sdmay19-25: Handheld Emulation Station
Semester 2 Week 2 Report
2/11 - 2/15

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
Newer PCB is ready to start working with, start on opcode implementation, kernel module is refined and ready for GPIO implementation.

Pending Issues
Opcode implementation, GPIO implementation, solder PCB v3.

Plans for Upcoming Reporting Period
Jacob Nachman: Continue with opcodes, work with the others on integrating the whole system and testing what we have currently.
Nic Losby: Solder parts onto PCB V3 and hopefully have a working prototype.
Nick Lang: Complete MBC1 memory bank and begin work on MBC3 and MBC5 type memory banks.
Sean Hinchee: Begin integrating GPIO code now that the newer PCB revisions are completed and needs are more formally documented. Continue writing definitive tests for emu/gb.
Matthew Kirpes: Help with making a working prototype and continue working on emulator.

Past Week Accomplishment
Jacob Nachman: Implemented more opcodes, tried to figure out how registers interact together when paired to make a 16-bit register (E.g. Loading an 8 bit value into 16 bit register, does it load into the first byte register or override both values?)
Nic Losby: Ordered the PCB and Researched which screen is more suited for our project, HDMI vs GPIO driven and ordered a screen and battery.
Nick Lang: Implemented ROM only memory bank and began work on MBC1 type memory bank.
Sean Hinchee: Kernel module was refined and the module interface was re-defined.
Matthew Kirpes: Worked on emulation instructions and interpreter for memory values .

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Nachman	More opcode implementation, documentation	11	21

	editing, noted opcodes which could be classified as "high risk" for causing problems based on documentation misinterpretation.		
Nick Lang	Began work on Memory bank controllers for cartridge emulation.	9	19
Nic Losby	Got the screen working with the Raspberry Pi and implemented a custom device tree blob to help speed up the screen refresh rate.	12	20
Sean Hinchee	Kernel module is complete with a functioning test system (rpi 3B) which creates and can properly interface with the respective /dev files for all inputs that will be transliterated from the PCB. Tests for em/gb began to be written.	12	24
Matthew Kirpes	Worked on emulation instructions and interpreter for memory values.	8	16