

Project Name: Unity WebGL Hosting Framework

Company: PS Technology / Union Pacific Railroad

Background:

PS Technology (PST) is a wholly owned subsidiary of Union Pacific Railroad that develops software for the railroad industry. PST's product line includes multiple training simulations for railroad employees. Currently these training simulations are desktop applications. A future goal is to allow users to access this simulation training via a web browser.

Functional Requirements:

The Unity WebGL Hosting Framework project will allow multiple simulations built in the Unity game engine to be hosted on a single website using WebGL technology. This website will include two main screens:

The landing page presents the user with an option of different simulations/games to play. Each game is a separate Unity WebGL project

When the user clicks on a game, they are taken to that game's screen. On the game screen the user can play the game and view a high score table. The high score table is outside of the game window. There is a button available make the game full screen.

The process of adding new games to the system will be dynamic. No new code or database changes are required to add a new game. Something simple like "Add game to a file directory" is preferred.

The project will include 2 or 3 sample games. The functionality of these games should be extremely simple, and the design is up to the team.

Technical Requirements:

Prefer for application to be hosted on Microsoft Azure.

Application will use micro-service architecture.

Front-end of the application will be written in Angular.

Back-end of the application will be written in Java using Spring libraries.



Team Size: 3 – 5 people

Future Opportunities:

PS Technology has both full year and summer internship opportunities. Due to the current COVID-19 situation, all of our internship programs are delayed until September at the earliest.

Legal:

A non-disclosure agreement (NDA) is not required for this project. No sensitive information is needed to be shared.

We require that full source code is provided as a project deliverable.