

Project Charter

Team 18

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Problem Statement:

Mapping biomes to a height map when worldbuilding is both time consuming and difficult to do without prior expertise.

This project will differ from other world creation software because it will focus on the biomes/climate rather than the shape of the simulated terrain.

Project Objectives:

- Map biomes to simulated terrain given an image file and parameters such as sea level and planet size
- Generate terrain using Perlin noise and/or rudimentary simulation of plate tectonics in the form of a heightmap
- Give users the ability to save, load, and display terrain and maps through the GUI

Stakeholders:

Users: Game designers, world building hobbyists, and table top players.

Developers: Alex Shelley, Rami Bitar, Jason Shipp, Ben Denison, Nathan Raine

Project Manager: Jason Shipp

Project Owner: Team 18

Deliverables:

- Process image files as input for terrain and perform our process to generate biomes
- Create an intuitive frontend GUI in C#
- Compute a biome generation algorithm with closely related precision
- Include user ability to draw terrain in house
- Include user ability to randomly generate terrain in house
- Users can save image file with projected biomes