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CS 330

Final Project Reflection

For my 3D scene I opted to create a computer desk setup featuring a desk top, monitor, keyboard, mouse, and various accessories. I selected this to create a visually appealing environment. I did take some creative liberty and added in a couple of objects: the coffee cup and computer speakers to complete the look of my scene. To implement this, I used OpenGL and also utilized a file that had primitive shapes already coded. I completely understood the code and how it worked, I just couldn’t wrap my head around all the vertices and indices. Luckily, my advisor sent me Battersby’s primative file and that changed my life. I just took off running at that point.

Users can manipulate their viewpoint using various input devices, such as the mouse or keyboard. To navigate the scene I added in various camera movements using keys (WASD) and mouse movement. To increase the speed in which the camera moves, I implemented code that would increase or decrease the camera speed based on the direction the mouse scroll wheel turned.

Because the primative shapes had their own .h and.cpp files, my render scene method was very organized. It was helpful for me to be able to call objects, move them, resize them, and texture them all in the same little location. This cut down on the amount of coding that needed to be included in my source file. The same can be said for having separate camera and shader files as well. Doing it this way eliminated unnecessary code within my source file. Another reason for the separate files is so they can be reused time and time again – should I decide to add more to my scene or create an entirely new 3D world.