EE/CprE/SE 491 WEEKLY REPORT 3

09/27/2024 - 10/03/2024 Group number: sdmay25-15

Project title: Millimeter-wave 3D Scanner Client &/Advisor: Mohammad Tayeb Al Qaseer

Team Members/Role: Nathan Reff, Luke Post, James Peterson, Daniel Ripley-Betts

Week's Overview

This week was a lot of preparation for soldering, getting the plans for soldering, getting the circuit board to solder. We continued our in class activities and 3 of us continued to get smart on the Voron system for when all of the printer parts arrive. We are anticipating soldering next week and potentially some of the printer parts to arrive next week as well. There was not a meeting with our advisor this week.

Key Accomplishments:

- James: Continued research into UI development and Voron printer assembly.
- Luke: Obtained the circuit board and components and made a plan for soldering.
- Nate: Did more research on Voron printers. Prepared for Voron kit by continuing background research.
- Daniel: Researched Voron printer assembly, established base file system for git (if we use it). Discovered that the firmware should be able to handle G-codes so we will still be using some g-code to move the toolhead. (sick last half of week)
- Collectively: We all worked on the empathy maps and personas.

Challenges/Issues:

Nate: None

 Daniel: Not quite sure how we'll control the scan head, guessing a separate control line from the board with the raspberry pi.

Luke: None

James: None

Individual Contributions

		Hours this	Hours
Name	Individual Contributions	week	cumulative
Nate	Worked on figma persona and empathy chart outside of class. Continued more research on Voron Printer and other related components	3	5
	Obtained the circuit board, components, and git files for the circuit. Read through the git files to understand the circuit design and how to solder it. Made plans for soldering. Worked on the figma user persona and empathy chart outside of class.	5	8
Daniel	Researched Voron assembly and boards, set up git folders	2	4
James	Research UI development and Voron assembly	2	4

Upcoming Week's Plan

- Nate: Do more research on UI design and prepare more for Voron equipment by doing more
- Luke: Study the git files for the circuit board more and solder
- James: Stay updated on soldering progress as well as prepare for arrival of Voron kt.
- Daniel: Looking more into Voron boards and how we will interface with the raspberry pi. Be ready for soldering and starting the build

Advisor Meeting Summary

• Key Discussions:

 We did not meet with Dr. Tayeb this week as we are still waiting on the parts for the Voron printer to arrive.

Action Items:

Hurry up to slow down