Reflection

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At the beginning of this course I wanted to create a project that had three functions. 1) It would function as a basic etch-a-sketch meaning that it would draw a line using two dials. 2) It would save and display those drawings, and 3) it would allow two people to play at once. Of these three goals, however, I was only able to get one to work. The first goal of the etch-a-sketch was accomplished early on after the initial problems with the first screen. This screen was not programmed in the same way that the screen I had researched. Waiting for the new screen to arrive was the first set back that I had in my design, however by trying my very hardest to make that screen work despite all it's stupid I was able to figure out how it functioned. In the long run understanding this much more difficult screen made it easier to program my second screen.

In regards to the second functionality, I was aiming too high without knowing how to shoot and the only weapon I had was a potato. What I mean is that I don't think this is possible to do. If anyone has been able to record the image on their screen using arduino I could not find evidence of it. That said it could be possible to record a byte array, however it would take a lot more memory. After struggling with this for two weeks, I eventually gave up on the idea all together, however it was a setback that caused me to finish my project later than I had wanted.

By the time I even started the third function my memory had been eaten up and I was unable to make this game how I wanted. Instead I added a maze, which, though small, I like better than the original idea.

Looking back there are a few things I would change about the project if I could.

1) I would get a processor with more memory so that I could make all images bigger
2) I would add two rotary encoders so that I could have a two player sketch mode
3) I would fix the bug on the main menu where the box starts in the second space
4) I would fix the gallery so that the button doesn't have to be pressed at a specific time to navigate
5) I would fix the PCB to have rotary encoders in line with each other and make the box smaller because of it
6) I would add an eraser (because I almost did but it was 1% too much memory (>_<)

The best thing about this project is that coming into it I had ideas but not really any understanding about the processes to make them work, and now I feel more confident in programming, and think I could make the project even better if I wanted to. It was a very difficult class but I feel that it was one of the more valuable ones. Lessons

I learned (and wish I had know) include: sometimes you just have to let an idea go for the sake of the whole project. This is in reference to the second functionality. The second thing I learned was ribbon cables suck. I had surprisingly better luck than many of my classmates. Whether this is a result of my tiny hands or practice with small detail work I am unsure. And lastly I am not very intrinsically motivated. One friend in particular was a big help at motivating me, but as I won't always have others helping to push me along I need to get better at doing this myself. Whether this is a result of lacking passion on my part, a general apathy, or pure stubbornness I couldn't say, but for my personal benefit in all areas in life I hope to find a passion to strive for that can keep me intrinsically motivated without being drowned out in worries of success or the lack of.