EWU CSCD445 Project

Conway games of life on a cubes surface

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Conway games of life on a cubes surface

Each face of a cube will have a 2d grid of Conway games of life and their edges will interact with the connected face's

Functions

- 1. OpenGL Cube
 - 1. If we have time also have input that can effect Conway games of life as it runs
- 2. CPU Conway games of life
 - 1. If we have time

- 3. CUDA Conway, games of life
 - 1. But include edges interacting
- 4. Convert each 2d grid of Conway games of life to image for the face on the cube

Min Goal

At min, a cube with each face running Conway games of life on CUDA that has the edges interact with some start state to see it run (Ex have some Glider's)

Report

How to run/use

Need the project executable and res folder to run

Take no arguments

The program will log to console and log files in logs folder using spdlog

A <u>imgui state</u> file will also be made to remember somethings about GUI last state (Ex where within the window GUI is at)

Sample run

BLANK

SpeedUp

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Video

TODO Video Link

Making the program

We only test on linux

For the program

Need OpenGL lib and dev

Need GLEW lib and dev

Need GLU lib and dev

Need GLM dev

Need git clone $\underline{sub\ modules}$

For Makefile

Need CMake

 $Need\ pandoc\ and\ wkhtmltopdf$

Need nvcc

Wants clang

May Need gcc

Notes

- OpenGL Code base off
- Graphics Interoperability
- OpenGL Interoperability