

sdmay19-25: Handheld Emulation Station

Week 3 Report

September 23 - September 29

Team MembersJacob Nachman — *Meeting Facilitator*Nick Lang — *Meeting Scribe*Nic Losby — *Chief Engineer*Sean Hinchee — *Test Engineer*Matthew Kirpes — *Report Manager***Summary of Progress this Report**

Starting to try and wrap up the research phase in order to move towards a more hands on learning experience with the tools we will be using. Decided we will be using Eagle as our PCB design software and we will be utilizing the 3D printer on campus for the case.

Pending Issues

Finish up part decisions so we can start deciding where to order them from.
Decide what to do about microsoldering, pay or attempt ourselves?

Plans for Upcoming Reporting Period

Next week we plan to start playing with software like Eagle to get some hands on experience with the tool. We would like to be able to use the tool with moderate expertise by the time we start our first prototype.

Past Week Accomplishment

Biggest accomplishment this past week is solidifying our choice for the software we will be using for our PCB design. We also learned more about the scope of the project and started discussing microsoldering and case options.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jacob Nachman	Started looking into the raspberry pi zero and how much power draw it has. Started researching what effect it's power draw will have on battery life, as it will be the biggest battery hog. Researched the various ways we can incorporate the battery onto the PCB board.	7.5	15.5
Nick Lang	Researched possible options for cases such	8	15

	as 3d printing or custom ordering. Researched different software options for 3d modeling.		
Nic Losby	Read multiple blog posts about emulation design. Attempted to write a wrapper for libUSB in C to make low level USB calls.	7	14
Sean Hinchee	Read through emulator source code from 9front project ; Read through documents about composing kernel modules for Linux ; Looked in to how Higan emulator does rom storage and usage	7.5	15.5
Matthew Kirpes	Watched some YouTube videos that had similar projects using raspberry pi.	7	15

Gitlab Activity Summary

Nothing to report.
