

EMPR Group 10 Meeting

Beginning of Week 2 (12/01/2015)

Meeting Chair: Shivam Mistry

Secretary: Liam Fraser

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

- Set up private GitHub repository. Ensure everyone has access
- Discuss mandatory code review. Decide on feature branches and pull requests when merging into master. Code review can be done at this stage.

Tasks:

- DMA Synth code using Wavetables / Fixed point library - Liam
- Screen and Keypad - Edward
- Can Bus - Shivam and Doug

EMPR Group 10 Meeting

Beginning of Week 3 (19/01/2015)

Meeting Chair: Douglas Parsons

Secretary: Shivam Mistry

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Initial synth code /w fixed point library - done over weekend by Liam
- Can Bus - spent the previous week in the lab trying to get can bus working. Eventually figured out that the can bus was broken. Was fixed by Friday of week 2.
- Implement basic keypad support - Edward

Further Tasks:

- Now that Can bus is working, look at processing data and text packets - Shivam
- Start working on individual project: a shell for the MBED - Doug
- Continue work on screen and keypad - Edward
- Add sample support for drums and begin on individual project which is piano mode. This requires multiple wavetables for one instrument, support for ADSR curves and a MIDI input - Liam

EMPR Group 10 Meeting

Beginning of Week 4 (26/01/2015)

Meeting Chair: Liam Fraser

Secretary: Edward White

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Can Bus working - can process text and data packets
- Piano mode and dependencies for that well underway - Liam
- Working on volume control with keypad - Edward

Further Tasks:

- Implement a Queue and checksum checking for CAN bus - Shivam
- Continue work on Piano mode, also look at building a couple of speakers for in the lab - Liam
- Continue work on screen and keypad - Edward

EMPR Group 10 Meeting

Beginning of Week 5 (02/02/2015)

Meeting Chair: Mingzhao Zhou

Secretary: Douglas Parsons

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Piano mode is working although sounds like an organ. Parts for speakers ordered - Liam
- Shell is mostly implemented. Waiting to merge in new Synth code before continuing - Doug
- Queue and Checksum for CAN bus implemented: can now play the tracks in a reliable fashion - Shivam
- Working on the visual display function on LCD - Edward

Further Tasks:

- Build some speakers and continue work on Piano mode - Liam
- Shivam: write memory allocator using the upper 32K of SRAM typically reserved for peripherals such as Ethernet and USB
- Doug: Fix scrolling text on shell and improve the LCD code
- Continue work on keypad - Edward

EMPR Group 10 Meeting

Beginning of Week 6 (09/02/2015)

Meeting Chair: Shivam Mistry

Secretary: Liam Fraser

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Piano mode improved, Implemented the sustain pedal for midi input. - Liam
- Begun work on improving the LCD functionality, scrolling text fully implemented across two different lines - Doug
- Begun work on memory allocator, implemented majority of features, but not fully tested - Shivam
- Working on improving interrupt based solution for keypad - Edward

Further Tasks:

- Liam: Work on Equal Loudness to provide a better sounding output
- Doug: Improve efficiency of the LCD scrolling text - currently noisy
- Shivam: Complete full testing on memory allocator
- Edward: Continue work on Keypad Interrupt system

EMPR Group 10 Meeting

Beginning of Week 7 (16/02/2015)

Meeting Chair: Liam Fraser

Secretary: Mingzhao Zhou

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Equal Volume Loudness implemented, and codebase tidied up - Liam
- Vastly improved efficiency of LCD scrolling text - Doug
- Fixed bugs with the memory allocator - Shivam
- Working on improving interrupt based solution for keypad - Edward

Further Tasks:

- Liam: Further work on piano extension
- Doug: Merge in improved Synth code and fix any issues caused
- Shivam: Finishing touches on memory allocator
- Edward: Continue work on Keypad Interrupt system

EMPR Group 10 Meeting

Beginning of Week 8 (23/02/2015)

Meeting Chair: Douglas Parsons

Secretary: Shivam Mistry

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Further improvements made to the Synthesis code - Liam
- Bug fixes for the Shell - Doug
- Extension project work - Shivam
- Working on improving interrupt based solution for keypad - Edward

Further Tasks:

- Liam: Finalize Piano code
- Doug, Edward: Merge in Edward's keypad code
- Shivam: Finish individual extension project

EMPR Group 10 Meeting

Beginning of Week 9 (02/03/2015)

Meeting Chair: Liam Fraser

Secretary: Douglas Parsons

Members present: Shivam Mistry, Liam Fraser, Douglas Parsons, and Mingzhao Zhou(Edward)

Task assessment:

- Finished implementation of Piano - Liam
- Bug fixes for the Shell, and Edward's code merged in - Doug
- Extension project work almost completed - Shivam
- Helped merge in keypad code into group solution - Edward

Further Tasks:

- Doug, Edward: Debug and test keypad code.
- Everyone: Prepare for group presentation