John Heiden – Terrain Generation Writeup

1. My scene is a lightly forested mountain range. My terrain features lakes and grassy areas at the bases of several mountains that exist throughout the area.
2. I added trees to the grassy areas to create the forest environment and several types of ores throughout the mountains that could possibly exist there.
3. My atlas contains 16 textures and any generated world will contain 4 or 5 of them depending on the provided seed (60983 is a seed I like that shows the completed requirements).
4. Websites used (WARNING: I saved all these images from Google. Be careful if actually visiting the sites):
   1. <https://www.pinterest.com/>
      1. Clay
   2. <https://filterforge.com/>
      1. Grass
      2. Lava
      3. Gold
      4. Iron
      5. Sand
      6. Stone
      7. Water
   3. <https://minecraft.novaskin.me/>
      1. Coal
      2. Emerald
      3. Orange Sand
      4. Snow
      5. Obsidian
   4. <https://steamcommunity.com/sharedfiles/filedetails/?id=2120039835>
      1. Diamond
   5. <https://aminoapps.com/>
      1. Redstone
5. To expand the environment for a game, I would like to create a biome system so that all 16 of the textures I have in the atlas could be used in one world. In the current implementation there is a hard limit at 5 since the different textures are just different variations of the sections that are created during world generation. It would also be interesting to try to implement something like a cave that goes underground, minus the ability to mine through the ground since the world is only a set of quads at the moment.