

EE/CprE/SE 491 WEEKLY REPORT 1

1/25/2022 - Q4 2022

Group number: 3

Project title: Minecraft Mods for 5G-and-Beyond Wireless Systems and Rural Broadband

Client &/Advisor: Tim Daniels

Team Members/Role:

William Lavelle - Leader

Eric Kirch - TBD

Nicaela Rose- TBD

Zhihao Liu - TBD

Jacob Kelderman -TBD

(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.)

- **Weekly Summary** (Short summary about what the group did for the week. This should be about a paragraph in length. These are just a few questions to help you get started. What was the overall objective for the week? In general, what tasks were completed? Were there any changes made to the project?)

Had our first meeting with Dr. Daniels. Briefed on the general idea of the project. Given questions as to what we'll need, limitations, and how we're going to start making the simulator. We need to figure out a meeting time that works for everyone moving forward, and are working on that. We formed a discord for organizing the project, as well as communication.

- **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.)**

- William Lavelle: Set up a when2meet to find suitable meetings times.
- Nicaela Rose: N/A - met with Dr. Daniels last week to get more knowledge towards the project.
- Jacob Kelderman: N/A met with Dr. Daniels asked questions to confirm understanding
- Zhihao Liu: Scheduled the meeting time with the team and met with Dr. Daniels to get familiar with the project.
- ...

Last week, we made a snapchat group, and started communicating with each other on the project

○ **Pending issues** (If applicable: Were there any unexpected complications? Please elaborate.)

- William Lavelle: Finding a time that works is hard!
- Nicaela Rose - Finding a more appropriate time (during Dr. Daniels Office Hours) to meet together on a weekly basis has been difficult since our schedules are different.
- Team Member 3:
- Zhihao Liu: Find a more suitable time to meet.
- ...

We are currently working on finding a meeting time that works for everyone, given we're all students with other classes, it has not been easy. We've been using when2meet in order to find a time that works for everyone.

○ **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.)**

<u>NAME</u>	<u>Individual Contributions</u> (Quick list of contributions. This should be short.)	<u>Hours this week</u>	<u>HOURS cumulative</u>
William Lavelle	Had an introductory meeting with Dr. Daniels, and made a when2meet to find a	?	?

	good meeting time..		
Eric Kirch	Created a discord for the project	0	0
Nicaela Rose	Met with team members and client to discuss the project.	0	0
Zhihao Liu	Met with team members and client to discuss the project.	0	0
Jacob	Met with team members and client to discuss the project.	0	0

○ **Comments and extended discussion** (Optional)

Feel free to discuss non-technical issues related to your project.

○ **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.)

• Team Member 1: Work on...

• Nicaela Rose: Brainstorm and do more research on the project to see what we can/can't do and see what questions I may have for Dr.Daniels

• Team Member 3:

• Zhihao Liu: Continue to meet with the team to find future work directions.

• William Lavelle: Ask Dr Daniels more questions about the specifics of the project.

• Jacob Kelderman: Research other possible games and brainstorm options for what to include in mod

○ **Summary of weekly advisor meeting** (If applicable/optional)

(Provide a concise summary on the contents and progress made during the advisor meeting.)

-Dr. Daniels on a project called Arum (Ara?), involves looking at a lot of different broadbands accessible all over the place, and what you can do with it

**Part of the project is getting the word out*

**It is a simulation tool*

**How can we provide something to a lot of students that's fun, educational, and tied into this idea?*

-A Minecraft world, or some other readily available world building game in order to build out these things such as network infrastructure, and water towers

-Want to be able to see benefits and implications of things such as coverage, benefits, etc.

Want to make this available to every FFA student/teacher in Iowa

**Environment is very importance*

-Weather is a big one

- Need a rural aspect
- Need networking capabilities, remember, not every farm can be connected to fiber

**Ends in a coverage simulation*

Dr. Daniels idea + bare minimum: Follows some base physical reality, might need to be gameified a bit

- Must find the game's limitations
- Going to need to account for wired and wireless connections

Requirements

- Must be affordable
- Licensing on Minecraft
- Must figure out what we can do

Things to figure out

- Making the objects (tractors, towers, etc.)
- What we're going to use

Dr. Daniels scared of us trying to build our own world; Trying to use something like Unity

***Trying to turn Minecraft into an educational experience*

**Cloud is becoming bigger and bigger for agriculture*

For next time:

- Appoint a leader, and someone to take care of communication and website
- Start analyzing are needs, as well as limitations
- Develop questions for next time