

# Firebreath Forest

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**Alpha Release**

**Created by Proximity**

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# Outline

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- Task Progress
- Implementation
- Design and UI
- Future Plans

# Task Progress

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# Task Progress

- **Excitement Minigame:**
  - Scene and game logic done
  - UI upgraded
  - ToDo: Dragon chasing the player
- **Anticipation Minigame:**
  - Scene and dragon's behavior done
  - Playtime limited by sunrise
  - ToDo: Test and fine tuning
- **Roller Coaster Level (main scene):**
  - Scene and terrain design done
  - ToDo: Avoid clip through problem in terrain
  - ToDo: Optimize frame rate

# Implementation

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# Implementation

- Excitement Minigame:
  - Randomized Stream of Button Sequences
  - Scaling with increasing difficulty
  - Change in speed depending on success or failure
  - Dictionary used to access assets for requested button inputs
  - indicator panel highlights current button prompt

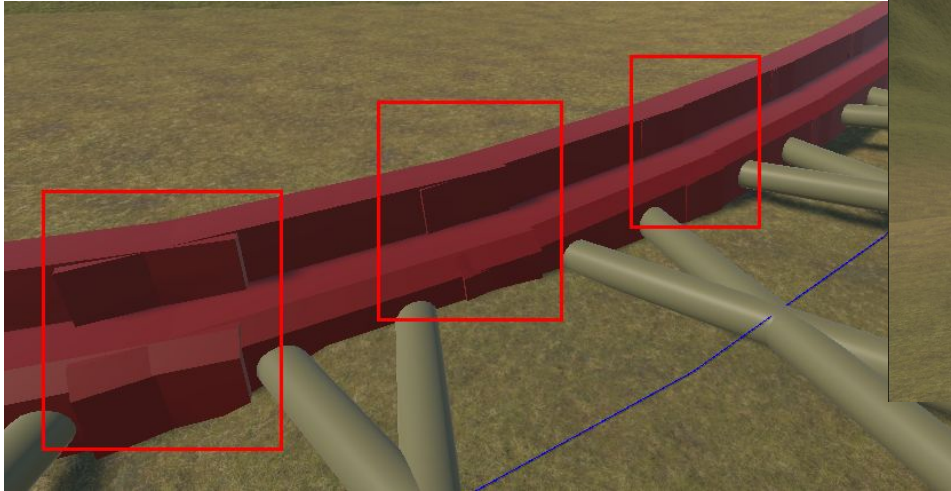
# Implementation

- Anticipation Minigame:
  - Dragon cycles through states: deep, light, disturbed sleep and awake
  - State be influenced by the player making noise
  - Dragon detects player if awake
  - Sunrise to limit the playtime



# Implementation

- Placing railway tracks
  - Last milestone: navigation mesh, go through object piece by piece, spline package
  - Smooth problem: small track pieces
  - Low frame rate: high draw call

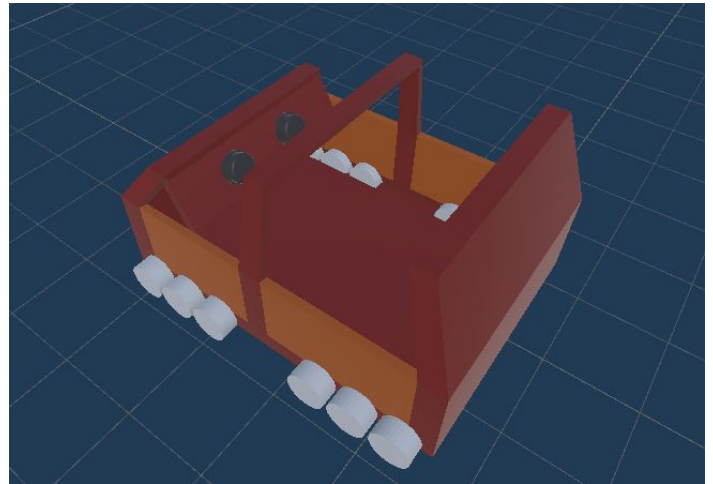
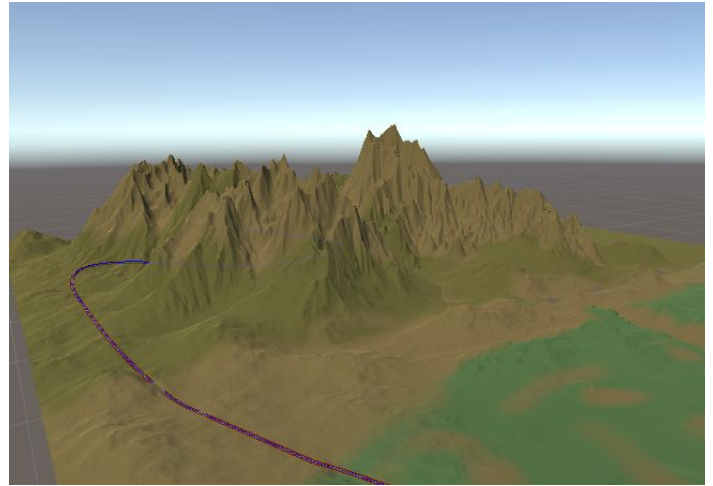


