COSC 4370 – Homework 4

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replit link: https://replit.com/@dankalhori/4370hw4#main.cpp

I Problem

The main assignment was to a 3D rotating cube with each side displayed numbers 1-6.

II Method

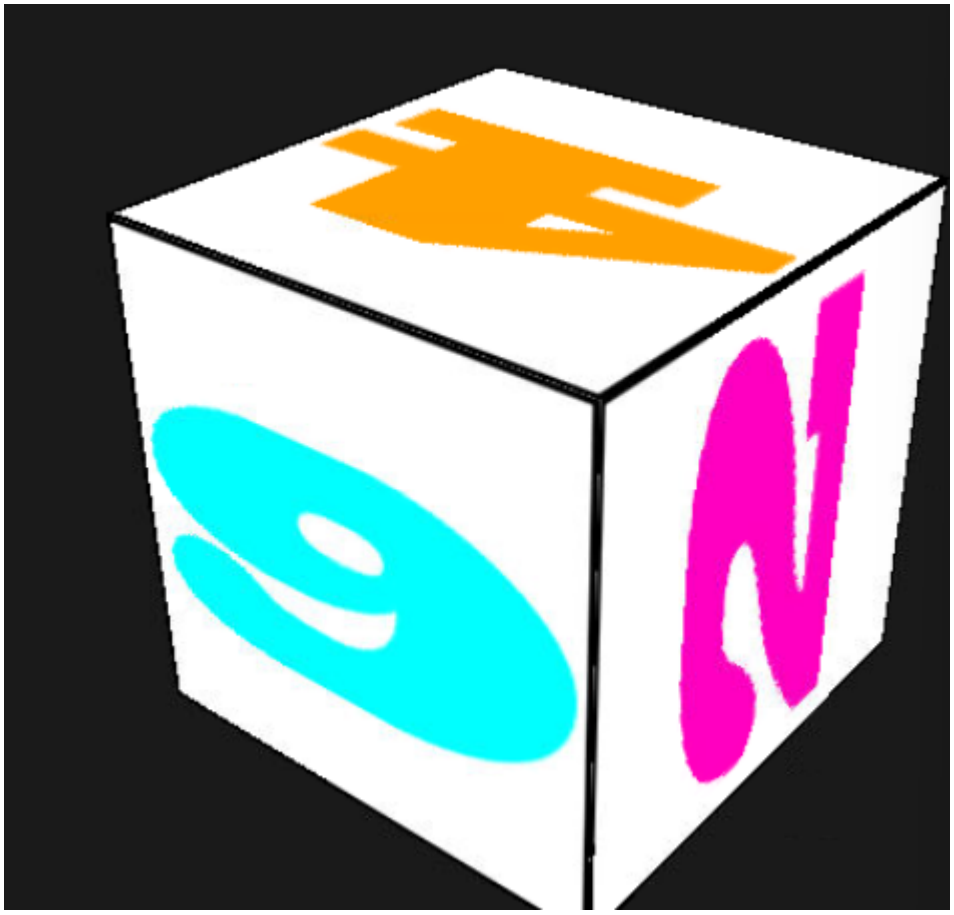
The method used was creating textures that held all six numbers and assigning them to a corresponding face on the rotating cube.

III Implementation

For the texture, an unfolded image of a cube numbered from 1 to six was used. Then UV coordinates to map the texture on the cube using OpenGL Buffers. During render, the textures were bound to the cube before it was drawn.

IV Results

The result was a cube that rotated that clearly shows all 6 sides being numbers correctly.



Reference:

https://learnopengl.com/Getting-started/Textures

https://teaching.csse.uwa.edu.au/units/CITS3003/lectures/019_texture_mapping_in_OpenGL.pdf