

WEEKLY REPORT

Date: 3/31/2013 (Spring Break)

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

- Software architecture is more defined around PortAudio framework, so coding tasks can be divvied up reasonably, and everyone will have a clear interface between classes.
- One keyboard has been fully wired and is ready for use.
- Portaudio is communicating with ALSA on the RPi, now just debugging ALSA configuration.

Plan for coming week

- Start implementing the architecture. -Brittany Oswald
- Implement Mixer and Module classes, as well as work with John to get ALSA configured on the RPi -Dustin Amesbury

- Create simple program using PortMidi and work with Darren to get GPIO pins figured out -Wallace Davis
- Continue coding and troubleshooting PortAudio and access to the audio device on the pi. -John Tuohy
- Work with Wallace to get GPIO figured out, as well as continue MIDI CPU programming. -Darren Hushak

Pending issues

- The Pi is having issues using a default audio device.

Individual contributions

- Brittany Oswald worked with John to understand the current code and updated the software architecture to define interfaces and interaction between classes to make coding more straightforward.
- Darren Hushak wired and soldered one keyboard that is ready for use
- Dustin Amesbury implemented an interface that will be used by most classes in the software architecture and worked with John troubleshooting the RPi and ALSA.
- John Tuohy worked with implementing the AudioProcessor, as well as worked with Dustin to troubleshoot the RPi and ALSA issues.
- Wallace Davis configured GPIO pins and used a MIDI interface to test.

Individual hourly contributions

- Brittany Oswald - 3.5

- Darren Hushak - 20
- Dustin Amesbury - 20
- John Tuohy - 25
- Wallace Davis - 22