Jessie Potter and Hwei-Shin Harriman

MP4 Proposal

- What is the main idea of your project? What topics will you explore and what will you generate? What is your minimum viable product? What is a stretch goal?

We would like to pursue a project that involves computer-generated, interactive art. We would like to start with an MVP similar to live wallpapers found on Android phones: simple, passive animations and responsiveness to taps/clicks from a user that trigger small animations in the environment. To scale up, we would add different objects/animations based on the location of the click. Our stretch goal is to create a scene where the computer prompts the user to find specific objects. Once the user finds all of the objects the game ends.

- What are your learning goals for this project (for each member)?

Jessie: I would definitely like to learn some more basic coding skills, and have some practice accessing libraries that I haven't interacted with commonly already (like math and counter). Computing the random images in Mini-Project 2 had been an interesting experience, but I do think I would like to have the experience of intentionally creating images, in addition to making them interactive. It would also be beneficial for me to have some practice coding with someone else, because in ModSim I actually never really got that experience. (For the most part the other person would be much more experienced and do almost all of the coding while I ended up working more on the presentations).

Hwei-Shin: I would like to get more practice working with classes. I would also like to learn about the various packages that are commonly used in Python to create user-interactive experiences/games. I would also like to gain more experience with pair programming, since I am currently very used to working/developing my code alone, and would like to practice communicating the code that I have in my head to my partner.

- What libraries are you planning to use? (if you don't know enough yet, please outline how you will decide this question during the beginning phase of the project).

We anticipate that we will be using Pygame quite a bit, along with the standard libraries like math, random, etc. We might find that there are aspects of our code that require additional libraries, so the list might be appended as we work through the coding process.

- What do you plan to accomplish by the mid-project check-in? (See below for some generic goals; edit to suit your particular project)

We would like to get the scanning motion working. We would also like to start the functions that allow the computer to recognize clicks from the user and react by creating an object/animation (though we don't necessarily need to have this part entirely working by the mid-project check-in).

- What do you view as the biggest risks to you being successful on this project?

We confidently expect to have our MVP done by the end of this project, however, due to time and the desire to ensure that all members of the team are confident in their understanding/command of the code, we think it might be quite ambitious to meet our stretch goals.