EE/CprE/SE 491 WEEKLY REPORT 6

03.6.24 - 03.19.24

Group Number: 07

Project Title: Gamified Security Awareness

Advisor: Thomas Daniels | Client: Sudesh Kannan

Team Members/Role:

Charan Gurramkonda - Team Organizer + Primary Communication

Charles Millar - Testing/Developing

Caleb Lemmons - Information Application Lead

Parker Schmitz - Technical Lead

Brayden Lamb - Design/Visual Lead

Derek Lengemann - Testing/Developing

Weekly Summary

• Week 6 was vital for our team as we collectively mapped out our game. Previously, we operated independently, often following my broad concept because it seemed achievable and intriguing. However, merging my initial outline with my teammates' insights transformed my idea into something more concrete and appealing to software developers. For instance, we shifted the first level from a simple social engineering theme to a basic terminal challenge after reassessing our audience. This change, along with our progress, impressed our client. We aim to finalize our game concept by week's end and assign technical tasks accordingly.

• Past week accomplishments

- **Charan Gurramkonda:** In Week 6, our collective focus was on refining the game concept, as midterms prevented us from advancing technical development. I spearheaded a collaborative effort to map-out our overall game strategy, ensuring a unified approach for future enhancements.
- Charles Millar: In the past week our group has done well at creating a precise scope of what we would like the levels of our game to look like and entail. After completing ideas for the first five levels for the game, we pitched our level ideas to

our clients in our weekly client meeting. Our clients were pleased to see our progress and are excited to see how the game will progress further.

- Caleb L: With spring break finishing up, the amount of work I completed in the last week was small. Continuing from last client meeting, the team presented our current level scope and updated design ideas. With our story not really having an ending yet, we looked to our client team for advice looking forward. Our team took note of the helpful criticism our clients gave us and with Spring break being right after, we all took our leave for the week.
- Brayden Lamb: Between our last report our group has worked on creating a precise scope of what we would like the levels of the game to look like and the story behind them. We pitched our level ideas to the client in our weekly client meeting and they seemed to like our plans. Didn't get to do much because of spring break.
- O Derek Lengemann: With last week being spring break, not a lot of work was able to be done. The team was able to present our updated and more fleshed out ideas for each level to the client while getting input from the client about the current ideas as well. While the story has yet to have an ending, we have an excellent start as to the concepts and the story we want to explore and how we will do this.
- o **Parker Schmitz:** In the week before spring break, I had implemented a wall jump mechanic identical to *Super Metroid*. When the player is in the air, a check is performed behind them. If a wall is found, the player can press jump and vault off of the wall. This mechanic could be manipulated to provide a simpler wall jump experience, or there is a variable to disable wall jumping altogether, if we so desire. I am now very familiar with manipulating player movement using Unity's physics engine, and should be able to to change variables such as max velocity, acceleration, drag, and gravity to our desires.

• Pending issues

- Charan Gurramkonda: No pending issues on my side. Ownership Discussion w/ Client is still pending.
- Charles Millar: I have no pending issues.
- Caleb L: No pending issues.
- Parker Schmitz: We will need a way for all of us to work on and access the game while we develop it. Unity has a built-in version control system, but GitHub may be

preferable, as it is more general, and will allow us to open source the project if we so desire. I am not aware of any size limitations on GitHub, but even if there are, I doubt our project will be too large for GitHub. I am also a little concerned about our progress on the game itself. There's maybe a month and a half left in the semester, and I have not been made aware of any progress on programming the game besides what I've worked on. After my experience, coding the game with any degree of quality will definitely be the hardest part. While we don't need a high fidelity product by the end of this semester, the original plan was to at least have a low fidelity prototype to present.

• Brayden Lamb: No issues.

• **Derek Lengemann:** There are no pending issues.

Individual contributions

NAME	Individual Contributions	Hours This Week	HOURS Cumulative
Charan G.	- Outlining Levels & Finalizing Game Design	3	23
Charles M.	- Level ideas and structure	3	24
Caleb L.	- Initial Level ideas completed	1	22
Parker S.	- Wall jump implemented	4	26
Brayden L.	- Level ideas	2	33
Derek L.	- Level ideas and structure	3	25

• Plans for the upcoming week (03.5.24 - 03.19.24)

- **Charan Gurramkonda:** Facilitate another team discussion on game levels, incorporate client feedback, and progress towards finalizing the structure.
- Charles Millar: In the upcoming week I hope to look into potential free assets
 on the Unity store which we can use in our game. These assets may also give me
 some inspiration for what future levels may look like.
- **Caleb L:** The plan this next week is to meet back up with my groupmates and create a game plan to finish the storyline taking our clients advice into account.
- Parker Schmitz: I plan to implement a sort of level change system, to allow for multiple rooms/levels in our game. My intention is for it to be applicable to many different situations, such as single, linear levels like in Super Mario, or a more open world like a metroidvania.

- **Brayden Lamb:** Finish the scope of the game and work on our presentation for next week in class. Also just regroup with the team and plan out the rest of the semester's work.
- **Derek L:** In the upcoming week, we will finalize the scope of the game and incorporate the ideas received during our client meeting. We will also regroup after spring break and prepare for the rest of the semester.

• Summary of weekly advisor meeting

Updates on Thursday.