

Proposal

For this project, I would like to create an interactive, abstract artwork. I want to give it a magical and hypnotizing aspect by using smooth, continuous movements of shapes and lines. I want the piece to evolve and slowly transform as time passes. I also want the viewer to be able to experiment with the visual by pressing keys and speak into a microphone. Something that I often work with and would like to also do in this project is bright colors on a dark background and using a trail effect (making the background slightly transparent gives that effect).

For this project, I want to try making shapes that do not have angles and only one curvy continuous line as its contour. I will have to look into `curveVertex`, `bezierVertex`, and `quadraticVertex` to see how they work and how I can move and distort a shape created by them. I am also very interested in using noise to create smooth motions both in the overall movement of the shape and its distortion.

For the sound part of the project, I would like each shape to have a sound associated with that would change depending on the movements of the shape. I would also like to add some audio input from the user to modify an aspect of the piece. For this, I have 2 ideas that I like, the first one is to modify the colors of the shapes and line. I can start with the shapes being more blue and the lines more red and the red (or green) value for the shapes and green (or blue) value for the lines would augment with the sound input to change the colors of the shapes and lines. The second idea is to modify the size of the shapes with the sound input.

In terms of interactivity through the keyboard, I am thinking of having the user modify the piece by pressing different keys of the keyboard. In this piece, I want the user to dabble without necessarily knowing what they are doing. For example, the “obvious” or most common use of the up arrow is to move something upward, same for the different arrows, and I want to take away the idea of a predetermined use for a certain key (although they will end up having their own meaning in the piece itself).

Some potential changes that would happen with key pressed would be the colors of the lines and shapes to change (more like a drastic change than the temporary change from the audio input), the acceleration and deceleration of the motion, the thickness of the strokes, the number of shapes/lines, the size of the shapes, how shapes interact with each other (if I manage to understand how to do it) ...

In terms of technical challenges, I think the hardest part will be to understand how to create one class for all the shape because they might all have a different number of points (each needing x and y coordinates) and learn how to move them. I think that this idea of many different points for each shape will be a struggle for the interactions and the code in general, but I am also very curious to explore this because it is something I have never done before. Another thing I might have some trouble with is the sound aspect because it is not something I often work with.



