**WEEKLY REPORT and MEETING AGENDA**

Report #: 1 Project Name: GUIDE

Date: 9/24/2024 Prepared by: Diana Canchola

**Agenda for the meeting**

1. Proposal Presentation Feedback
2. Software
3. Hardware
4. Next Steps/Action Items

**Overall accomplishments since last meeting**

1. Completed Proposal Report with Feedback
   1. Added more requirement values
   2. Added design validation plan
2. Beginning C++ prototype for depth camera
3. Setup Git repository
4. Setup VM for hardware connection
5. Ordered Parts

**Tasks completed by each team member since last meeting**

| Task description | Assigned to | Completed? |
| --- | --- | --- |
| Proposal Report: Executive Summary | Noah Kilpatrick | yes |
| Proposal Report: Introduction | Jack Couture | yes |
| Proposal Report: Literature & Technical Survey | Jack Letsinger | yes |
| Proposal Report: Proposed Work | Diana Canchola | yes |
| Proposal Report: Engineering Standards | Ryan Wu  Alyan Tharani | yes |
| Proposal Report: References | Everyone | yes |
| Proposal Report: CVs and Bios | Everyone | yes |
| Finalize Parts List | Jack Letsinger | yes |
| Update Proposal Presentation | Diana Canchola Jack Letsinger | yes |
| Setup VM | Jack Letsinger | yes |

**Plans for next period**

1. Begin testing RPLiDAR to compare with one ordered
2. Continue software development in generating images from depth camera
3. Begin modeling for potential cane attachments
4. Begin software development for LiDAR data

**Task assignment per team member (to be completed before the next meeting)**

| Task description | Assigned to |
| --- | --- |
| Generate Images from Depth Camera data | Jack Couture Noah Kilpatrick |
| Receive data directly from depth camera instead of CSV files | Jack Couture Noah Kilpatrick |
| Receive distance measurements from LiDAR | Jack Couture Diana Canchola |
| Develop plan for power distribution | Jack Letsinger Ryan Wu |
| Begin testing and generate data from RPLiDAR | Jack Letsinger Alyan Tharani |
| CAD model for cane attachment | Everyone |

**Project management status**

1. We have purchased 7 items that should be coming in this week
   1. Vibration Motors
   2. Batteries
   3. Battery Holders
   4. Microcontrollers
   5. Pin Header Set for Pico
   6. LiDAR (smaller and lighter weight)
   7. Power Button
2. On-track with hardware
   1. Begun testing depth camera
   2. Ordered parts
   3. Setup VM for development
   4. Compare parts ordered with pre-existing hardware
3. On-track with software
   1. Begun developing code for depth camera images
   2. Created central repository
4. Discord Messaging used for communication
5. Google Drive used for documentation and agendas

**Minutes from previous meeting**

Meeting 09/17/2024 Notes

* For the presentation we must add more detail
  + Dimensions of each part
  + Weight of each part
  + Values describing our goals
  + Design and Validation slide
  + Handle Dimensions

Actions/Next Steps

* Must have 90% completion on individual contribution for the proposal report next class
* Edit the proposal presentation to include the details missing

Meeting 09/19/2024 Notes

* Completed the edits for the proposal presentation
  + Added each part’s dimensions and weight
  + Added values for distance of obstacle detection, battery life, latency in seconds, weight of the final design
  + Added two Design & Validation slides to describe how we will test our goals and objectives as well as hardware and software components

Actions/Next Steps

* Complete individual portions of the proposal report for each member of the group
  + CV and bio-sketch
* Complete executive summary of the proposal report
* Continue working with depth camera and software associated through the weekend as a VM operating 24/7 is fully functional for all members of the team