CS411 - Computer Graphics Report on Lab 0

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I. Introduction

This report presents the setup process and initial testing of an OpenGL environment for Lab 0 in CS411 - Computer Graphics. The objective of this lab is to establish a working OpenGL development environment and run a simple demo program to ensure the setup is correct.

For this lab, I used the OpenGL setup repository from TheCherno's GitHub [1]. This repository provides a structured OpenGL project setup, including:
- **GLFW** for window management.
- **GLAD** for OpenGL function loading.
- **ImGui** for UI rendering.
- **GLM** – for mathematical operations (vectors, matrices, transformations).

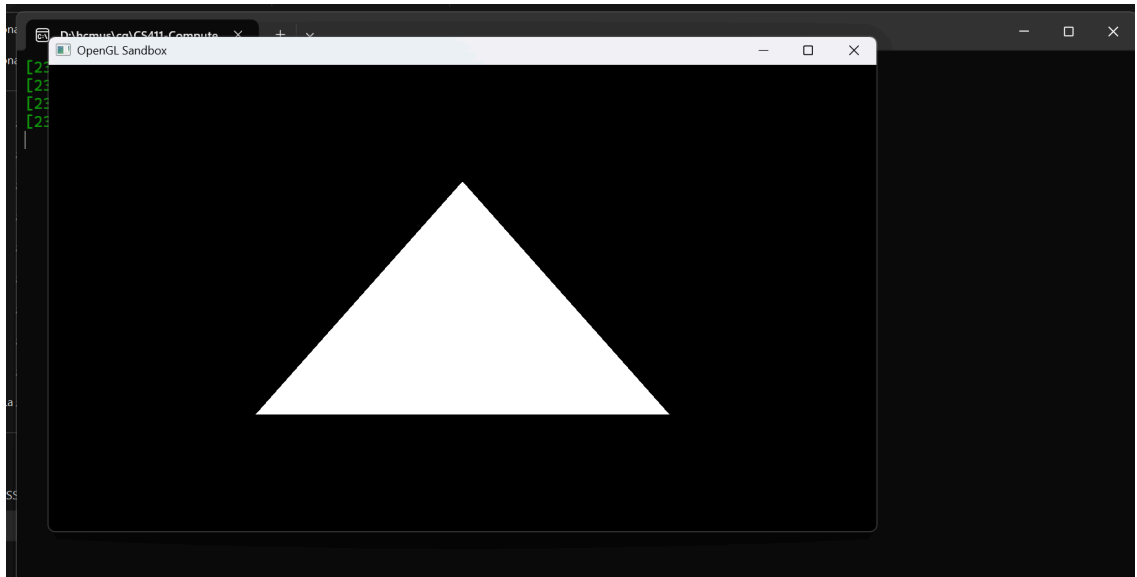To run the demo program for the first time, follow these steps:
- Run **Win-Premake.bat**
- Navigate to the **\scripts** directory of the project. This script helps set up the project files for Windows.
- Open **Lab0.sln** in Visual Studio

After running the batch file, open Lab0.sln found in the Source folder. This is the Visual Studio solution that contains the project. Build the project in Visual Studio using the **Release** or **Debug** configuration.

Once built, run the program to verify everything is working.

II. Demo Program

A simple triangle is drawn using the given functions by GLWF.

Reference

[1] OpenGL - https://github.com/TheCherno/OpenGL