Introduction to Programming II Project Log

Project title:	DrawJS – Drawing App
Topic:	Topic 7 Extending the apps, part 3

What progress have you made this topic?

This topic, I worked on the scissor tool, brush size selections and an eraser tool..
For the scissor tool:
- Implemented the icon and name needed for the toolbox
- Implemented the selectMode, a selectedArea class, a selectedPixels variable as shown in the lectures.
- Implemented populateOptions
- Implemented buttons, mouse dragging as well as mousePressed functions with the help of helper functions to run them as p5js functions.

For brushSize selections:
- Since this is an enhancement to lineToTool and freehand tool, I worked on implementing sliders for these tools. I also created helper functions to be able to implement these sliders easily when navigating different pages as well as a global boolean brushController.
- Since we need to use strokeWeight() function and in the future I will add more brush enhancements such as brush opacity, and will need to work with alpha values, as well as stroke() function, I implemented a mapColorToRGB in the helper functions to map text color values to RGB.
- I implemented the sliders as well as brushSize variable to lineToTool and freeHand tool and it works to make these tools bigger in their sizes.

For the eraser tool:
- Implemented the icon and name needed for the toolbox.
- Added eraser modes as a variable, which is either square or round and an eraserRadius variable so that user can choose how effective their eraser to be.
- Since I want a background selection in the future and I want the eraser to always color the canvas to the supposed background, I implemented the variables for this.
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What problems have you faced and were you able to solve them?

- I encountered some problems when implementing brushSize. It required a lot of testing for it to work completely. Mainly the problem was with HTML elements in the options div. I needed to make sure I implemented the variables as globals so that I can keep track of these sliders.
- Scissors tool did not work. I was not able to solve this issue. I followed the lecture example, as well as trying out the lecture example. Currently, lecture example and the example file given in this topic **does not work. I implemented a very similar workflow**, however, it does not work as well as the lecturer example. I will try to find a way to implement this tool in a different way. If I can not, I may have to find another extension to do.

- I needed to find out how to make the eraser tool work but I quickly realized just coloring the pixel in the same color as the background is a fake but solid way to make this tool work.

What are you planning to do over the next few weeks?

- I am planning to pursue other ways to make the scissor tool work. If not, I will give up this tool.
- I will start the bucket tool implementation as well as backgroundColor selection for drawing the whole canvas to a certain color.
- I will start spray effects.
- I will work on the brush opacity choices.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

Yes, but I will need to make modifications to my final plan if I am not able to solve the problem with scisssorTool.