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Statistics
Audio:
Level: -74.8 dB           DSP load: 0.1%
Clipping: 0.0%          Stream load: 0.0%

Graphics:
CPU: main 22.7ms, render thread 14.2ms
Batches: 30538           Saved by batching: 0
Tris: 10.8M             Verts: 9.8M
Screen: 1145x601 - 7.9 MB
SetPass calls: 171      Shadow casters: 2997
Visible skinned meshes: 0
Animation components playing: 0
Animator components playing: 0
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# Implementation

- Terrain design
  - Two parts: mountain and forest
  - Press button to drive in the mini-games



# Design and UI

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# Designs and UIs - Excitement Mini-Game

- We used a built-in method from the spline package to automatically place the tracks into the terrain.
- More scenery was added to the mini-game.
- The UI was integrated with the level design and its functionalities.
- A flying dragon follows the player throughout the game.



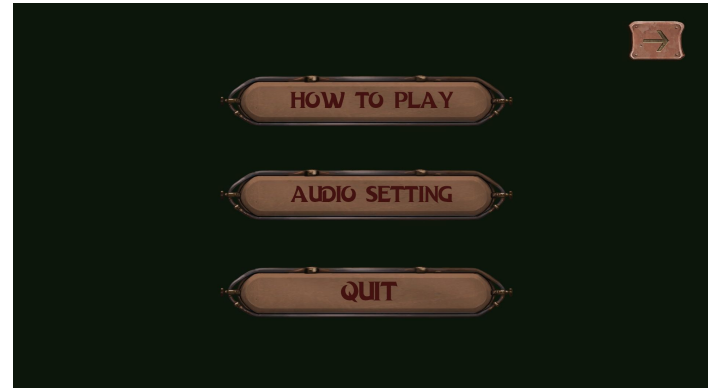
# Designs and UIs - Anticipation Mini-Game

- Initially, the dragon is asleep in the middle of the field. The dragon wakes up according to a sleeping pattern to check the field.
- If the player is allocated, they will die and the scene restarts. If not allocated, the game continues and the player collects more gold. The dragon goes back to sleep.
- The mini-game starts with gloomy dark lighting and gradually becomes brighter, which makes it harder for the player to hide and easier for the dragon to locate them.
- Post-processing will be used in the next milestone to make the gold piles shine in the forest, making them easier to identify for the player.



# Designs and UIs - UI

- A start scene was added, allowing the user to choose between starting the game immediately or accessing the options section.
- In the options scene, the user has the following choices:
  - Viewing instructions for each mini-game.
  - Adjusting audio settings (to be implemented in the next milestone).
  - Quitting the game.
- The UI designs continue to follow the adventure theme chosen at the beginning of the game implementation.



# Future Plans

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# Future Plans

- Frame rate optimization
  - Texture instead of game objects
  - Consolidate tracks in one mesh
  - Optimize level of detail (LOD) system
- Focusing on the emotion
  - Difficulty adaption
  - Fine-tuning



Live Demo

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# Thank you!

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Any questions?