Date: 3/20/17
Group number: dec1712
Project title: Sound Effect Devices for Musicians
Client &/Advisor: Professors Geiger and Chen
Team Members/Role: Jake Asmus/Team Leader, Joseph Brown/Team Communicator, Daniel Peterjohn/Team Webmaster, and Jiangning Xiong/Team Key Concept Holder

o **Weekly Summary**
   ● This past week Jake worked on the pedal mat functionality, Daniel helped prepare the new Teensy 3.6's, and Joseph spent some time learning about programming the Teensy. A little time was spent on spring break, so there is not as much to report on for a weekly summary.

o **Past week accomplishments**
   ● Jake Asmus: I have developed a circuit schematic and built the circuit with 3-input and 2-input NANDS using the SN74H10N and CD4011BE respectively. The schematic built was a JK Flip Flop toggling the output when the mat button is pressed. Used LED's to signal when the output is high and low and programmed with the Arduino Uno to interpret the logic of the JK FF. However, after presenting to Professor Geiger, I will now use the T Flip Flop for simplicity because we want to toggle the output when the button is pressed each time.
   ● Daniel Peterjohn:
       ❖ Soldered the two Teensy 3.6 boards and the Audio Shield.
       ❖ Tested the Teensy Audio library capabilities. I used a function generator to output a 440Hz sinusoid into the Teensy. This was then processed by the Teensy's ADC. Then I output the same signal out of the Teensy's DAC to test quality of the signal. The results showed that there was minimal distortion in the 80Hz to 4kHz range.
       ❖ Started the Gantt chart timeline and added some events for myself.
   ● Joseph Brown: I shared my information with my team members about the adjustments to the sine waves coming out of the same output in the Teensy by normalizing the value to avoid clipping the speakers. Learned a little more about programming the Teensy 3.6.

o **Pending issues**
   ● Jake Asmus: On the works of developing a digital/heat meter display for the buttons that need more states than the on/off states using the TFF. Developing a 7-sigment display with a possible heat meter for more visuals than digits.
   ● Daniel Peterjohn:
       ❖ Website needs to be started

> ❖ Test the audio effects on an input signal going into the Teensy and hear the output.
- ● Joseph Brown: Work with Daniel on making the website look professional and help fill in the details.

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Jake Asmus	Developed LED Display for switch buttons	12	26
Joseph Brown	Shared information about the sound adjustments and studied Teensy programming	3	18
Daniel Peterjohn	Soldered Teensy parts. Tested Teensy Audio Library	5	16
Jiangning Xiong			8.5

o **Plan for coming week**
- ● Jake Asmus: will be testing and finalizing the on/off button LED display with TFF and work on the 7-segment and heat meter display.
- ● Daniel Peterjohn:
  - ❖ Write the front page for the website
  - ❖ Test the audio effects on an input signal going into the Teensy and hear the output.
- ● Joseph Brown: will help Daniel with the website and help program the Teensy to read and output the correct frequencies.

o **Summary of weekly advisor meeting**
- ● No meeting