8:31 PM
- Session Ended October 8, 2023 at 8:30 PM
- Session Ended October 8, 2023 at 8:29 PM
- Session Ended October 8, 2023 at 8:27 PM
- Session Ended October 8, 2023 at 8:25 PM

A 'Clear Logs' button is located to the right of the logs. The interface also includes a sidebar with navigation options like Home, Library, People, Dispatch, Invitations, History, xAPI LRS, Apps / API, and Account. A 'Help' button is visible in the bottom right corner.



Level Builder

Level Builder interface showing a perspective view of railroad tracks. The interface includes a control panel on the right with the following elements:

- Toggle Dark Mode
- Browse: assets/Level1/Video.mp4
- Search: assets/Level1/Video.mp4
- File input field
- Add Keyframe (green button)
- Delete Keyframe (red button)
- Edit Keyframe (yellow button)
- Export Level (white button)

At the bottom of the interface, there is a timeline with a play/pause button, a scrubber bar, and navigation arrows. The Union Pacific Railroad logo is visible in the bottom right corner.



What's left to do?

- Stretch Goals
 - Playback speed
 - Help page (level builder)
 - Individual reaction times
- Other Tasks
 - UI improvement



Questions?

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