

Reflection

During the length of this project, many things did change and I had to change some of the fundamental functions of the device. Along with this, I had to make a few changes to the appearance of the device when I was assembling it.

One of the biggest changes I had to make was lessening the amount of functions that I was imagining to be available to the user. The Pro-Micro does not have enough space to hold all of the bitmaps for the tools, so I was limited to 5 tools and changing the brush size. Along with this, there is no changing of the hardness of the brush. I could not figure out how to change the hardness of the brush without triggering the hand tool which was also linked to the rotary encoder.

When doing the 3D printing, I had to change some of my dimensions because they were too small and would not allow me to fit in my screen. Because of this, I had to print it more than once, leading to a total of 5 times.

The Fusion model worked really well. I also had success in soldering and drawing the designs.

If I was to redo the project, I would plan out my time more and make sure that I split up my time for programming and figure things out incrementally. I would also paint the device and add more lights to the design for more aesthetic. Better buttons would be used and there would be a different rotary encoder for more precision and changes.