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Project Reflection

CS330

Computational Graphics

Professor Wabara

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This project was rough. Fun but rough. In my project I created a scene representing my four objects in OpenGL. My objects were a Nintendo switch, Nintendo switch dock, PokeBall, and tube of chapstick. I thought it would be easy to create things like cylinders and spheres but it was not easy and I don’t think I had enough time to figure it out. After this class, I do plan to continue working on this project to make it better. With time constraints, however, I’m going to have to submit subpar work.

Most of my development choices weren’t my own choices per se. I was sort of forced into them due to lack of time. Had I had my own choice, and I understood the material better from the start, I would have taken a more organized, object-oriented approach to writing my program. Right now, it’s very disorganized and you have to scroll through a lot of lines of code. If I were to start over, or even re-factor this code, I would probably put all of the shape meshes in a class like.. Shapes.cpp and shapes.h and I would have a much shorter “main” method because I would abstract a lot of the functions to make a more readable main function.

My function can be navigated using WASD to move the camera forward, backwards, left and right. You can use the mouse to control the point of focus. This is set up by using the Camera.h class given to us by learnopengl. We set the camera object as the “view” matrix in our MVP matrix so that we can control the view.

I’m not using many custom functions in my code to make it more modular or organized. I was down to the wire with just learning this material so I didn’t really have time to organize the code or come up with my own functions. In the future, however, I would, as I said earlier, make a class that contained all of the “shape” meshes. I believe that our tutorial code had good organization with their user-defined functions. So I don’t know if I would change much from what was given to us.

Overall, I did enjoy this project. It has given me a deeper understanding of how graphics work on computers, and how to write to our GPU. I do think that, in the future, I will want to work with graphics. As soon as I’m able to successfully create a sphere or a cylinder, I will be very proud of myself! I do hope to get the opportunity to work with graphics in my career, because, even though this was a VERY hard class, I had the most fun out of all of my classes so far during my Computer Science Degree. It also helped me learn to think more like a programmer. I had to solve a lot of problems without being able to just google them because of the specificity to my objects. So I had to do a lot of manual debugging that I normally wouldn’t do if I were creating something simpler. I think that having this skill is important to being a programmer and I’m glad that I was able to develop this skill a little bit more!