EE / CprE / SE 492 - sddec18 - 21
Multi-Effect Sequencing Board
Biweekly Status Report 7

11/19/2018-12/3/2018
Client: Randall Geiger

Team Members:
Calyn Gimse
Charles Rigsby
Derrick Lawrence
Karla Beas-Gutierrez
Tyler McAnally

Summary:
- Finalization of Prototyping
- Quality-of-Life changes to Application
- Software code edited to implement pushbuttons
- Parts for prototype ordered, assembling of prototype started

Past Accomplishments of Last Two Weeks:
- Calyn Gimse:
    - Quality-of-Life changes to Application
        - Effect configurations only show fields relevent to its own effect
        - Added a simplistic diagram around effect buttons for visual clarity
        - Improved bluetooth recognition to avoid potential crashes
        - Minor bugfixes
    - Software code added to implement changing presets via preset pushbuttons
    - Software UI modified to account for smaller display, output display should take up the whole screen now.
- Charles Rigsby:
    -
- Derrick Lawrence:
    - Drafted and constructed enclosure to include basic woodworking and generating a Solidworks file for the CNC mill to route the top panel. Painted housing, also.
    - Soldered and verified operation of PCB and internal wiring + tested display panel
    - Finalized BOM and cost analysis
    - Very minor, last minute design change to hardware to add two additional looper switches for added control by the user.
- Karla Beas-Gutierrez:
    -
- Tyler McAnally:

- Worked on getting intuitive UI designed but ended up scrapping the approach due to the time we have left of the semester.

Pending Issues:

- None

Individual Contributions:

Name	Individual Contributions	Hours worked	Hours cumulative (this semester)
Calyn Gimse	Major Quality-of-life changes to android application, crashes/bugs in application resolved, software code added, software display modified to account for housing display.	20	100
Charles Rigsby			33
Derrick Lawrence	Misunderstanding caused looper switch issue that has been sorted out with fairly little trouble. Construction of housing required several design changes through the process, due to insufficient measurement data in datasheets for multiple components. Had to learn fundamental operations in Solidworks to design the front panel of the enclosure.	20	85
Karla Beas-Gutierrez			5
Tyler McAnally	Worked toward getting a nice UI developed	10	41

Plans before IRP presentation:

- Calyn Gimse:
    - Test effects with finalized housing
        - Make any necessary minor tweaks

        - Create presets that will be tested during IRP presentation
    - Minor display fixes to application
        - Make diagram and text sizes bigger
- Charles Rigsby:
    -
- Derrick Lawrence:
    - Paint top panel, and mount all components to the underside. Verify system with a final test to ensure no issue come from mounting the circuit boards.
    - Help with setting up plan for demonstration, including effect selection, and IRP panelist involvement opportunities.
- Karla Beas-Gutierrez:
    -
- Tyler McAnally:
    - Test pedalboard with an actual guitar

Summary of Advisor Meetings:

- Consider preventing public disclosure of potential Intellectual Property.
- Consider getting the IRP panel involved in the presentation, as opposed to typically monotonous demonstrations