

Com S 336 Final Project - Procedural Generation
Ben Williams
Kaitlynn Kruse

List of sources and references:

- THREE.js
- <https://github.com/ashima/webgl-noise> (GLSL Perlin Noise)
- <https://github.com/josephg/noisejs> (Javascript Perlin Noise)
- DAT.gui

What we wrote ourselves:

- User Interface for changing parameters
- CPU Calculated Heightmap
- Regenerating the terrain at runtime
- Setting up the THREE.js scene and plane mesh
- GPU Calculated Heightmap

What we adapted/modified from existing examples:

- Custom Shader Material in THREE.js

What we used unchanged from examples or libraries:

- We utilized a javascript perlin noise library from the site listed above
- We utilized a glsl perlin noise library from the site listed above
- We used Dat.gui for the UI components - sliders for the variables, button to reseed, and keyboard camera controls

Contributions:

Ben - GPU Compute Shader, Rotation of Scene, Regenerating Heightmap, CPU perlin noise implementation, variable terrain parameters

Kaitlynn - User Interface using Dat.gui, regenerating heightmap, CPU/GPU implementations