## EE/CprE/SE 491 WEEKLY REPORT 9

3/28 – 4/3 Group number: 03

Project title: Minecraft Mods

Client &/Advisor: Dr. Daniels

#### Team Members/Role:

William Lavelle - Leader

Nicaela Rose - Doing research on project

Zhihao Liu - Doing research

Jacob Kelderman - Meeting Minutes Recorder, Doing research

Eric Kirch - Design Documents, LUA

# Weekly Summary

This week we were able to meet with the client to discuss really deep specifics of the project. We worked out exactly what they want implemented and what they don't. We also filmed a Youtube presentation about our project.

#### Past week accomplishments

- Nicaela Rose Worked on the Testing Plan Assignment and Presentation.
   Looked at Lua tutorials and mod demonstrations online
- Eric Kirch Design documents, LUA learning
- Jacob Kelderman Made simple minetest mod for learning purposes, Worked on news report, met with Dr. Daniels
- Zhihao Liu Worked on the Youtube News Report assignment. Learned about Lua and network models that evaluate bandwidth/latency to remote services.
- William Lavelle Worked out specific obscure details of the project with the client. Recorded a Youtube presentation about our project. Started to learn Lua so that we can write our mod.

#### Pending issues

To write any parts of the mod, we need to learn Lua. We need Lua before we can do anything major.

## **Individual contributions**

NAME	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours</u> <u>this</u> <u>week</u>	HOURS cumulative
William Lavelle	Worked out specific obscure details of the project with the client. Recorded a Youtube presentation about our project. Started to learn Lua so that we can write our mod.	2.5	18.5
Nicaela Rose	Worked on the Testing Plan Assignment and Presentation. Tested mods and also looked at Lua API Documentation	2	17
Jacob Kelderman	Met with Dr. Daniels made a simple minetest mod. Worked on a news report video.	2.5	21
Zhihao Liu	Worked on the Youtube News Report assignment. Learned about Lua and network models that evaluate bandwidth/latency to remote services.	1.5	18.5
Eric Kirch	Worked on script for YouTube video, learning LUA and design documents	1	18

- Comments and extended discussion (Optional)
- Plans for the upcoming week (Please describe duties for the upcoming week for each member. What is(are) the task(s)? Who will contribute to it? Be as concise as possible.)
  - Nicaela Rose Start looking into components of the project that our client wanted us to look into based on the questions we asked him last week. Look into a network model that evaluates bandwidth/latency to remote services
  - Eric Kirch Create more design documents, learn more about LUA, maybe write some pseudo-code
  - Jacob Kelderman Get more familiar with Lua. Learn how to make more advanced features on the simple mod that I started, try to implement distance from certain blocks and have value update on the screen
  - Zhihao Liu Continue learning Lua and network mods. Build communication mods.
  - William Lavelle. Learn Lua. Find exact mods we will be using as a base.

# Summary of weekly advisor meeting (If applicable/optional)

Wanted us to focus on API documentation of lua so we could see what was possible and then start working on the network model that we are going to implement.

- -https://rubenwardy.com/minetest\_modding\_book/en/quality/clean\_arch.html#observer
- -Talked about architecture of mod.
- -Observer architecture
- -network mod that represents different local area nets
- -register with cell to find nearest towers
- -ABM vs LBM what does it mean (lua docs)
- -Could have three or four central mods that control everything and give data line of site function could be useful
- -satelites are invisible
- -make sure mod packs are seperate

TODO for next week

- -create a new entity that does something a little different
- -seperate module that communicates among them
- -Look at link above to see what certain parts mean (each person take a section or something)
- To Do: Make a BarnyardCounter. Everytime two sheep reproduce, the new child is registered with the BarnyardCounter. When you hit one of the sheep, the BarnyardCounter kills all the others as well. This is a test, because if Minetest makes this really hard, what we want to build will also be very hard. It's our version of Hello World
- Divide up parts of the mod and assign people to learn what they are & what they do, then report to team. Ex: What is a Schematic? What is Raycasting, how does it work? ABMs? LBMs?