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CS-330

Module 7: Final Project

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Final Project

The final project was a long process for me, this is my first time getting to actually work with 3D objects and taking a picture of something and then trying to recreate it in a 3D space. Over the course developing the scene as well with the lighting was a process to say the least. I had an original concept of using Lion King with all of the main characters on the branch singing the main song that everyone knows but I thought about it and decided to go with something more doable for a noobie per-say. This was the right choice because it was harder to learn new techniques when it comes to OpenGL. It’s similar to coding but a lot harder because dealing with textures, lighting, objects, and rendering takes longer than you’d think. The picture isn’t too accurate to my original photo that I decided to try to recreate but the spirit is there.

**The Original Photo:**

A computer and a cup of coffee

Description automatically generated with medium confidence

**The Rendered Photo:**

A picture containing table, indoor, coffee, cup

Description automatically generated

I decided I wanted to re-use some code when re-creating other objects such as the candy on the computer. This saved me a lot of time because I didn’t have to type out all of the code again, I just had to copy and paste the code and I could tweak it if I wanted to. Same goes with the pen, the pen and candy are similar shapes, and I was able to use some of the code I used for the candy and put it to use for the pen and change it up a little bit. For the camera and light positions, these were determined because of the vectors in certain locations, this allowed me to create an overall glow effect rather than a lamp shade effect where the light comes from one place. It looks like the light is glowing off of the wood which is a nice touch.

Now that the project is completed and I am done with the whole process, I feel like the whole point of this course was not only learning OpenGL, but also showing us the possibilities that our degree holds. Just because you may not do graphic design, learning it may help you solve some issues with code later down the road because of what we learned in this class. Problem solving was also a huge part of this course and running into issues upon new issues and being able to push through them was a challenge but also a good way to learn that this is what we will go through in certain jobs. This course allowed me to showcase what I can do as a programmer but also show case that I can do graphic design even though I’m not perusing a career in it.