ETGG4803	Lab1: **Cellular Automata**	Total Graded Points: **40**
Assigned: **8/22/2017**	Due: **10/2/2017** @ end of class	Possible Points: **55**

Project #1

1. (**15 points**) Develop a code-framework which is general enough to implement multiple simple cellular automata simulations (take Conway and Wire-world as two examples), including:
   a. File-save/load to save state
   b. Pause and step simulation
   c. Display graphically on-screen.
2. (**5 points**) Implement one of these simple CA's (you can do others besides Conway / Wire-world – just run it by Jason first)
3. (**5 points**) Implement a second simple CA (using the same framework)

Project #2

4. (**20 points**) Implement the reaction-diffusion simulation discussed in class with at least one of these seeding methods:
   a. Checkerboard
   b. Image-based
5. (**5 points**) Allow per-pixel based values for feed-rate, kill-rate, diffA, and / or diffB using an image.
6. (**5 points**) *Elegantly* expand your framework from part I to accommodate this type of cellular-automata-like simulation.