Daily Stand-ups for Sprint 3

LC7: Eduard, Tash, Tomin, Jordan

April 3, 2020

Original plans

Before the while COVID-19 issue came up, we had a few ideas of what we wanted to do for sprint 3 which are as follow:

- Do PIC16 capacities buttons (circuits and software).
- Learn how to interface PIC16 to SD card (PIC lab maybe?).
- Look into how we should buffer audio to the DAC.
  - Research PIC interrupts to pause DAC writes.
- Write basic music playback for the PIC.

  We estimated that this would be about 20 hours of work.

Stand-up logs

Note: we have been doing our stand-ups every Monday and Wednesday (and sometimes Friday) due to difficulties meeting.

Wednesday March 18

- We discussed pretty much nothing critical. Decided to hold off doing anything for the time-being.
- Eduard said we would pick up the PIC16 stuff.

Friday March 20

- This was the first opportunity for us to meet as a group during ENEL 300
- New course details mean we do not need a physical prototype, so we are throwing out most our plans for this sprint.
  - We will no longer buy any parts.
- Talked about alternative methods of d emonstrating our project. -**Verdict:** We have a C prototype, but it lacks the polish that we want, so for this sprint we will look into methods of simulating our product virtually as Eduard has recommended. [Assigned to all; estimated time ~1.5 hours]

Monday March 23

- Quick meeting after 327 worksheets.
- Talked about status of our project and what tasks our group can do. -**Verdict:** Jordan and Tomin can do revised technical requirments [estimated time 1 hour]. Tash can work on typesetting and writing the documents [estimated time < 1 hour].

Wednesday March 25

- Talked a little about our demo.
- For simulation software there are a few different options, but 3 stand out:
  1. GTK (hard)
  2. nukler (hard)
  3. QT (hard and only one of us know C++)
  4. One of several audio programming languages.
- the GUI frameworks seem pretty obtuse, and none of us really want to learn a new programming language. For know we will skip this part as it is not strictly required, but may revisit it if time allows.

Friday March 27

- Discussed drawing schematics for key circuits in our "imaginary" design. No extra work really has to be done here, we just need to compile the diagrams that we have done for earlier labs and stuff. [assigned to all; estimated time ~1.5 hour]
- We looked a bit more into the simulation aspect, and one possible part of this is designing our PC prototype to have a similar performance characteristics to the PIC platform - as in it should be able to run on low-end hardware.

Monday March 30

- Finished compiling circuit schematics, all that will need to be done next sprint is digitizing our drawings. We also came up with the idea of providing sample software, but lack of access to hardware by all may make that impossible.
- Tomin and Jordan have finished the revised technical documentation, and will send it to Tash tonight.

Wednesday April 1

- Very short meeting to clarify a few things.
- Tash has finished compiling the documents, and Jordan can typeset it in TEX and send it off tomorrow.