Brandon Jackson

CSS 497 – Summer 2023 Computer Science Capstone

Video Game Project: MechaPunk Fury (by Team Radon)

Project Results Abstract

My name is Brandon Jackson. In this CSS Capstone project, between June 18 and August 11, my teammates and I used the Unity game engine to develop a beat-em-up style game called *MechaPunk Fury*. We combined our different skills in developing different aspects of it. Then we put all of our individual pieces together into a working build, which was then play tested by our peers to receive feedback for further improvement on our game.

There were problems during the project. Early on, we did not know each other very well, so we needed time to understand what we could each contribute to the project and to adjust to each other’s schedules. Developing the game itself was not without issues, either. Due to us splitting up the work, our individual problems depended on what we were each doing. For me, I designed the levels in which the player traverses and the obstacles they contain. I was thus faced with making sure the levels provided a good, steadily increasing challenge without being frustrating, or without being a detriment to the combat aspects of the game that my teammates were developing.

My solution was to first sketch out the levels before implementing them. That way, I could get an initial idea of what the levels would look like, and I could easily revise it. From there, I had a base to work off of, and thus it was much easier to build the designs in game, followed by adjustments to object and enemy placements as appropriate.

With feedback from my teammates and our play testers, my levels eventually reached a desirable level of challenge and creativity, mixing together the combat system and obstacle design into an enjoyable experience. I feel this helped us successfully achieve our goal of a playable, functional game, and then some.

From this project, I learned and refined new skills in how to develop a video game, especially in terms of level design. I also improved my ability to communicate and work with others, as previously I typically worked on similar projects by myself. And through the use of an online organizational tool called Trello, I learned how to use available resources to make completing tasks both small and large much easier. All of these skills will prove very useful as I take on more projects in a future career and beyond.