Introduction to Programming II Project Log

Project title:	Draw JS – Drawing App
Topic:	Topic 8 - Callbacks

What progress have you made this topic?

Background Color:

- In addition to the mentioned tools, I also implemented background color customization. A button labeled "Set Background Color" was added, which allows users to easily change the canvas background color. When the button is clicked, the canvas background is set to the current selected color, ensuring a seamless and user-friendly experience.

Bucket Tool:

- For the bucket tool, I made several key implementations. I created an icon and assigned a name for this tool within the toolbox. The bucket tool serves as a flood fill tool, which allows users to click on the canvas to fill areas with the currently selected color. When the mouse is pressed on the canvas, the tool checks if the mouse press occurred within the canvas boundaries and performs a flood fill operation accordingly. This operation recursively fills an area with the replacement color, ensuring that the user's desired changes are applied consistently.

Spray Customization:

- Regarding the spray customization feature, I extended the SprayCanTool. Users can:
- adjust the number of points and the spread of the spray,
- Two spray modes, "square" and "round," are available, allowing users to switch between different spray patterns. While using the "square" mode, the tool generates a square-shaped spray pattern when the mouse is pressed, and in the "round" mode, it simulates a round-shaped spray pattern
- I also kept the brush controllers for the size and plan to implement brushOpacity to this tool as well.

Scissor Tool:

- From previous log, I did not manage to solve the issue with my tool. I will keep my code but remove the functionality to show the work I did. I will try to work towards another extension to replace scissor tool and possibly bucket tool.

What problems have you faced and were you able to solve them?

- Background color functionality broke eraser tool multiple times, I needed some global variables to keep track of the current background color.
- Bucket tool does not work currently. I tried every possible solution with set() and get() functions. This does not work. In its current stage of the code, I am hitting a max stack size error which I can not go past. I will try to research other solutions. If not, I will try to find another extension to do.
- I needed a simple algorithm to solve how to do square spray mode. I solved this easily.

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

Work on a new tool called TextTool where the user will be able to write text, delete it, change its size and color. I will also add brush opacity.
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?
I may not have time for some final polish when doing the project. I was planning on changing my UI as well as some styling. I do not think I will have time for this. I will have enough time for my functionality.