Weekly Summary

Week 3/30/2020 – 4/3/2020

**Michael Hayes:** This week I reworked the way movement works in our game. Previously movement was using only collision detection to determine if a player can move. Since jumping disabled movement if you were to walk off a platform you would be able to move still. I used a Raycaster to check for when the player is not touching a platform so that it disables movement and jumping if there is no platform beneath the player. After reworking movement I started to work on the gun model for the player. It’s a simple model that is kept in place in view of the camera. I then worked on the lava and the shaders for the lava after messing around with the shaders trying to get it to work I found a site that helped me set up a basic lava and shader for our reset box. I added a left and right jump (q and e) which is for wall jumping left and right.

**Next Task:** I am going to finish fixing the bugs with movement and move on to making the grappling hook more fluid. My plan is to create an impulse movement towards the direction where the grappling hook is attached so that the player is thrown towards the direction they want to go. This will make the grappling hook more usable and fluid. If I have time next week I will look into movement bobbing for the gun to make the game more realistic and add sound to the grappling hook.

**Ryan Slaybaugh:** These past couple of weeks I spent time outside of coding designing level 1 on graph paper. Originally I had anticipated 6 pages but instead ended at 5 due to how the design came out. This last week I spent coding in the level objects. I then spent Friday working on optimizing how I coded in the objects and finished up with all but cosmetic additions.

**Next Task:** My next task is to focus on optimizing level and menu code and to see if I can do something about the pauses when loading when the screen doesn't show anything loading.

**Semira Pinder:**

I added a way for the cat enemy catGun to shoot bullets when the “Shoot” animation is played for that enemy. The can shoots a bullet from its center, but it can only shoot one bullet at this time and only one bullet per animation. I ran into multiple problems with making the bullet appear in the right spot and shooting it in the right direction, but after researching local and world coordinates, I found solutions to both problems.

**Next Task:**

In the future I will investigate AI for the enemies, and I will try to make an enemy class to make multiple enemies at once or help with a system class that makes the player and the enemy objects all at once. There also needs to be multiple bullets at once just in case there’s multiple enemies and the bullets need to stay longer than one animation, so I will plan on fixing these issues as well.