sdmay19-25: Handheld Emulation Station
Semester 2 Week 3 Report
2/18 - 2/22

Team Members
Jacob Nachman — *Meeting Facilitator*
Nick Lang — *Meeting Scribe*
Nic Losby — *Chief Engineer*
Sean Hinchee — *Test Engineer*
Matthew Kirpes — *Report Manager*

Summary of Progress this Report
Got good fps with the raspberry pi and the screen, completed emulator memory bank, refined opcodes and started implementing ALU, opcode testing implementation.

Pending Issues
Opcode byte operations and finishing the ALU, v4 of the PCB, continuation of the other memory banks on the emulator.

Plans for Upcoming Reporting Period
Jacob Nachman: Finish the ALU and start working on opcode byte operations.
Nic Losby: Design V4 of PCB to include the missing trace and relayout a few components. Research RPi Compute Module
Nick Lang: Continue work on the memory mapped unit and get with jacob to interface the memory and cpu.
Sean Hinchee: Work with Nic to setup a button testing system hooked up to the rpi3 development machine to finalize the kernel module. In lieu of that, continue building tests.
Matthew Kirpes: Continue work on MBC3 and MBC5 for emulator.

Past Week Accomplishment
Jacob Nachman: Optimized opcode implementations for currently implemented codes and started the ALU.
Nic Losby: Got the screen working with the RPi and was able to get above 60fps with a custom device tree blob.
Nick Lang: Completed work on MBC1.
Sean Hinchee: Kernel module reached a state of functionality excepting gpio implementations.
Matthew Kirpes: Continued work on the emulator.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Nachman	Implemented more of the opcodes, added more methods that help opcode implementation be less redundant.	10	31
Nick Lang	Completed MBC1 and started work on the GB's internal memory and the memory mapped unit.	12	31
Nic Losby	Soldered parts onto V3 and noticed I forgot the feedback loop for the power circuit Added a temporary jumper wire as a workaround.	10	30
Sean Hinchee	Setup infrastructure for opcode tests, including generating necessary boilerplate for testing each opcode. Not all opcodes are implemented yet, but all command {1, 2} opcodes should be implemented.	12	32
Matthew Kirpes	Got Started on memory MBC3 and MBC5.	9	25