CSC481 Homework 5

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12-6-2023

Design Decisions

For Homework 5, I really struggled with getting V8 to work properly on my system. It caused many problems and eventually left my WSL in a completely unusable state. I was forced to do a full wipe of my windows drive, reinstall windows and then reinstall WSL, as well as Ubuntu. At this point I was up and running again, and it let me install V8, but I never got it to run correctly. I always had compile errors and then once I resolved those, I would have issues while running. After wasting over two weeks with this, I eventually made a command decision to skip the scripting and come back to it later on my own time, after classes were wrapped up. Since I will be graduating this month, I am hoping that I can complete this over the holidays, before I start any employment. Although this was upsetting for me, especially with the struggles I had with the networking, I know that submitting without the scripting is better than not submitting at all.

Since I was unable to get scripting to work, I also was unable to get the HID portion of it to work, since I needed scripts to do that. This unfortunately means that all of my part 1 code does not work properly. I am unhappy with this, of course, but I would be even less happy if I didn't submit anything, which is why I am submitting everything else that I completed.

After I made the difficult decision to skip part 1, I then started on my second game for part 2. I chose to make a 2D space flying game similar to the old NES game GRADIUS, but without any shooting or enemies. I wanted the player to fly a spaceship through an asteroid belt without hitting any asteroids to complete the game. I knew that I would have to make more changes to my actual code that other people might, just since I wasn't using scripting. I decided to just make the second game in the main function and I tried to leave as much code in tact as I could. I chose to reuse some of my objects for other purposes.

Because I already had collision set up for the floating platforms, I chose to use those as non-moving barriers for the top and bottom of the screen. I then chose to repurpose my static platforms as the asteroids and I created a deathzone in the same location and the same size as each of the asteroids. I implemented the creation of these asteroids with random numbers also, so that each time the game it played it is different from the last time. Since I already had functionality to scroll to the right from my 2D platformer, I used that same function to shift every platform/deathzone at the rate of the frame delta, and I already had the code for hitting a deathzone to create a death event. The death event creates a respawn event and that shifts everything back to the start, so by reusing that, I did not need to make any changes to that code. I did need to change the image for the player to be a spaceship, so I also made that change in the code of the main function. Lastly, as mentioned in my reflection, I chose to implement an ending for the game. After the player makes it through all the asteroids successfully, the screen goes black and the main timeline pauses, pausing the game entirely.

I think this worked out well for a second game and I was pleased with how I was able to do it all from inside the main function. I would have been more pleased if I had been able to get the scripting to work and then made all of these changes based on scripts, rather than in my main function. But considering that I could not get the scripting to work I was happy with it.

If I can ever get scripting to work after this class is over with, I will be trying to make another game on my own to see how much of the code I would have to change to have a third game. I am very curious to see how different it is from the changes I needed to make to get my second game working without scripts. Although the semester is over, I am looking forward to completing this and continuing to improve my game engine for my own satisfaction!