Katie and Shreya
Software Design
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Mini-Project 3 Proposal

Our main idea is to create an interactive art platform, where the user can create by holding their mouse and moving their cursor around. We are borrowing inspiration from interactive art websites like Silk and bomomo. We already have almost a minimum viable product in that we have a program which draws circles of varying sizes and colors wherever the user clicks on the screen. Thus, our next step will be to further enhance this and add increased options for interactivity:

- Allowing the user to select colors (or to select a random color mode) using the keyboard input
- Allowing the user to select a specific shape to be drawn (rather than just circles)
- Changing how the shapes are drawn/what happens when the user clicks & holds (the shapes might grow bigger, or they might follow the mouse)
- Adding an element of randomness in order to change the angles of lines drawn or the thicknesses of the lines, etc.

We also want to build a user interface, with different screens, like a drawing screen and a tutorial screen and maybe a button to save your image. The main library that we are going to use is pygame.

By the mid project check-in, we hope to accomplish at least two of the bullet pointed ideas like to eventually add. We think that the most feasible ideas we suggested are likely allowing the user to select the color mode and the shape mode. We would also like to be able to save an image of the user-generated drawing.

One of the biggests risks we foresee to completing this project is how busy we both are. We are concerned about having enough time to implement all the features we would like to implement. One way we can mitigate this risk is by breaking down each feature into manageable chunks and trying to complete one chunk every few days or so, so that we are constantly getting progress done, but not having to do too much work at once, so we have time to devote to other tasks/classes/etc.

LEARNING GOALS:
Katie: I would like to better learn how to work in teams on a software project. I would also like to get more comfortable using classes, inheritance, and event driven programming.
Shreya: My learning goals for this project are to learn how to design a program effectively with another person, learn how to scaffold a program effectively so that each step builds upon the previous step, and learn about different libraries/tools within Python that I am not already familiar with.