Jordan Schlinger

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Design Decisions

Looking at my project there is a lot to discuss. Perhaps the elephant in the room- my dumb self thought that the sample that was oft discussed was the ones in the textbook because I just… am blind apparently. So, every single thing I did was based off reading the book, watching videos, and googling. I actually think this is good- while I often fell down, I learned a heck of a lot more than I would have if I just copy and pasted every single thing, for instance the mouse scroll speeds and the movement. I had to look it up, type it in, commit it to memory, and do that multiple times (for example- in my project and on assignment 4-2).

So first though let’s talk about development choices. I used both recent videos based on the updated SNHU curriculum… and the older ones too to get a full grasp on this. I chose to do it week by week and often overnight after all my other classes- frankly it was a bit intimidating! But the big thing I did during this time was adapt. I tried to look at what different shapes could do. I even played some old games to get an idea of how they designed various items- *Duke Nukem Zero Hour* for the N64 was one. During this time one thing I noticed has how many times a developer would just hide an object in another object- to put it another way they would, say, make a wall. But it wasn’t really a wall- it was cubic or rectangular and we just can see one part unless we clip in. Like wise in *Pokemon Emerald* for many items that the player can click on and observe it’s really an NPC version of the player character… with another visual layer on top of it. I incorporated this by using multiple prisms and- on the top- even multiple boxes so that I could cover up “bad” textures with good ones. Likewise I could hide the other sides of my prisms!

That of course brings us to custom functions. I had originally had difficulty with the various display options. However I soon got it working after rediscovering the sample folder. I did four separate views- one from the front, one from the side (“Perspective”), one from the top looking down, and one looking up. These are mapped to the keys “1”, “2”, “3”, and “4”. It really looks similar from each direction as it is a perfect square. However it does let one see the custom texture I did up top with the entrance to the top box a la the image I originally chose to portray. The one annoying thing with these perspectives that I regret is that they show that the texture I modified for the top was slightly off- I think about 5 pixels to the left out of 512. It shows if you really look and it constantly annoys me. Using buttons to go up and down as well is good- though it can also help people see the clipped shapes below the plane mesh which is kinda sad.

When it comes to custom functions there is quite a lot. For one I had to add in some extra attributes for lighting to get it work- a lot of what I have there are basically artifacts from *not* seeing the (correct) sample. Also of note is as it was a square I made each piece easily copyable, and made it to where each square decreased by a set number of “sizes”. This was so that I could easily and effectively copy and paste the boxes, wooden fence posts (there was no wire in the picture), etc and then just on each just change the numbers, going down the line of copy and pasted code. In fact when choosing a picture that was what I was looking for as it seemed far easier to modify and work on!

Looking back on everything I really wish I could take it again. I learned a whole heck of a lot- indeed if I could drop my class now I would, despite my grade, not because I am disappointed in how I did but because I would like to try something far more ambitious. I think after this class I will indeed be making 2D pictures into 3D ones almost as experiments. As a start I want to remake what I did this time, in my own time, making it larger, adding in extra objects (ie- very basic humans, think a box, a sphere, and four cylinders), adding extra layers to my ziggurat, and more. I would also like to look at structures in, say, Halo and try to remake them in OpenGL. Simply put I want to experiment and learn more. I am at this school to get a degree, yes- but I am also here to *learn*. And I want to learn as much as possible and become as skilled as possible!