

EE/S E Senior Design: sddec20-28

Micro-Mouse Maze Runner Showcase

Week 3&4 Report

Client: Dr. Phillip Jones

Advisor: Dr. Phillip Jones

Team Members:

Richard Anderson

Austin Chesmore

Tyler Fuchs

Jorge Gomez

Aaron Walter

Joshua Wooi

Bi-weekly Summary

Our team met and decided to increase the working time we have scheduled so we are now meeting thrice weekly. Major contributions from the previous report include testing of hardware and software components. These steps are crucial in getting our entire design functional. Other areas like PCB design and GUI contributions were made. Our net PRIM check in is at the end of october and we would like to be able to show a working prototype for that meeting.

Past Weeks Accomplishments:

- Tested sensor and controllers
- GUI and software connectivity
- PCB initialization
- Conceptual design for Maze created in solid works
- Meeting with Tim in Design Scheduled
- Started integrating software with hardware

Pending Issues:

- Creation of parts for PCB
- C code not running on the feather for the sensors
- Maze CNC design

Individual Contributions:

Team Member	Contribution	Prev Week	This Week	Report Total	Total
Richard Anderson	Maze generation c++, simple MazeSolve c++ (A*),	6	9	15	31
Austin Chesmore	Worked with aj to begin testing software integration with hardware. Worked on sensors, worked on dual motor configuration. Worked with jorge on the pcb	7	11	18	41
Tyler Fuchs	Continued working on GUI and maze drawing. Completed the http requests from the GUI end. Beginning to handle information being sent back from MicroMouse	4	8	12	29
Jorge Gomez	Search for eagle libraries. Looked up how to create schematic and board parts. Discussed simpler methods to pcb completion. Looked at data sheets.	5	5	10	29
Aaron Walter	Did lots of software work: REST framework set up (controllers and JSON API), wireless working, light sensors set up, helped Austin get IDE working with new libraries.	10	13	23	55
Joshua Wooi	Began built on pcb frame based on schematic dimensions. Designed a proposal of free-standing maze walls.	4	3	7	23

Plans for Coming Week:

- Finish PCB design
- Maze Cutting and Completion
- Hardware testing with software