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Comp 565/ March 13 2016/Project 1 Documentation

The theme of my project is a dream world. The colors are supposed to represent the surrealism the one would find in a dream. My project is unfinished. I was able to create a terrain using Brownian Motion algorithm and import it into the AGMGSK. But I wasn’t able to implement the navigation, the smoothing or import any other models. To finish the project I would have to create or find more models to establish my theme. I would then have to user Vector3.Lerp in order to create smooth movement between the agents and the terrain. Then I would have to create a Treasure class, which I started to do. With treasures, I would be able to make the NPAgent follow the treasures. By completing these tasks I would have had a more complete project to submit.

I implemented the terrain generation algorithm by modifying createHeightTexture and creating a 2d array of integers called “heightMapInt”. I had another 2d array called “center”. This array contained all the coordinates. I also had values for the radius and the step. On each pass (I used 10.), the program randomly selects an x and z coordinate from center. Then it raises the height of each coordinate within the radius of the random center. I had to use the distance formula to make sure the area was more circular instead of being a box, when I first implemented the algorithm. This is done, in my case, for 4000 steps in each pass. I also made sure that the lower right quadrant of the map was left alone.