[Date]

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Final Major project

Progress report

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Background

I want to generate worlds to simplify and streamline world creation for D&D (?)/ fantasy table top roleplaying games(rpg). I will be using procedural generation to generate a map with terrain and biomes, with stretch goals of implementing resources linked to the environment and generating settlements based on said resources. This map will be presented similar to Skyrim’s world map (fig 1). But in a much more stylised and low poly envisionment which would not include foliage.

I’m doing this project to gain a deeper understanding of procedural world building techniques.

I think this fits the course as I believe it’s technically challenging enough.

Overall Aims

* Gain a deeper understanding of procedureal techniques
* Simplify world creation for fantasy table top rpgs
* To generate a world map with biomes

Objectives

* Research approaches to biome generation and the corresponding algorithms
* Chose tools based on existing libraries for chosen algorithm
* Start planning implementation based on research
* Implement continents
* Implement terrain
* Implement biomes

Stretch goals

* Enforce biome adjacency rules; no snow directly adjacent to tropical forests

Description of research/prototyping completed

* Section on research/prototyping done at this point

Project Specification

* Fully detailed description of the “product” use short clear descriptions with measurable values
* An application capable of generating 3D maps for a fantasy world
* Which will have biomes and visible terrain

Discussion of potential solutions - Algorithms/approaches

Tectonics

* Strengths
* Weaknesses

Voronoi

Hex based generation

Discussion of tools and technologies

Discussion of software dev methodology

Discussion of project management tools and metrics

Resource implications

High level overview of classes that may be required

High level flow diagrams and pseudocode

Appendices

Reference List and Reading list

Literature review