Alpha 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

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

Unity 3D
- Terrain Texturing Algorithm
- 3D Terrain Height Generator
- Asset Placement Algorithm

Local Storage File
- Save Load

ZIP File Interpreter

USGS

G
Map Editor

Map Editor

Cleveland

Detroit

East Lansing

New Map
Map Creator

![Map Creator Interface](image-url)
Map Viewer
What’s left to do?

• Optimize generation of maps
• Integrate object placement
• Implement saving/loading a map
• Implement user placement of railroad pieces
• Develop the game
Questions?
Video Demonstration