---

491 Weekly Status Report 1

9/6 - 9/13

Group 15

Project: Cyren

Client: Dr. Randall Geigar

Advisor: Dr. Chen Degang

Team:

- Justin Shaver - Meeting Facilitator
- Thomas Frye - Scribe
- Will Pigg - Lead Hardware
- Chandler Davis - Lead Software
- Daniel Bohlke - Test Engineer
- Caleb Hendrickson - Test Engineer

Weekly Summary

Past Week Accomplishments

- **Justin Shaver**
  - Filled out a backlog of stories (tasks) for us to pick up
  - Filled out the meeting agenda
- **Thomas Frye**
  - Started working on the register map api for the rockpro64
  - Setup Git on my computer to start using the repository
  - Researched more in the i2c ports functionality and usage
- **Will Pigg**
  - I reviewed last year's music device project for reference, and began to review design features from last semester
- **Chandler Davis**
  - Set up a RaspberryPi 3B+ to run the OS that will be used for our final device.

    - I also set up my editor, VSCode, to be able to remotely edit files on the RasPi from my desktop PC (or anything that can log in through the IP, as it's hosted on my network).

    - Did some research on how to create better diagrams for the parts of our project that I'm working on.
    - I also found a good software (Microsoft Visio) through my co-op that I've been getting experience in.
- **Daniel Bohlke**
    - Setup Ubuntu on my PC to easily run C programs (and write tests in C)
- **Caleb Hendrickson**
    - Installed Visual Studio 2019 for IDE
    - Added FFTW library to Visual Studio
    - Studied DFT and frequency plotting(Did several practice problems on paper)
    - Developed basic C code to take in an input signal generated by a for loop that calculates and prints out the DFT and frequency distribution of the signal

Pending Issues

- **Justin Shaver**
    - N/A
- **Thomas Frye**
    - Still stuck on successfully using the i2c ports
- **Will Pigg**
    - Speak with Daniels
- **Chandler Davis**
    - After speaking with some team members at work (Collins Aerospace) who are well-experienced in C, I'm debating on whether the graphics library I selected last semester is still "up to snuff".
- **Daniel Bohlke**
    - Researching more about Analog to Digital conversion and Data Processing
- **Caleb Hendrickson**
    - Implementing a plotting function to properly graph the input signal and frequency graph to ease development

Individual Contributions

Name	Individual Contributions	Hours	Total
Justin Shaver		7	7

Thomas Frye		8	8
Will Pigg		7	7
Chandler Davis		7	7
Daniel Bohlke		8	8
Caleb Hendrickson		8	8

Comments Extended for Discussion

N/A

Plans for Upcoming Week

- **Justin Shaver**
  - Begin planning deadlines and dates for deliverables
- **Thomas Frye**
  - Work more on the API
  - Hopefully get the i2c ports working
  - Meet with Will at some point to drive audio through the RockPro board
- **Will Pigg**
  - Need to speak to Daniels, and start brainstorming how to better represent the electrical design for our project
- **Chandler Davis**
  - Doing research on if we should switch from GTK to Qt
  - Once I pick the graphics library, I will install the necessary software to my dev environment.
  - Plan GUI pages that we need
  - Start on diagramming the control/data flow diagrams for the GUI
- **Daniel Bohlke**
  - Work on Pending Issues
- **Caleb Hendrickson**
  - Push to Github,
  - The pending issue mentioned above
  - Start the implementation of the replacement of the code generated input signal with an audio file AND/OR Research of the different functions in the fftw library that may be necessary for more complicated input signal transformation and interpretation

Summary of Weekly Advisor Meeting

We have yet to hear back from either our client or faculty advisor, despite multiple attempts to reach out to them.