

Drawing App

As part of our final grade this semester for the Computing Project 1 module we were given the assignment of adding extra features to one of the case studies we had already attempted earlier on in the semester year and I decided to add on to the “drawing app” which was the first case study. The reason I wanted to enhance this case study over the rest is because I believed that working on this would be a challenge for me and I would find it difficult to add code to this rather than the other case studies.

Extra Features Considered

I considered many different extra features to add to this app and this included the following:

- Adding a text tool - by implementing this, users will be able to write text onto their drawing app
- Adding shape tools - by implementing this tool, users will be able to add different types of shapes to their drawing e.g. triangle and this also has the ability to change its size and colour
- Add extra colours - I want to add extra colours to the colour palette because I am of the opinion that there isn't a wide choice of colours available to the user wish they want to use more
- Adding a rainbow pen tool - I have considered to add this because I feel like this tool is a complex feature which will push my ability in coding and also be great use to the user when it comes to their drawing
- Refining the design of the application - I want to refine the design of the app as at the moment the app looks too basic
- Adding a star Tool - by implementing this, the user is going to be able to draw/stamp using a star almost as like its a brush tool
- Adding a Eraser Tool - This tool is going to let the user clear any unwanted drawings they have done instead of having to clear the whole canvas

Extra Features Added

Even though I considered many complex features to enhance the drawing app, I realised that being a one person group I was not going to be able to code all of this by myself in time to meet the deadline given and due to this I had to discard some of the features considered therefore the feature included in the app are the following :

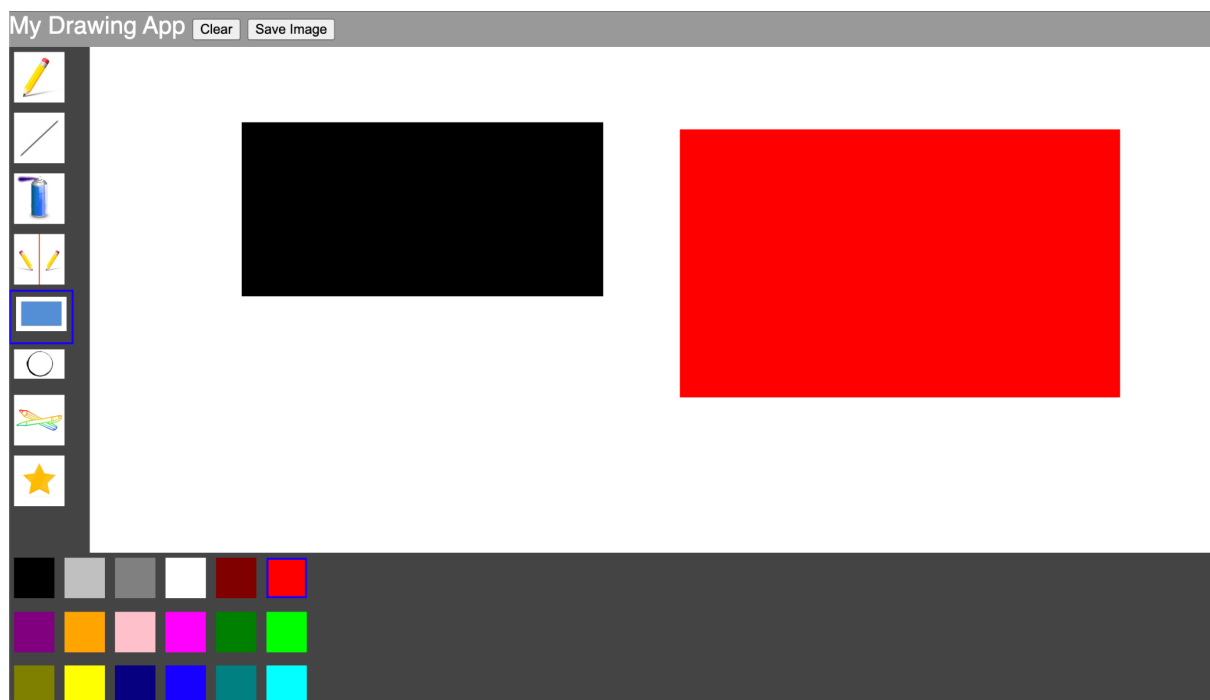
- Adding rectangle shape tool
- Adding a circle shape tool
- Adding a rainbow pen tool
- Adding a star brush Tool

Implementation

As I started on coding the extra features for the drawing app, I knew I would run into many complications therefore this section includes a few tests I carried out to ensure the new version I am creating works as expected.

