

Introduction to Programming II

Project Log

Project title:

Drawing App

Topic:

Week 14 : FreeHand/Line tool updates, Update Eraser tool, start skeleton of Scissor/text/bucket fill tools

What progress have you made this topic?

I made good progress on this topic I did some research on some bucket fill tools as well as updated the FreeHand/Line tools to allow users to set a stroke size. The Eraser tool also now draws a white circle and calls the erase() function from the P5.js library. It detects when it is enabled or not to overwrite the colour palette colour. I skipped over the Scissor tool as I did not like that it pasted and image of the selection. Instead doing some research I found the copy() function in the P5 library and adapted this for my drawing. I added this as cloneTool and is my version of a “copy paste”.

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

The bucket fill tool is proving hard to implement. Looking at the P5, Library I am basing my cope off of the get() function as well as set() functions. I am not getting it to work however. As it stands I have not found a good fix to get this tool working. Also, the Text tool requires a much deeper knowledge of HTML, CSS to implement. I have looked at a few places and not found anything useful in a P5.js drawing app environment. I can make the text box but not 100% sure how to place the text at mouseX/Y

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

I will look at adding some more tools as the Text tool requires more knowledge in HTML/CSS than I have and with other commitments figuring this out might slow down other progress. I also will research some more approaches to bucket tools

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

At the moment I am still on track. I have not finished the bucketfill but implementing some of the improvements to the existing tools and having the clone tool in place is good.

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Topic: Week 16: Update circle and custom shape tools, Start start on minor Aesthetic updates to HTML/Divs

What progress have you made this topic?

Circle tool now has a selection of Circle or Rectangle and you can also set the option to fill() or noFill() based on the selected colour. I also used w3 schools to get some more knowledge on updating CSS sliders and buttons. My app has a custom colour, sliders, buttons withs hover over effects and the side bar tools has a over over colour.

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

I am still having issues with the Bucket fill tool...I have no quite figured out how to compare the pixels with the new colour. I have seen some Stack overflow articles which I will leverage.

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

I need to finish bucket fill tool, and then update the Stamp tools to help users see how much rotation they are using.

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

Besides the bucket fill tool yes. This is on schedule .

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Topic: Week 18: Work on bucket fill and stamp tool updates, complete Scissor and text tools. Start Beta testing app.

What progress have you made this topic?

The bucket fill tool is not working as I can compare the pixels and then update them. Also as previously mentioned the Scissor tool was replaced in my tool with the clone tool. I have added the functionality to select the clone tool size using a slider so that copying larger images is more convenient. I have also completed the stamp tool but adding a slider that updates a text box with the current value, You can also manually set the rotation in the text block which sets the slider. I also added 2 other tools, highlighter and Kaleidoscop tools. Kaleidoscope I got from P5 reference and adapted whilst highlighter I had to update the colour palette array to set a value that has an opacity value to make the highlighter look more realistic. So, the colour palette tool now has colours for Tools, hightlighter and the flood fill tool. Depending on which is selected.

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

The bucket fill tool uses the get() method and what I have found is that it is very slow. I have done some research online and seems some other people with slow tools. There is a Stack overflow article to show that there is a faster method which I tried in my code and could not get it to work. I know other students have a floodFill that was faster as well however, I updated my colour palette quite a bit to get this working and have no time to backtrack out of this. So, the fill works but it is quite slow depending on the size of the object. Also with the Stamp tool I wanted an overlay image which showed the image orientation however, this was cumbersome to implement and going with the method of used of slider and textbox had a better overall feel and functionality to use a specific value. Lastly, Setting the colour palette was also a time consuming process as this needed some additional functions in the toolbox as well which tool time to figure out. Over all I go the fixes I wanted but this process ate time from previous weeks significantly.

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

I Need to do some final touches to my apps and make sure that all comments are in place and neatened up so that I can beta test,

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

Yes, I am on track. It is a pity that the bucketFill tool is so slow though. But leaving that as it is I will be on time.

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Topic: Week 20 : All tools should be updated and working without bugs. final state is to complete the tool aesthetics and final polish (custom images etc).

What progress have you made this topic?

All tools have been updated now and work as expected. I can change between these apps and my Wife has tested the application to draw a simple image. I have also made a few tweaks to the fields and tools look to make them look as I want to (at least with what I am capable of in CSS/HTML). I have also created custom tool images and stamps. I played around with transparent background tool images but it was hard to find a colour that matched them all so I used white backgrounds. I also changed some of the CSS like side bar overflow-y : Auto so that there is no scroll bar when in full screen. This gives the tool a neater look.

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

During Beta testing I found that when I save an image after using the eraser tool there were black marks on the image when on the canvas in the tool there was nothing. I found that the erase() function was causing this and instead I updated the tool to use a white ellipse instead. This fixed that issue and saving the image no longer produces this.

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

This is complete ready to submit

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

Yes