EE/CprE/SE 492 WEEKLY REPORT 8
2/8 – 2/22
Group number: 19
Project title: Take a Virtual Hike
Client &/Advisor: Mat Wymore
Team Members/Role: Trevor Nemes (Team Leader), Tyler Hassfield, Opeyemi Abass, Aashu Mallik, Akhilesh Ratnakumar, & Zian Li

Two Week Summary

In the past two weeks, we have been working on our designated coding parts, and have those almost completed. Including basic movement of walking and flying mode, water texture and tree generation, and perlin noise generation.

Past two weeks accomplishments

- Trevor Nemes: Over the last two weeks I have been working on creating a procedural generation algorithm to create two types of trees, with random sizes and placed around a scene in random locations. Everything that I plan on having within this procedural generation algorithm will all be within one function.
- Tyler Hassfield: Over the past couple weeks I have worked on implementing a flying mode. More specifically, the ability for the user to toggle between a walking mode and a flying mode.
- Opeyemi Abass: Made progress on the rock and bush design look
- Aashutosh Mallik: I spent almost all my working hours on implementing a water scene in three js and web gl. The water scene is going to be a part of our virtual environment. I also spent some time researching more on procedural generation and learning more on how to implement it using three.js and webgl.
- Akhilesh Ratnakumar: I spent the last week working on generating terrain height levels and working on different terrain textures.
- Zian Li: I spent my past two weeks working on flying mode, and how to generate a basic terrain to test the said flying mode.

Individual contributions

NAME	Individual Contributions	Hours last two weeks	HOURS cumulative
Trevor Nemes	Made progress on the procedural generation algorithm to generate trees	13	19

Tyler Hassfield	Finished implementing Flying-mode	10	15
Opeyemi Abass	Made progress on the rock and bush design look	6	7
Aashu Mallik	Built a water scene using three.js and webgl. Researched into procedural generation and it's implementation using three.js and webgl	14	17
Akhilesh Ratnakumar	Made some progress on terrain texture generation	5	5.5
Zian Li	Flying mode	5	6.5

Plans for the upcoming two weeks

- Trevor Nemes: Over the next two weeks I plan on continuing to work on my forest procedural generation algorithm as well as plan on creating textures for the trees so they look somewhat realistic.
- Tyler Hassfield: In the coming weeks I plan to debug the flying-mode. There are parts of the physics that can be cleaned up as well as adjusting the velocity of the user while flying. Once that is done, I will work on debugging the initial collision detection system that I have started.
- Opeyemi Abass: I plan to to continue working on the code and make it easy to integrate with the other team member code.
- Aashutosh Mallik: I plan on refining the water scene that I made so that it's not choppy. I plan on refining the code so that it can be used and understood by other teammates. I also plan on doing more research into procedural generation and it's implementation using three.js and webgl.
- Akhilesh Ratnakumar: I am planning to continue working on different terrain heights and add grass mesh to the ground.
- Zian Li: I am planning to review the movement function and any new assignment assigned in the upcoming meeting.

Summary of weekly advisor meetings

Over the last two weeks, we have had two meetings, one each week. In both of them we each shared the progress we have made in each of our parts of the project/code. After that, we then talked about what we each plan on doing the following week after each meeting, leading up to

our next meeting. We also talked to our client at each meeting to make sure he is happy with what we have so far and where we are so far in terms of the project. Our client has been happy with our progress thus far this semester.