

CDEFO Week 6

Prompt: Where am I on my timeline.

I can integrate this nicely into just my research journal in general, so I hope the answers I provide while discussing my progress can answer this question.

Week 6-7:

- **Core functionality needs to be done**
 - The Arduino should be to take a command from an NFC tag, and execute either on itself or on the Host Machine
 - C++ functions for media control, Bash scripting, and controlling digouts on Arduino must be working
 - A few modules should be made for demonstrative purposes
- Materials for user experiences should have all arrived
- At least 4 user experiences by this point
- Majority of C++ functions will have been written and tested on Arduino and Host Machine (continuous)
- Model/print enclosures (5 days)

Like last week's research journal, images aren't the most appropriate to document progress since all of the materials haven't quite arrived yet and the vast majority of my work is coding, but I still have until week 7 to get them and stay on schedule.

I realized when I was writing the C library that some of the library functions weren't very extensive, resulting in a lot of code in the sketch still, so I worked on further abstracting the code and expanding the arguments passable to the functions. Also, core functionality is done, so that can be checked off the list. I also talked to my other stockholder Beka Gulotta and she introduced me to a literal truckload of readings I can go to for inspiration into designing my modules, on top of different terminology that I can use in my rewritten proposal. There's also [another project](#) on her website that I can reference in my in rewritten proposal as opposed to that one project that Joseph Meyer told me about that I still don't know the name of. While it's not a spoof of an IoT environment or an exploration of where the platform can go as an evocative experience, but it works well into the concept of nostalgia that I'm trying to cultivate, and the functionality is similar despite most of this not being electronic. All of the coding/planning took around 10 hours I'd say.

I likely won't have the 4 experiences, but I have 2 right now, and with the input from my final stakeholder, I can set about searching for my third. In terms of my user experiences, I came up with a few more ideas that can be incorporated. Those are ideas are recording video and audio using the laptop webcam that's on the host machine, and the other is using the keyboard itself to accept input, maybe as some sort of keepsake type functionality. You could type a message that some later could view or even reply to. I've also found curtains to use to section off the room and have borrowed good stereo speakers.

I have decided to make the enclosures out of wood/MDF instead of printing them, which will be more expensive, but a lot nicer to hold and look at. This will add a few more days and push it over into Week 8, or maybe even further. Once I get home for spring break I can try making it with my own tools, or maybe go to home depot with a mockup and have them cut out the pieces. Or perhaps I can find a place

that allows me to rent time at a CNC machine and I can cut it out of MDF. Or I could just use this [website](#). There's also this handy [box designing](#) website that can give me a PDF for laser etching.

I will say one thing, this project is beginning to get very expensive, if I can keep everything on campus (i.e. using UMDs woodshop, borrowing curtain mounts or tripods from DCC) then it should alleviate the costs significantly.

Prompt: What questions/concerns am I bringing.

Frankly, I'm worried that the cost of everything is getting too out of hand, but in order for my experiences to work, I need to buy these things.

Most of the work can be done by me, but would DCC be willing to let me borrow things like tripods to mount lighting, or maybe even large fabric screens so that I don't need to spend too much on things I'll only use once effectively?

I remember there being mention of a fair in April that some of us may be able to present our capstones at. How would I go about signing up for that?