Meta Video Games Final Project Proposal

Sophie, Sabrina, Cynthia

The main idea of the project is to create a certain type of video game that involves any genre of game but with an added twist. For example, while playing the video game, the user may be led to expect certain outcomes or go in one direction when in actuality, the result is completely different and takes the user by surprise. We will be further exploring how to use modules, classes, video game making, pygame visualizations, and user interaction and input. The minimum viable product is to create a simple game with few user input to generate a surprise element. The stretch goal would be to create a full-fledged game that is pleasant to look at, free of bugs, and challenging to play.

Sabrina's learning goal - To explore the dynamics of programming on a team of people rather than just a partner. I would also like to better understand taking in user input and making changes based on the user. I would also like to learn more about what goes into making a video game/keeping a person playing.

Cynthia's learning goal - To improve in Python and understand how to effectively use classes and pygame to create a working computer game. I would like to fully understand the basic aspects of how to write a video game and how the various parts work with one another.

Sophie's learning goal - To explore what it means to build a game and improve my ability to create a program that interacts with the user. I also want to get better at integrating graphics with my programs.

For the implementation plan, we are planning to use pygame for most of what we want to do, looking for more libraries/resources as they are needed.

Project Schedule:

Week 1: 10/28

1. Finalize project proposal and direction moving forward in terms of communication, meeting times, and how to divide up project work
2. Semi-finalized project architecture - talk about different modules and how all the parts are going to work with one another
3. Begin discussing format, plot, and visualizations of game itself

Week 2: 11/04

1. Finalize ideas from week 1
2. Start creating the classes/functions outlined
3. Begin working on integration of the classes/functions

Week 3: 11/11

1. Have MVP version 1 completed: user can go through the game from beginning to end
    a. Doesn't have all the details of the game, just a clear start to finish and basic format
2. Reconnect in terms of project goals and program structure to discuss anything that needs to be changed/revised

Week 4&5 (Thanksgiving break) : 11/18

1. Start on the website MVP
2. Expand the MVP from week 3 to further align with stretch goals
3. Incorporate visualizations
4. Debug game

Week 6: 12/02

1. Final touches/focus on visuals
2. Create presentation
3. Finalize website

In terms of team collaboration, we plan to attempt to pair program in rotations when possible, but also anticipate that splitting up certain aspects of the work and assigning it to specific people will be more efficient for smaller things. We have also scheduled weekly meetings twice a week to ensure that everyone is on the same page and address any issues that may have come up.

One of the biggest risks with this project is that we will concentrate more on the design aspects of the game rather than the software skills behind it. We hope to mitigate this risk by keeping the core of the game design interesting but simple, controlling the amount of time we dedicate to design. We also hope to outline the programming aspects needed to create the game early on and focus on those solid first, adding more to the narrative afterwards.

It would be helpful to learn more about graphics and making programs appear prettier to the user, along with any basic video game theory. We learnt about copying existing video games in class but it would be interesting/helpful to learn about how to come up with ideas and implement and original video game.