EE/S E Senior Design: sddec20-28

Micro-Mouse Maze Runner Showcase
Week 10&11 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

With one biweekly report left we are feeling the pressure of the final report to complete all our final testing on the micromouse project. Much was done testing the sensors with the feather along with get the robot fully assembled. A chassis was designed to protect the micromouse and will be printed soon. The GUI was updated to the final version and reflects a few changes that were necessary printing to the screen from the mouse. The Maze was cut with a CNC machine and is now done.

Past Weeks Accomplishments:
- Maze Cut and Assembled
- Maze A* algorithm improved for maze running
- GUI updated to final version
- Preformed testing on hardware components

Pending Issues:
- Hardware and software interfacing
- Chasis being 3D printed
- GUI drawing the maze
- Schematic connection errors
- Broken feather

Individual Contributions:

Team Member	Contribution	Prev Week	This Week	Report Total	Total
Richard Anderson	a* modifications (shared ptr, feather compiler, output instructions, maze restructure),	5	11	16	47
Austin Chesmore	Worked on assembly/testing of prototype, assembled test for motor driver and assembled motor encoders.	9	11	19	61
Tyler Fuchs	Created a new GUI that will incorporate our final design features. Got the maze cut and finished, and am working on the keyboard input and maze drawing on the screen.	8	9	17	46
Jorge Gomez	Connected schematic in eagle. It was checked and reconnected. Possible corrections to design found. Found information on routing a pcb. Specified pin connections on pcb.	8	7	15	44
Aaron Walter	Fixed the web framework to be asynchronous. Added code to drive motor controllers. Working with hardware team to get PCB finished	9	10	19	74
Joshua Wooi	Worked with Jorge. Connected schematic in eagle. It was checked and reconnected. Possible corrections to design found. Found information on routing a pcb. Specified pin connections on pcb.	8	6	14	37

Plans for Coming Week:

- Hardware and Software integration
- Chassis printed
- Gui completed
- Finalize schematic and pcb