

EE/CprE/SE 491 WEEKLY REPORT 4

02.20.24 - 02.27.24

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**

- The past week marked a significant breakthrough for Group 7, primarily due to our reunion with our client after a two-week hiatus. In addition to re-engaging with our client, we had the opportunity to collaborate with Seth, a game designer employed as a developer at Allstate Insurance Group. Our discussion with Seth revolved around various software tools he has utilized, and we benefited from his insights on our project's scope and conceptual design. By the conclusion of our session, we reached a consensus to utilize the Unity game engine for our development. We have set an ambitious goal to meticulously craft and refine the stages and levels of the game. Despite the abundance of cybersecurity challenges we are eager to incorporate, we recognize the time constraints.

● **Past week accomplishments**

- **Charan Gurramkonda:** I successfully obtained the Student License for Unity and have begun familiarizing myself with its capabilities through tutorials. While I cannot pinpoint a singular achievement for myself this week, the real triumph lies in having a clear direction for our project. I'm exploring the software's potential, experimenting to see how we can effectively integrate our planned levels.

- **Charles Millar:** During the past week I helped create a slideshow presentation for our client meeting. The client was wanting us to create a presentation to pitch our game idea to them, so we could receive their feedback. The clients ended up loving our game idea and gave us some advice for moving forward with the games development. I believe our group has come to the decision to use Unity as our game engine and each group member should be able to get a free membership as students. We are hoping to implement a terminal into a level in our game and Seth gave the suggestion to check out a game called Voices of the Void which uses a terminal. Overall, our group should have good direction moving forward after meeting with our client this last week.
- **Caleb L:** Last week, our group met up with our client's team and gave them a run down of where we are and received feedback accordingly. The client seemed very pleased with our progress, and we were elated to discover that our initial ideas don't conflict with the clients vision. The next step is solidifying what game engines/software so we can play to its strengths. After searching for game engine information around last week, most of our team all concluded that Unity would probably be our best option. Luckily for us, one of the client's colleagues has used Unity to make multiple games before and they agreed that Unity would most likely be ideal for our 2D game. We then decided to take the week to sign up to Unity and start messing around with it and continue without respective roles. I have begun to mess around with Unity and will continue to look through the asset store for cool ideas. To add, I have also continued to refine the gamification ideas and have started working on mock-level ideas for each of the Cyber Security concepts that we initially decided upon.
- **Brayden Lamb:** Last week we met with our client and they brought a few more members to the meeting to give us some expertise in game development. They liked our presentation and story for the Gamified Security Awareness project. I was surprised they didn't have much negative to say or much feedback for us but the experts they brought from their team were a big help. For the meeting, I adjusted and made more visuals to show an early-stage look at how the game could look. We decided Unity was the best route to go and tasked everyone with playing with Unity to learn more about the game engine.
- **Derek Lengemann:** Last week we had a chance to meet with our client and a few advisors. They were able to provide us with plenty of experience and information about the project. They enjoyed our presentation and our ideas that we presented and encouraged us to decide on a scope for the project. We have decided on using Unity and while some of us have already begun learning about the various tools within Unity and what is all possible using the engine, the rest of the group has

begun to learn more about it. The client has given us multiple different examples to check out such as Voices of the Void and various projects different members of their team have made over the years.

- **Parker Schmitz:** I successfully acquired a student license for Unity and have it set up to work with Visual Studio. I've been experimenting with Unity to help re-familiarize myself with it as well as any new features they've introduced since I last used it 7 some years ago.
- **Pending issues**
 - **Charan Gurramkonda:** No pending issues on my side. Everyone is doing their job!
 - **Charles Millar:** I have no pending issues.
 - **Caleb L:** There are no pending issues on my part.
 - **Parker Schmitz:** No issues. We are making excellent progress.
 - **Brayden Lamb:** No issues.
 - **Derek Lengemann:** There are no pending issues.

Individual contributions

NAME	Individual Contributions	Hours This Week	HOURS Cumulative
Charan G.	- Unity Tutorials - Refining Levels & Security Concepts	3	18
Charles M.	- Client Presentation and Meeting - Looking into Unity	3	18
Caleb L.	- Expanding on Gamification Ideas & Mock-Levels - Messing around with Unity	3	18
Parker S.	- Setting up Unity - Re-familiarizing myself with Unity	3	16
Brayden L.	- Making visuals for the client meeting - Experimenting with Unity assets and tools	6	28
Derek L.	- Unity Tutorials - Unity Experimentation	4	19

- **Plans for the upcoming week (02.14 - 02.21)**
 - **Charan Gurramkonda:** I plan to keep playing with Unity, progressing through tutorials, and collaborating with my team to refine the game's concept. As we

gain a better understanding of the game's scope, we can assign specific roles for stage development and create preliminary mock-ups.

- **Charles Millar:** In the upcoming week I hope to look more into Unity and try out the game Voices of the Void which Seth, a game developer with Allstate, recommended. I am hopeful that this game will give me a good perspective on how to implement a terminal into our game.
 - **Caleb L:** The plans are to continue messing around with Unity and finishing up my level ideas in time to show the client more level ideas. Depending on their responses, I can go in and tweak these ideas or continue to add more Cyber Security concepts to make problem solving mini-games with.
 - **Parker Schmitz:** This next week I plan to have a simple 2D platformer implemented in Unity. I want to have it be configurable, so we can give the player character the physics we want and allow for new functionality to be added. I'd like to implement walking, running, jumping, and possibly wall jumping, just to experiment.
 - **Brayden Lamb:** This week I want to continue playing with Unity and want to make a detailed first room to show to the group at the end of the week. I also want to look into using Blender software to make some assets for the game because it has more tools and is easy to import into Unity.
 - **Derek L:** This week I plan to look more into the various aspects of unity and to use the different tutorial videos I find to learn more about the engine and what is possible within. Our group will continue to refine our different ideas and will begin to assign roles for each of our members as we begin development of the game.
- **Summary of weekly advisor meeting**

Brayden talked with Dr. Daniels in person about how the client meeting went and I explained that I felt it went well and they liked our ideas and the direction we wanted to take the project. Dr. Daniels asked about a few specifics about the game and unity. He was satisfied with the progress we have made so far.