# Systems and Unit Test Report

Product Name: Cellular Automata Simulator

**Team Name:** The Cellulites **Date:** December 2, 2018

# System Test - User Stories

## **Sprint 1:**

- **us 1.** As a team, we would like to decide on what technologies we will be using for the project.
- us 2. As a developer, I need to create the design of the system that we will be implementing.
- us 3. As the product owner, I want to see the site up with something of substance on it.
- **us 4.** As a student, I want to have a list of cellular automatas that I can choose to simulate and explore some well known cellular automatas that already exist.

## Sprint 2:

- **us 1.** As a developer, I need to create the design of the system that we will be implementing.
- us 2. As the product owner, I want to see the site up with something of substance on it.
  - **us 3.** As a student, I want to have a list of cellular automatas that I can choose to simulate and explore some well known cellular automatas that already exist.
- **us 4.** As an experimental individual interested in trying out my own ideas for cellular automata, I want to be able to write my own ruleset to observe and experiment with the emergent behavior of cellular automata.

## **Sprint 3:**

- us 1. <s1 us4>
- us 2. <s2 us4>
- **us 3.** As a power user, I would like to have some file directory system which i can use to switch between different rulesets to examine, compare with, and work on them simultaneously.
- **us 4.** As an artist, I need to be able to save and load rulesets/color schemes so that I can work on designing a ruleset which fits my creative vision across different sessions.
- **us 5.** As a new user, I need a nice and easy way to learn how to use the site(a guided tutorial) so that I can simulate my own ideas for a ruleset and become educated on the cellular automata.

#### Sprint 4:

- **us 1.** <s3 us3>
- **us 2.** <s3 us5>
- **us 3.** As a team whose product deadline is approaching, we should polish up the website and make sure to tie any loose ends.

# System Test - Scenarios

# Sprint 1: User Story 4(only applicable one to scenarios)

- 1. Enter website
- 2. Click "Parameters" tab
- 3. Click both "Set Parameters" and "Set Delay" button(there are default inputs)
- 4. Click "Load/Store Code" tab
- 5. Click on Drop-down menu
- 6. Select any from list
- 7. Click the "Compile All" button below green container
- 8. Click Start/Reset

# Sprint 2: User Story 4

- 1. Enter website
- 2. Click "Parameters" tab
- 3. Click both "Set Parameters" and "Set Delay" button
- 4. Click "Draw Func" tab
- 5. Create a mapping(described in manual), have 0 and 1 be the states, and any color for them is fine
- 6. Click "Init Func" tab
- 7. Type in(sets everything in grid to state 0)
  - a. curr.setCurrentState(0,0);
  - b. curr.setFutureState(0,0);
- 8. Click "Update Func"
- 9. Write an update function of any sort you wish. Use the manual to understand what are the expected outputs.
- 10. Click "Info" tab
- 11. Click "Start" button, then "Stop" shortly after
- 12. Use the "State" field, and the mouse cursor to change the states of the cells to 0's and 1's.
- 13. Click "Start" button again
- 14. For all of funcs, you can also just copy paste from the other presets, and just run them

#### Sprint 3:

- 1. Make a CA(or just copy-paste from a preset)
- 2. Click "Load/Store Code" tab
- 3. Enter a filename
- 4. Click "Save Text to File"
- 5. Save the file

# ... as for loading

1. Needs some work, no way to specify which function to put the file text in

### Sprint 4:

-None applicable