OpenGL: Color, Lights and Models Write-up

In this homework assignment, we learned about lighting, colors and how to use the ASSIMP library to import models using obj/fbx file. From light models like diffuse, specular, we can import the map types of the material to use in OpenGL.

For the model exporting in Unity, I used the provided obj exporter script to export the selected game object to obj file.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A wooden box with cross bars

Description automatically generated

Load a cylinder instead of cube

A blue background with green text

Description automatically generated

A barrel with a cross on it

Description automatically generated

Using a different texture

A screenshot of a computer screen

Description automatically generated

Compared to last project, the code files only have these 2 new added classes for meshes and model 

I believe one of the toughest challenge for this assignment was to implement, building and integrating the assimp library into the opengl project, as shared many of the classmates. At first I use “cmake ./cmakelist.txt” to build but it doesn’t work. I’m guessing that it uses the x64 architecture on my machine and build the assimp in x64, but the opengl project is x86 so it doesn’t work. After that, it says that the dll assimp library is missing even through I added to the lib directory and in the dependencies. After a bit of digging on stackoverflow and AI chat, I managed to solve the problem by adding the dll straight to the project root folder.