Project 1 Reflection:

As our first project for Programming for Design, I was tasked with applying the coding techniques I have learned to programmatically create a self-portrait. The tools I used to create my portrait were:

- VS Code - App
- HTML - Markup language
- CSS - Styling language
- JavaScript - A programming language
- P5JS - JavaScript library
- Chrome - Browser
- Bear - Rich text writing
- Miro - Visual virtual workspace (flowcharting)
- Git - Source control
- GitHub - Cloud code storage and code submissions

As part of the exercise, I was required to put together a flowchart of my process for creating my portrait. From there, I created pseudocode to map out the logic of my portrait program. Finally, I created multiple scripts that run in the browser that allows people to progressively draw my portrait with consecutive clicks.

The process of creating a portrait was more difficult than I had anticipated. Not because of the programming thankfully, but because of the need to visualise and write out my logic in flowcharts and pseudocode.

Initially, I struggled with my program seeming too simple, it seemed odd to me that my portrait was a list of simple draw functions. I managed to clear my mind by chatting with Simon about my concerns, and he suggested purposefully adding in some complexity to display my understanding of the coding I had learned. This was really useful as it shifted my perspective and allowed me to think more about what possibilities were available.

With this new understanding of the task, I set about creating a program that would load a simple web page with a canvas in the centre. The user would be instructed to click their mouse and with each consecutive click, a new part of the portrait would appear. Along with this, with each click the background colour of the canvas would change to a random colour and when the final part of the portrait was drawn a text would appear thanking them for drawing my face.

I repeatedly found myself going back to my flowchart and pseudocode to make adjustments. One area I had particular difficulty with was the logic around drawing each portrait piece separately. I found that when the mouse was clicked, which started a loop through the array to draw the next item, the new item would be drawn but the previous

would disappear. I was quite happy with my solution to this issue. The solution was to create a “for” loop inside the click loop that would draw the new item in the array and all previous items too.
With the program complete to my satisfaction, I adjusted my flowchart and pseudocode to resemble the logic I had come up with.

Whilst I do not plan on becoming a programmer, in my career as a user experience designer I will have to constantly interact with them. I can see that by practising flowcharting, pseudocoding and programming, I will be a much more effective designer. This is particularly true when seeking to understand the technical limitations of a product or service. I found this project quite challenging but also rewarding. The elation felt when I finally figured out the logic for my click loop was incredibly satisfying.

#Uni/Programmin for design#