sdmay19-25: Handheld Emulation Station

Week 9 Report 11/12 - 11/16

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

With senior design (first semester) starting to wrap up, we are starting to work on a lot of paperwork, such as our project plan and design document, in order to get ourselves prepared for the start of the next semester. We have started a prep phase where we review things for emulation design, finished up rough drafts of CAD designs, and going back to prep work so we can start off strong in 492.

Pending Issues (might change this to not talk about the presentation)

Lab testing with our PCB (waiting on parts) and getting everyone introduced to GO language, the language we will be using for emulation software design.

Plans for Upcoming Reporting Period

- Jacob Nachman: Focus on Go language learning, as well as finishing up documentation for the final presentation/end of 491.
- Sean Hinchee: Begin constructing emulator software in Go. Assist in the learning of the Go programming language with the team. Continue constructing kernel module interfaces
- Nick Lang: Look into learning GO so I can assist in the emulator design.
- Matthew Kirpes: Learn/practice some Go programming. Prepare for presentation.
- Nic Losby: Get a PCB mostly soldered finally.

Past Week Accomplishment

- Jacob Nachman: Completed rough draft of desired dock design. Also learned a bit about a new programming language! The use of inline C in go will make it very useful for the emulator design.
- Sean Hinchee: Begin constructing emulator software in Go. Assist in the learning of the Go programming language with the team. Continue constructing kernel module interfaces.
- Nick Lang: Learned more about rsync as a backup method for our system and familiarized myself with CAD software even more than before.
- Matthew Kirpes: Learned that RetroPie support seems to be the way to go for our
- Nic Losby: Got a prep list set up of parts that need to get ordered and made sure that we had everything needed on our rough BOM.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Nachman	 Finish up case TinkerCAD dock design, might try and switch away from that and into using the controller as a remote to play on the TV, maybe even do both, either way we have a dock designed if we chose to do that route. Do some GO lang tutorials to get familiar with the language, gonna work with Sean on starting an emulator. 	6	60.5
Nick Lang	 Looked into rsync as a backup method for the emulator. Looked at some advanced tutorials for TinkerCAD to improve case design. 	8.5	59.5
Nic Losby	 Reordered parts for the PCB since the BOM import did not import all of the components. Inventoried current parts and added labels to match the silk screen. 	5	62.5
Sean Hinchee	 Began analyzing which platform should be targeted by an emulator. Identified potential interfaces to expose the kernel module through. 	6.5	59.5
Matthew Kirpes	 Compared to RetroPi to see what we could implement/what would work well for our needs. Started looking into Go language for emulation design. 	6	61

Gitlab Activity Summary Nothing to report.