Team 6
Antonio Hernandez Olivares
Cesar Chich-Saquic
Fedya Henrichs-Tarasenkov
Rafael Cervantes

Week 6 Breadboard Prototype Writeup

Our project is a real-time music effects processor that passes through an audio signal with a 3.5 mm audio jack input and output and applies audio effects of our choosing. For our breadboard prototype, we have the Teensy 4.1 and Teensy audio shield and an audio jack breakout board. The input signal comes from a device (we use our phones) hooked into the audio jack breakout board which then goes into the audio shield. Together, the audio shield and Teensy 4.1 use DSP to apply whatever effects we want to the signal which then goes to the output audio jack on top of the audio shield board. What we have working currently is the ability to apply certain effects to our audio signal, however we haven't implemented the leds, buttons or pots yet. Ideally, these are what we would use as our user menu, but for now our code uses a simple serial menu. To achieve our "musts" for the breadboard prototype, we still need to make our user interface easier to use and to implement it into hardware, but overall the project has hit most of its goals.

- ☑ ~~Must be portable.~~
- ☑ ~~Must pass through an audio signal.~~
- ☐ Must have a clean and intuitive user interface.
- ☑ ~~Must have at least 1 audio effect.~~
- ☐ Must have a case.
- ☑ ~~Should have 3 audio effects.~~
- ☐ May have a screen displaying the audio spectrum.