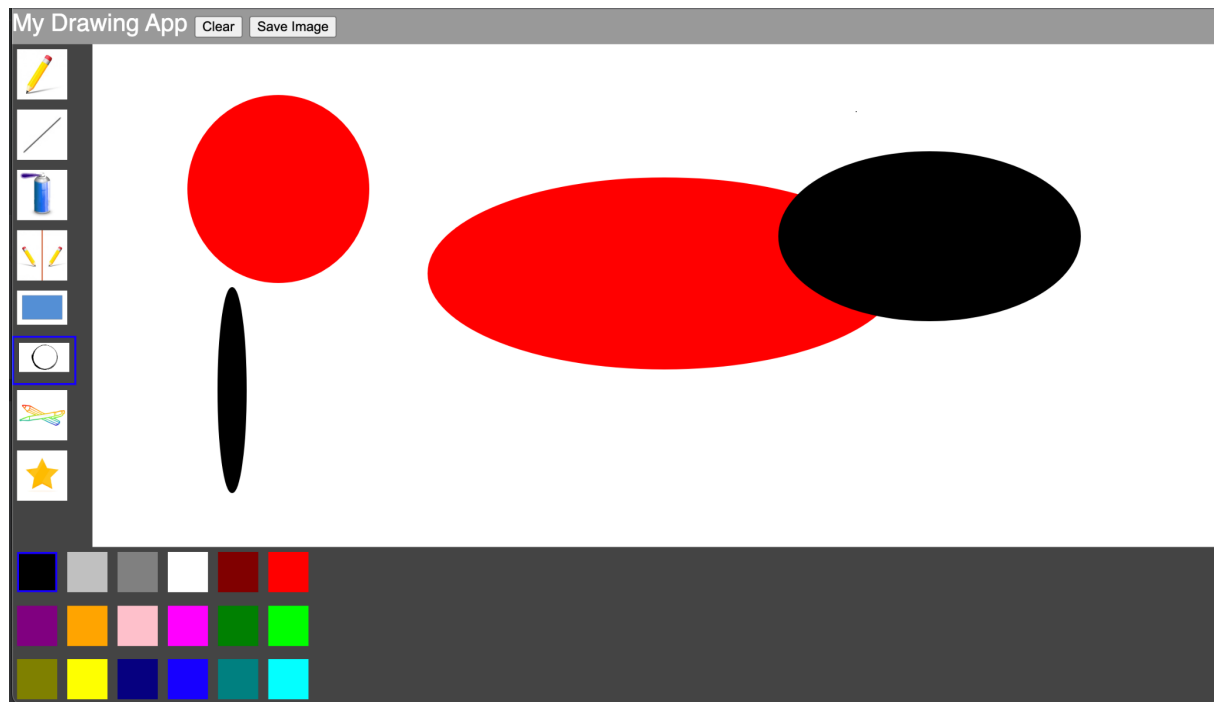
Rectangle shape tool :

This tool allowed the user to draw a rectangle on the drawing window of their size and colours. At first this was going well but I quickly came to the realisation that the rectangle tool was not working as intended, upon clicking the drawing window to save the rectangle, another rectangle would appear so instead of making one rectangle, the tool would make two. I fixed this by editing the code and used this code `rect(startMouseX, startMouseY, mouseX - startMouseX, mouseY - startMouseY);`



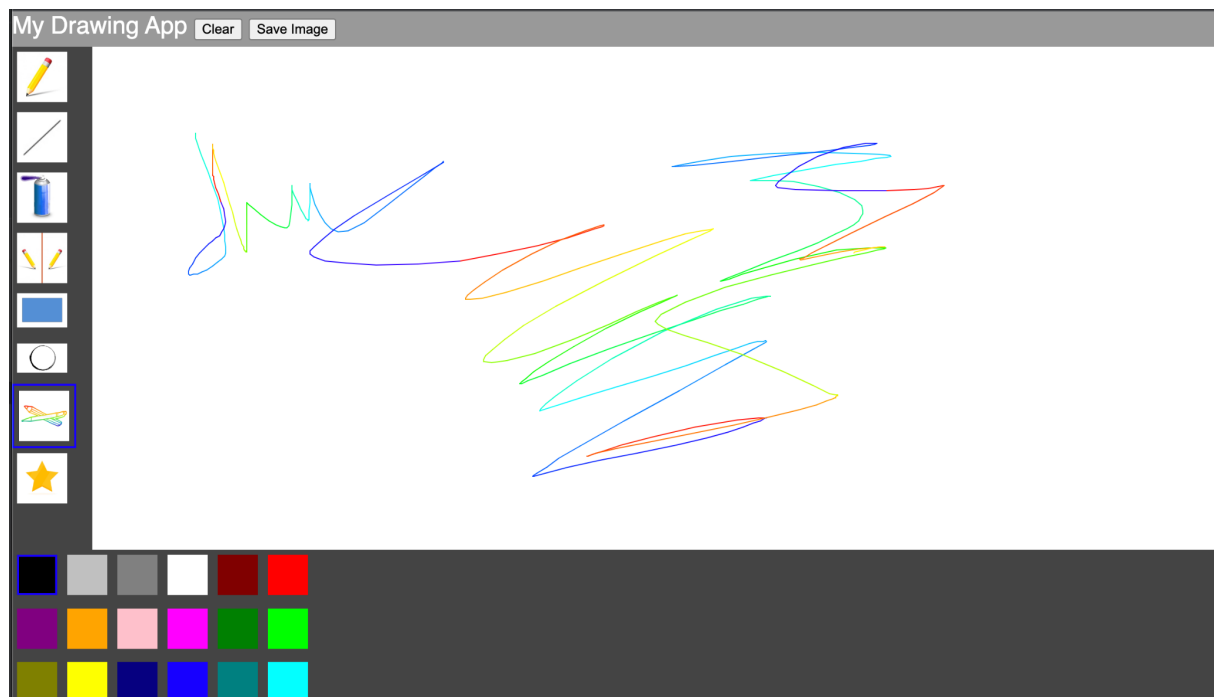
Circle shape tool :

