Coms 331   Assignment 8   Fall 2019

Introduction

This assignment will complete the Game of Life program. We will implement the remaining features, namely, drawing the game in the game rectangle, implementing the start/stop feature, and the toggling of the state of a cell in response to a mouse click in that cell.

Program Design

Create a `bool` variable that indicates whether the updating is continuous or only in response to key strokes. If the value `true` means continuous updates, then initialize the variable to `false`.

When the mouse is clicked, first determine the world coordinates of the mouse click (as discussed in detail in class). Then determine the row and column numbers of the cell in which the click occurred. If the click was outside the game, then it should be ignored.

Once you implement the drawing of the game, the other features (update, clear, randomize, and step) should work automatically, because they operate off the current state of the `Game` object (Assignments 6 and 7). Resizing the board should also work, although you may have to recompute `xmin`, `xmax`, `ymin`, `ymax` (using the same formulas) and then call `setProj()`, or else the vertex shader will continue to use the same projection matrix.

Due Date

Place the application program, the `Game` class files, and the two shader programs in a folder named `Assignment 8` and drop it in the dropbox by Friday, October 11.