Beta Presentation

RailBuilder: The Great Race to Promontory

The Capstone Experience

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Project Overview

- Simulate real-world environments
  - Topography, soils, water, and vegetation
  - Easy to use interface
  - Provides control for environment piece placement
- Game that showcases this technology
  - Building a railroad between two locations
System Architecture

Unity 3D

Manage Budget
Place Track On The Terrain
Show Off Technology In The Base Application

Terrain Texturing Algorithm
3D Terrain Height Generator
Asset Placement Algorithm

Local Storage File
Save Load
ZIP File Interpreter

USGS

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Map Editor

New Map

Gold Beach

grand canyon

national park
Map Creator

![Map Creator Interface](image-url)

- **Name:** Enter Name...
- **Density:** 50
- **Texture Smoothing:** 1
- **Elevation Smoothing:** 5
- **Latitude:**
  - Pin 1: 42.5927
  - Pin 2: 42.884
- **Longitude:**
  - Pin 1: -84.7586
  - Pin 2: -84.3578
Realistic Terrain Generation
Game Terrain Generation
What’s left to do?

• Project video
• Visual and gameplay polish
• Creating deliverables for our client
Questions?