sddec18-21: Multi-Effect Sound Pedal Sequencer for Performing Musicians
Week 6 Report
March 18 - March 24

Team Members

Tyler McAnally — *Software Lead / Outreach*
Karla Beas — *Facilitator / Hardware Engineer*
Charles Rigsby — *Hardware Lead*
Calyn Gimse — *Test Engineer / Digital Lead*
Derrick Lawrence — *Report Manager / Hardware Engineer*
Professor Randall Geiger — *Adviser / Client*
Professor Joseph Zambreno — *Course Instructor*

Summary of Progress this Report

Progress this week includes successfully processing a WAV file, creating a program that will switch the effect in use in real time in response to numbered keystrokes, implemented a 3rd party library into the codebase on the raspberry Pi, designed the basic layout of how the UI app will look, and set up Android Studio development environment. A circuit and parts list were drawn up for approval from our adviser to order.

Pending Issues

The primary issue the team is facing right now is getting an analog sourced signal to use for testing. This will need to take very high priority in the upcoming period until it is resolved. Work will continue, but there are no major issues other than the analog signal acquisition that will halt progress.

Plans for Upcoming Reporting Period

The plan for the upcoming week will be to discuss the input circuit with our adviser and make changes as necessary. Once changes have been made, parts will need to ordered as soon as possible. Work on the effect library and UI app will continue through the next week, as well. The UI will be an ongoing development. The effect library can continue to be developed and tested with a WAV file. Although not ideal, this will help keep progress from reaching a halt.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Tyler McAnally	Setup Android Studio development environment and finalized basic layout/navigation of the UI app	6	23
Karla Beas	Set up Raspberry Pi and looked into basics of audio DSP, refreshed programming in c	5	22
Charles Rigsby	Updating Project Plan, and UI human factors research	5	22

Calyn Gimse	Created program to test audio effects, created a separate program to switch the effect in use in real time, and implemented a 3rd party library into codebase	9	30
Derrick Lawrence	Created circuit diagram and parts list to be reviewed. Updated Project Plan	6	23