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2D Graphic Demo Documentation

CSCI 43700

Running the Program

<https://cs.iupui.edu/~callandi/csci437/graphics/>

My drawing program can be run on any of the most-modern browsers by going to the website linked above. This program works best with a mouse or a trackpad.

Project Overview

My graphics demo is a simple drawing program made using HTML, JavaScript, and CSS for the web. Upon arriving at the website, users are able to create and save drawings using the canvas provided for them. The canvas can change the color of its pen, shapes, background, and texts. There are three main tool bars that the user has access to, the top most being the Paints section. The Color input changes the color for the Pen, Line, Rectangle, and Circle tools. The Background Color input changes the color of the background. The Text Color input changes the color of the user’s inputted text.

In the Tools section, the user can choose the size of the Pen and Line strokes. While using the Line tool, the program takes a starting input when the user presses down on the mouse, and draws a line to wherever they let go. The Rectangle tool is similar, but it draws a rectangle to the ending point instead of a straight line. The Circle tool is similar to the Pen tool, but it gives a more spotted stroke when brushing quickly. The Image button displays an image that I drew using the drawing program. It is best viewed when first arriving on the page.

The Text Options section allows users to input a text size and their own string of text. When the user selects the Text radio in the Tools section. The user can click anywhere on the canvas to display their text that they typed into the Your Text input of the Text Options section.

Users can even save their drawings by right clicking on the canvas and clicking Save Image As from the dropdown menu. If users want to create a brand new drawing, the Clear button clears the entire canvas.

Reflection

I actually had a lot of fun writing and playing with this program. It was very interesting seeing how much extra creative drawing capability I could add when creating a new tool or feature. The image that I created was made entirely based off of all of the tools that I made, which I think is pretty neat. I originally was having trouble deciding which language I wanted to use for this project, but I ultimately decided on relying on JavaScript and HTML because it would be easy to share this program with my friends and family when I was finished with it. There is clearly a lot you can do to create graphics using the canvas tag, and I found this to be a very fun learning exercise that I am proud to show off.