Dusten Schacht

CS-330

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My original picture that I chose was actually super simple by accident as I literally took a picture of my computer and I didn’t think that I was going to actually build the picture within this class however I did but because it was just a black box on a desk, I created it and then created the light source and the code for a user to navigate my 3D scene. I am currently adding a triangle and a few other things to meet the requirements, but I used a piece of paper to draw out the points of the desk and the computer using triangles so I could actually create the scene then I coded those points and used the GLushort indices to let the program know when to start and stop connecting dots. I did run issues on certain weeks where the program would just connect everything or just keep drawing.

To make sure the user can navigate my 3D scene with ease I actually edited the code within the camera.h file itself as within that file they had W for forward etc. but I needed a few other things such as Q for down and E for up, so I added 2 variables with both keys and added the up and down function for those variables so the user could also move up and down within the program with ease then I went in and programed the W,A,S,D,Q,E so the user can use those inputs to move around the scene then I started by importing the camera.h and creating a variable for the camera within the program so the user has a spawn point then I starting creating the variable so the user can use the mouse to look around and use the scroll wheel to speed up or slow down the movement speed.

I broke everything down into sections to make sure that the code was easy to follow and keep up with as I made sure that all of the variables created was at the top alongside lighting, camera speed, shaders, positions of light, while keeping all of the math for everything in the middle with the movement for the user to navigate everything while having the coordinates and textures coordinates at the bottom of the program and this makes my code extremely organized as everything has its place and everything is easily found and read for the user. This allows the code to be reused with a few tweaks here or there as someone else could come along and change the shape or texture of some things while doing very little effort.