Procedural Terrain Generation

Non-technical outline of project

Ideally I will finish with a fully functioning program that works in a web browser that will generate a terrain based on the parameters that the user enters, ideally these will be in the form of sliders that are well laid out and just in general very user friendly.

Some features of the terrain that I would like to include are biomes, temperatures, rainfall chance or density, and other more specific features like river generation, object placement based on the biome, height or other factors, I would like some roads and paths to be generated throughout the landscape, avoiding higher mountainous regions and water, possibly adding a very basic character for the user to walk through the level and experience it as a typical player would.

Deliverables

-A playable/demo including a link to the source code

-Backup of the whole compiled version and code

-Written document to describe the system and origins, approaches and explaining implementation

-Video demo

10/03 – Date Start

Week 2 – Currently have a very basic terrain generator, start adding specific features

Biomes, moisture and heat maps.

Week 3 – Continue refining biome, moisture and heat maps, get everything working perfectly.

Week 4 – Implement roads, paths, rivers.

Week 5 – Easter

Week 6 – Unavailable during this week

Week 7 – Implement object spawning

Week 8 – Add some basic UI and the ability to tweak things during runtime.

Week 9 – Refine the UI, making it user friendly and approachable, especially to not technically knowledged users.

Week 10 – Polish and final tweaks

Week 11 – Plan Documentation, start writing up written piece

Week 12 – Continue written piece, record video doc

Week 13 – Extra time for polish, unfinished work or for other projects

09/06 – Due Date

Extra Project Goals

Weather system, villages and or buildings that have some paths and roads connecting them, player character that spawns on a road and is controllable, can walk around the terrain in real time. Have the program generate more chunks in run time rather than all at once at the start.