sdmay19-25: Handheld Emulation Station

Semester 2 Week 9 4/8 - 4/12

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

We were able to get everything integrated and included into the case and looking presentable. We have also cleaned up our code in preparation for GPU functionality and SDL integration. GPIO inputs are looking good and we can create and close SDL windows with the golang library.

Pending Issues

GPU functionality, properly render information to the screen.

Plans for Upcoming Reporting Period

Jacob Nachman: Work to add tile updating and draw information from memory to the screen. Nic Losby: Continue testing and iterate on the case design as well as continue battery life testing.

Nick Lang: Work on implementing memory side of gpu.

Sean Hinchee: Implement SDL routines for integrating GB-like logic with familiar abstractions.

Matthew Kirpes: Work on poster presentation and final presentation.

Past Week Accomplishment

Jacob Nachman: Cleared the project in preparation for new SDL renderer and set up cycling method.

Nic Losby: Ordered and integrated a power circuit from Adafruit in order to meet the deadline.

Nick Lang: Achieved a better understanding of the layout of graphics content in memory. Sean Hinchee: Tested gpio inputs and resulted in creation of new button pcb draft due to

buttons being incorrectly attached.

Matthew Kirpes: Worked on displaying images as well as continue on the gpu.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Nachman	Worked with Sean on partial redesign of the internal CPU as well as successfully got an SDL window to render and close onto the screen	12	103

	with the golang library.		
Nick Lang	Researched memory layout of graphics related memory and how it translates to the screen.	12	94
Nic Losby	Integrated everything into the case and made any modifications as necessary. Begin battery life testing	12	96
Sean Hinchee	Assist in partial re-design of internal CPU implementation for GB emulator.	13	113
Matthew Kirpes	Been discussing the possibilities of implementing gpu vs. other possibilities.	12	83