When creating this circle shape tool I ran into no complications as I adapted from the previous shape tool so this all went as planned. Below on the screenshot you can clearly see that the colour palette works on the circle tool and the sizing can be changed as desired



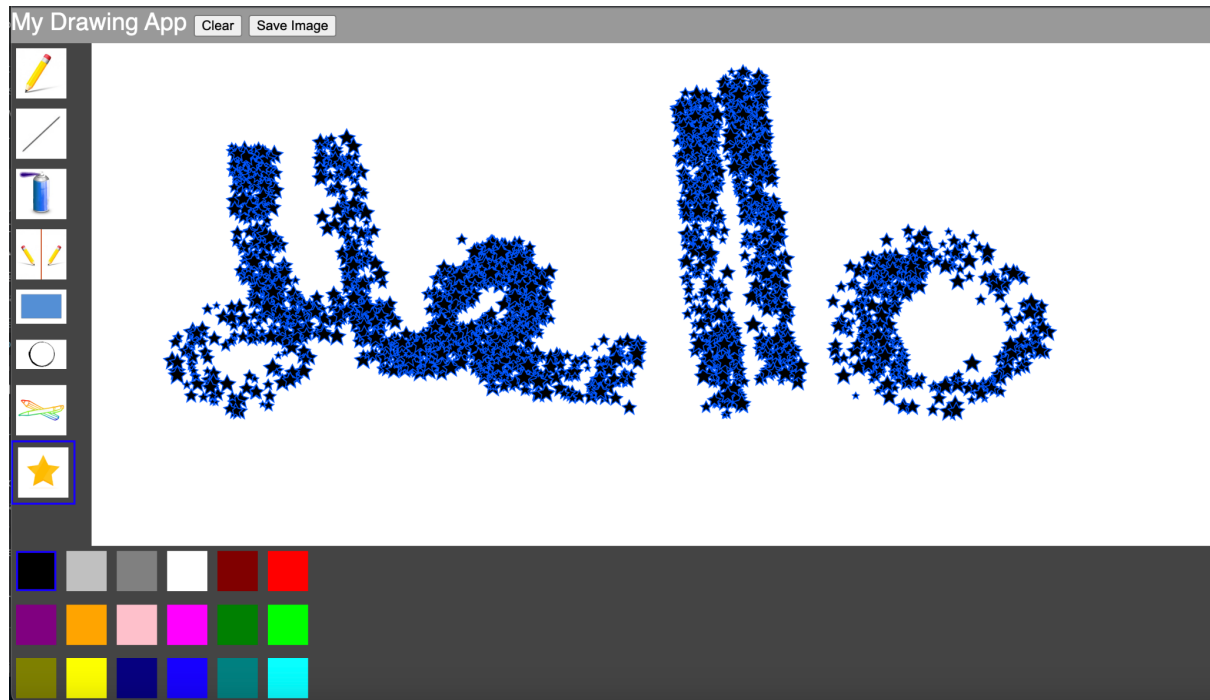
Rainbow Pen tool :

This rainbow pen is a pen which uses the colours of a rainbow when you use it and this was added to allow the user to get creative with their drawing and add vibrant details to the sketches they create. Below is a screenshot that portrays the use of this pen and how it switches colours mid writing



Star brush tool :

One of the first steps taken to make this image was to create a star image, when this was made. I made this star image into a brush tool where the user is able to add differentiation from their drawings, sketches and illustrations to other artists who don't have similar tools. This can be done by dragging the mouse on the display window which will print out many stars as you the user continues. Below is an example of where I have drawn hello using this star brush tool and the stars are clearly visible



Evaluation

In evaluation, being a one person group and no one to help me with the coding and other features of the refined drawing app, it was really hard for me to be able to complete the code and add complex tools to it by the deadline given. However, when disregarding certain features I was able to complete the ones I believed were important and I was overall happy with the final version of the app that I had created even though I had difficulty in creating some of these tools e.g. the width and height part of when creating the rectangle tool and some parts I was able to find easy when creating e.g. the circle tool as I had learned from the previous shape tool what I did wrong.