#### **WEEKLY REPORT**

Group Name: Dec13-09 Digital Synthesizer

Client/Advisor: Dr. Zambreno/Dr. Neihart

Attendees/Role:

**Dustin Amesbury - Leader** 

Brittany Oswald - Meeting Scribe

Wallace Davis - Webmaster

Darren Hushak - EE Director

John Tuohy - Communication Liaison

Dr. Zambreno - Client

Dr. Neihart - Advisor

### Past week accomplishments

 PortAudio works on the Raspberry Pi and interfaces with ALSA correctly producing sound from the pi

Date: 4/08/2013

• The Raspberry Pi receives MIDI input using the serial input on the pi

# Plan for coming week

- For class: finish up design document -Team
- For class: meet with 492 design groups -Team
- Create program which will play sound from the pi when an organ key is pressed. -Darren Hushak
- Implement mature software architecture. -Brittany Oswald, Dustin Amesbury, and John Tuohy

- Figure out where to put the arpeggiation and glissando, and possibly be able to slow down the speed of the arpeggiation. -Brittany Oswald and Darren Hushak
- Start mapping out the interface, physical buttons and state of the system. Consider LED display for the current channel for each keyboard and the pedals. -Brittany Oswald
- Determine if PortMidi is a useful decoder for us. -John Tuohy
- Update the website and help Darren if you are feeling healthy Wallace
  Davis

### **Pending issues**

- If you rapidly hit the key, a byte is sometimes lost. Look into debouncer for the keyboard. -Darren Hushak
- Wallace Davis has strep throat.

#### **Individual contributions**

- Brittany Oswald assisted getting audio from the pi.
- Darren Hushak built, installed, and tested MIDI shield.
- Dustin Amesbury worked with John to troubleshoot ALSA issues.
- John Tuohy got ALSA working on the raspberry pi.
- Wallace Davis worked with Darren on getting MIDI to be read from the serial port.

## **Individual hourly contributions**

- Brittany Oswald 4.5
- Darren Hushak 16
- Dustin Amesbury 5
- John Tuohy 5
- Wallace Davis 8