**Progress Report**

**- Increment 3 -**

**Group # Germ Theory**

# Team Members

Adam Pelah – ap17h – adampelah. Hector Rizo – hmr17c – tripplerizz. Andrew Koelsch

**Project Title and Description**

Game of Life – A semi-realistic automata / simulator of the effect of a virus on a population over time. People are represented by a ‘cell’, and cells are placed in a grid, with each grid space allowing one cell. Basic rules govern whether each cell will survive onto the next generation (each iteration). These rules revolve around a cell’s interaction with its neighbors, such as number of neighbors, proximity to an virus-infected cell, as well as non-neighbor factors such as age and time infected.

1. **Accomplishments and overall project status during this increment**

With this being the final increment, the main goal would have been to touch everything up and add the finishing touches. However, due to time constraints, we found that this iteration was about making a final push to get a decent product out there. We optimized the visualization, and created a simple GUI for the project, but it continues to be difficult considering our computing power.

1. **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

We ran out of time in the end. Adam was working on trying to get the code running on AWS but the visualization was not working on his computer in the end. The algorithm isn’t optimal, we save the animation as a video and then play the simulation, otherwise the simulation would ‘look’ slow and janky, due to our computing power. Because of this, the simulation can take a long time to save depending on how many days the user chooses to run it for. Therefore, our aim of semi-simulating realism was not reached to the full extent. While adding more people to a group may not directly add power of the project, we certainly felt the fact we only had 2-3 people working on this project at a given time, and the end result suffered because of it.

1. **Team Member Contribution for this increment**

*Please list each individual member and their contributions to* ***each of the deliverables in this increment*** *(be as detailed as possible). In other words, describe the contribution of each team member to:*

* 1. Adam wrote the progress report.
  2. Hector did the two diagram sections for the RD report, while Adam wrote the rest of the sections.
  3. Adam wrote the IT report.
  4. Adam optimized the visualization of the grid (saving of animation as video), while Hector wrote the code to grab real life data. Andrew created the GUI for the project.
  5. Hector and Adam jointly worked on the video presentation.

1. **Plans for the next increment**

N/A

1. **Link to video**