Jacob Daniels-Flechtner

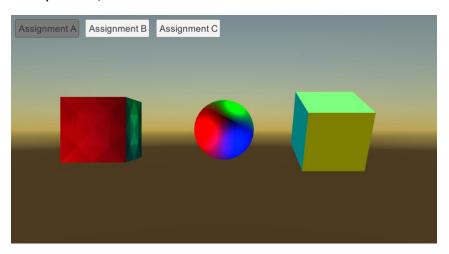
CMPM 163

April 26, 2019

Homework 1 ReadMe

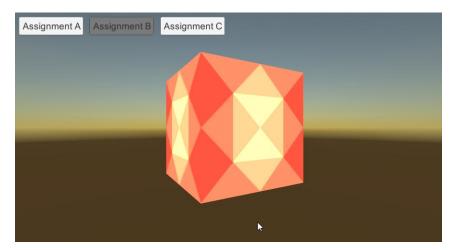
Part A

Leftmost block has a texture and is shaded. Middle block is a sphere using a phong shader. Rightmost block uses a vertex shader. There are 3 lights in the scene: red, green and blue. All objects move and some rotate. The phong shader sometimes seems to be rendering strangely on my screen, however.



Part B

A block with a shader that changes the intensity of its effect based on mouse position. A simple sharpen effect is used here.



Part C

An edited version of the game of life algorithm. Texels can be multicolored and are considered dead or alive based on a gradient rather than a binary value. The rules are edited so that nearby cells are checked to see if at least 1 cell is "more alive" than the root cell. Cells which pass this condition will become "more alive" (closer to Color.white,) while other cells will become "less alive" (closer to Color.black.) For some reason, this shader appears to blink rapidly when uploaded to Github Pages.

An early generation:



Many generations later:

