EE/CprE/SE 492 BIWEEKLY REPORT 4

10/11/2022 - 10/25/2022

Group number: 3

Project title: **Minecraft mods for 5G and Beyond**

Client &/Advisor: Dr. Daniels

Team Members/Role: **William, Nicaela, Jacob, Zhihao, Eric**

(All the above information should be there in each weekly report. The format/color scheme etc need not be the same. However, please remove everything that is in a bracket from your final submission. These are just part of the template and need not be a part of the report.)

o **Weekly Summary**

These two weeks we've been making good progress! It's nice to be working it for real. Nothing special, just getting tasks done.

o **Past week accomplishments** *(Please describe/summarize as to what was done, by whom, when and, collectively as a group. This should be about a paragraph or two in length. Bulleted points are acceptable as well. Please keep only your technical details related to your project. Figures, schematics, flow diagrams, pseudocode, and project related results are acceptable, but please ensure that they are legible (clear enough to read) and to provide an explanation. If researching a topic, please add a few details about what was learned and how it is relevant to the project. If two or more people worked on a single task, be sure to distinguish how each member contributed to the task. Specific details relating to the assistance provided to other members may be included here.* ***Do not include classwork, such as individual reflection assignments, and group meetings as part of your duties.*** *)*

- Nicaela Rose - Worked on research/demo on land claim blocks. Implementing this and also looking into default maps for Minetest that shows land coverage and ownership. Met with Dr.Daniels and worked on PIRM presentation
- Jacob Kelderman - Worked on detecting distance from nearest tower to animal
- William Lavelle - Working on map generation and terrain.

- Zhihao Liu - Worked on antenna modeling and using commands to change the color of animals.
- Eric Kirch - got sever storage working so towers are saved when leaving and rejoining game, started work on distance functions for the

o **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*
- Nicaela Rose - No pending issues
- Jacob Kelderman - none
- William Lavelle - None
- Zhihao Liu - No pending issues
- Eric Kirch - Need to fix list of towers

o **Individual contributions** *(Creating this section is optional, but it is **Required to include the "Hours Worked for the Week" and their "Total Cumulative Hours" for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.**)*

NAME	Individual Contributions *(Quick list of contributions. This should be short.)*	Hours this week	HOURS cumulative
Nicaela Rose	Demo for land claim block and default maps in Minetest. Slides for PIRM presentation.	4	11
Jacob Kelderman	Tested animal mod and was able to get location of nearest tower to particular animal	3	12
William Lavelle	Map generation and terrain	3	10
Zhihao Liu	Antenna modeling and using commands to change the color of animals.	3	11
Eric Kirch	Got tower server storage working and refactored some code for towers	9	20

o **Comments and extended discussion** *(Optional)*
Feel free to discuss non-technical issues related to your project.

o **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 - Look into a default map that resembles Iowa. Continue working on land claim/ownership.
- Jacob Kelderman: Find a way to send event when animal moves to be able to call check distance function
- William Lavelle: Finish mapgen.
- Zhihao Liu - Finish the rest of the work and test usability in the group files.
- Eric Kirch - Look into hooking functions for blocks (on_create, on_destroy)

- **<u>Summary of weekly advisor meeting</u>** (*If applicable/optional)*

  10/24:

  - Add animal tracker location update to trigger when the animal move, or on a timer.

  - Add some model of signal strength (distance and line of sight are considered)

  - split up all code in main file into modules or some other form of nice organization

  - area of interest: south of Boone, north of Madrid, both those towns on upper and lower edges of map