

Jeffery Zhou

Instructor Adam Tindale

SCTM 2005

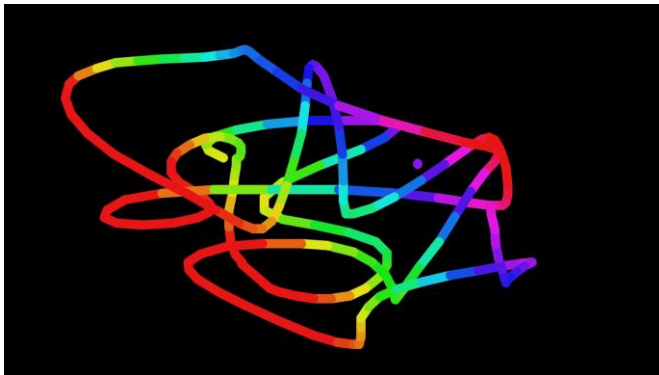
March 18, 2025

### SCTM – 2005 Final Project Proposal

In this final coding project, I wanted to propose an exploration into more advanced forms of previous assignments. Based on further research and talks, the core idea that I would like to create would be an undo function for paint tool P5 drawing animations. Using an array function, I would tie all the circles painted with the “line()” method as a form of temporary data, which can then be “popped()” out of the array, and subsequently “deleted” off the canvas, mimicking the appearance of an undo feature.

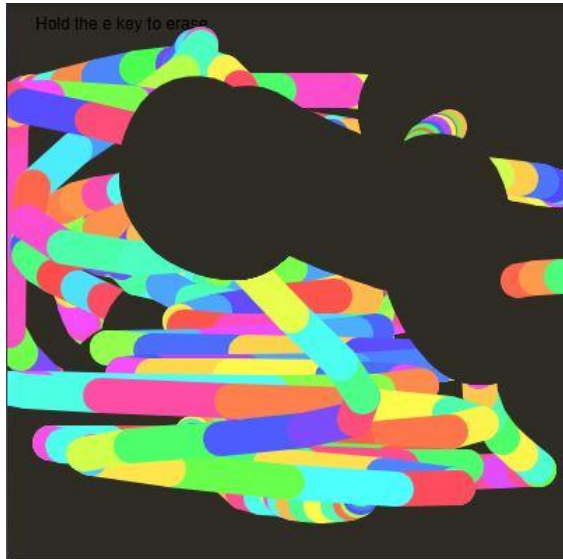
Of the three pieces of inspiration for this project, the first would be Professor Tindale, who through our talks and review of the projects done throughout the course, has recommended me a method in which I could remove the painting that was done on the canvas. This was then followed with guidance on methods in which this could be done, such as arrays, and for that I would like to give a huge thank you to.

Following that, the drawing lines animation example on the P5 website has always struck me, I feel particularly due to my background as an artist. The ability to code the ability to draw on a canvas through P5 stood out immediately when looking through this vast resource, and I had already thought of extra tools that I felt were possible to make as an additional feature when experimenting. Furthermore, this project holds a solid foundation that I have already familiarized myself with in previous classes, making the undo function more feasible to me.



Drawing Lines by p5.js Contributors, <https://p5js.org/examples/animation-and-variables-drawing-lines/>

The second project that I connected with was Drawing App with Erase, an intuitive project exploring a possible feature to expand upon the original paint animation. This one was a great help to me in my own projects, and furthermore, provided me with insight into how an alternative way of clearing the canvas could work.



Drawing App with Erase by Aferriss, <https://editor.p5js.org/aferriss/sketches/SJ2UFxy5M>

The Array methods will be an integral part of this assignment, a requirement in order to store the vast quantities of data points that composes the line() methods to paint on the P5 Canvas. Using the P5 reference found on <https://p5js.org/reference/p5/Array/>, I would track for anytime paint() is called in the program and add itself and mouse position data into an array.

Subsequently, after tracking all these painted points, I would make use of JavaScript's Array pop() method referenced on [https://www.w3schools.com/jsref/jsref\\_pop.asp](https://www.w3schools.com/jsref/jsref_pop.asp), in order to identify the latest data entry that was recorded on the array, and using a event listener such as a button mousepressed or keypressed function, remove it from the array, and consequently “undo” or delete the point from the canvas.

Ultimately, this project will be a complex undertaking, however, through this proposal, I believe that I have laid the groundwork for a successful assignment submission. I have identified the key concepts that will need to be established for this project to work, with a baseline canvas that can be drawn on, and then expanded on with a new feature using past knowledge, rooted in experience with previous assignments and further experimentation with arrays and coding in general.