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253 Final Project Proposal

For my program I would like to dicuss the topic of building self based off of the people you meet throughout your life. As new people enter and old people exit my life I have been realizing the infinite amount of ways people change me and the way I view the world. I want to express the idea that a little piece of everyone I have ever loved will live inside of me forever. My idea is to have one mouse controlled ellipse character that either stays on the mouse or trails a bit behind (the idea of a less precise form of movement lends itself well to the unpredicibility of paths in life). There will also be randomly generated stranger ellipses floating around the screen which will have a random color assigned to them. The stranger ellipses will be able to leave the scope of the screen (after which they will be deleted from the array) while the player will be constrained to the screen width and height. The ability for certain circles to leave the players scope of view is important to showing the limits of one's own experience. The stranger characters will also have random speeds and directions.

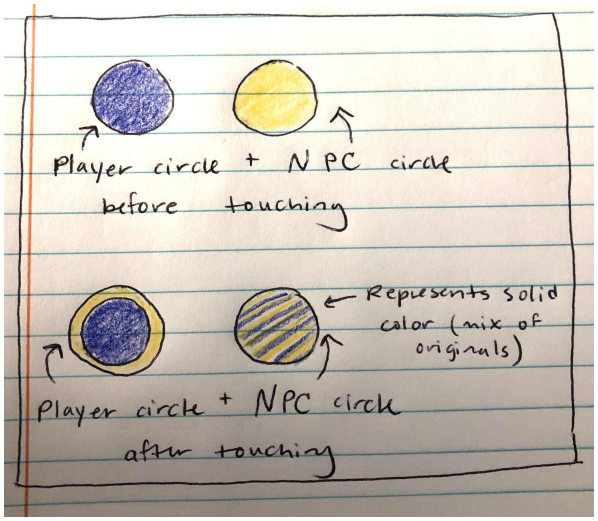
The main function of the game is that when the player circle (which starts off small and with a randomly generated base color) touches an stranger circle, a new circle of the same color as the stranger circle will generate as a ring around the original player circle. I am also playing with the idea of the stranger's color being combined with the player's color to show your effect on other people as well. The player circle will have the ability to touch many stranger character circles and gain many rings of color. It is up to the user which strangers are touched so therefore how their circle looks at the end is up to the user. The user will be able to end the program whenever they have finished creating their circle (I am not set on this ending condition since you can't really choose when you die) by moving their circle character through a door on the side of

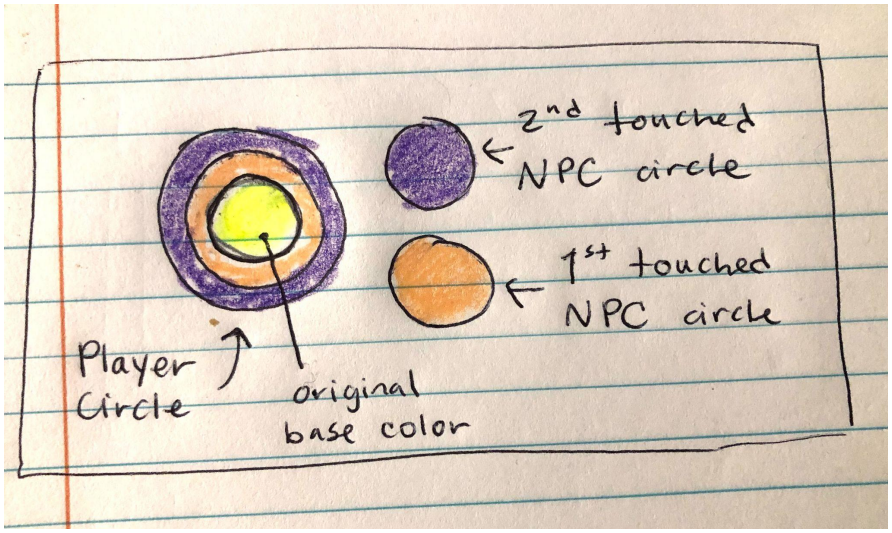
the screen. The final screen will display the final circle configuration along with a message and a button to play again.

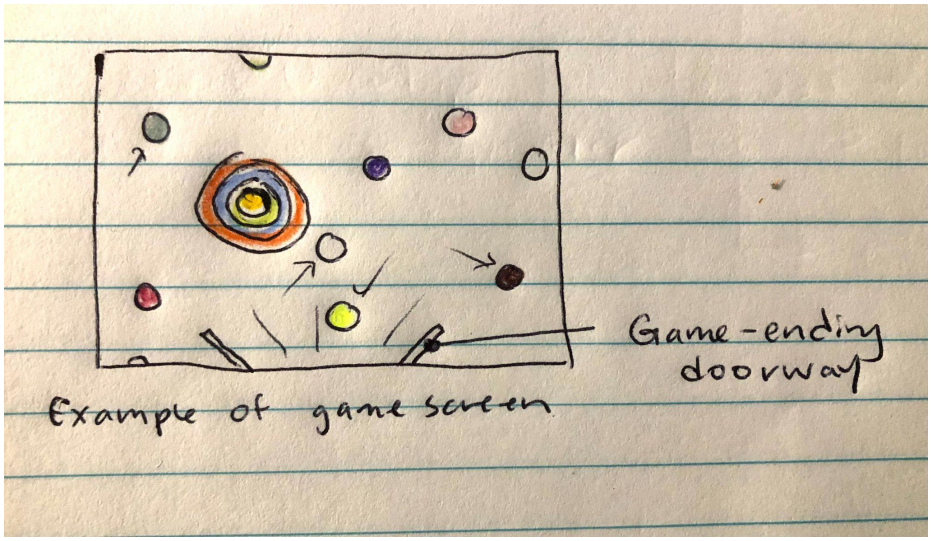
The main technical challenge I am going to face is creating a loop that can generate a circle, randomize the 3 RGB inputs, store those inputs, display them in the specific circle, and transmit the inputs to another circle's RGB slots. I could do this by using nested arrays (Mathilde just showed me those today so I will be experimenting with them in the next iteration). Potentially I would be creating two arrays (one which stored the ellipse and the other that stored the three RGB values) and could use the indexOf function to find the index of the stranger circle that I touched and match it to the index number of the color I need. And using a for loop I could do this for R, G, and B values. This, however, would end up being a challenge once I need to start deleting and creating new circles in the stranger array. I could delete circles using the splice from array method after the radius of the circle is outside the height and width of the canvas. I would need to also wipe the RGB data from its array by matching the index numbers again.

In order to draw my circles under the preexisting circles I am thinking I will create an array that contains the self versions as they are generated and will display them in reverse order (effectively drawing the last circle first so it will be on the bottom). Also mixing the stranger's color with the player's originally generated circle color could be done by writing something like: stranger.R/2 + Player.R/2 = stranger.R for each other color values.

In my prototype I managed to make it so when the player circle touches the stranger circles one new self iteration is added to an array and if the circle has been touched before it cannot add another self to the array. I need to play around with the newSelf array more to figure out how to display the array in reverse order and keep it running.


Player circle + NPC circle
before touching
Represents solid color (mix of originals)
Player circle + NPC circle
after touching


2nd touched NPC circle
1st touched NPC circle
Player Circle
original base color


Game-ending doorway
Example of game screen