COS 452
Assignment 4, Part 4
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Procedural texture example: https://threejs.org/examples/?q=terr#webgl_geometry_terrain

Keypoints:

- Generates smoothed improved perlin noise using the generateHeight and improvedNoise functions.
- Assigns the generated noise values to the vertices of the PlaneBufferGeometry accordingly. This is the geometry that models the terrain.
- The texture is generated using the generateTexture function with the generated noise data.
- In the generateTexture function the shading is done by generating vectors from the given noise data and then dotting the generated vector with the light source.
- In the generateTexture function the color at each pixel is generated using the base color that is “brownish” and modifying it accordingly based on the shading that was just generated. This produces areas that are darker than others while everything still has the same brownish base color.
- A mesh is created from the generated geometry and texture to create the final model that you see in the example.