

EE/S E Senior Design: sddec20-28

Micro-Mouse Maze Runner Showcase

Week 5&6 Report

Client: Dr. Jones

Advisor: Dr. Jones

Team Members:

Richard Anderson

Austin Chesmore

Tyler Fuchs

Jorge Gomez

Aaron Walter

Joshua Wooi

Bi-weekly Summary

This week, we made our first design document, created our first component graph, and finalized the part selection on our bill of materials.

The first revision of the design document described most of what our team has completed so far. It includes requirements, design analysis, and other approaches for the micromouse.

The second revision of the BoM includes parts that will functionally work together. It should be possible to start working on physical hardware after the parts are received.

The Senior Design Website was also updated to include reports and additional links. More developers have an environment set up locally, so other team members can make changes to the site without requiring additional help.

Dr. Jones has requested a separate slide show demonstrating the parts from the BoM and their purpose for the initial Prototype.

Past Weeks Accomplishments:

- Final draft of BoM made for Prototype 1
- First draft of component diagram/graph
- Started to work on project site in down time
- BoM Part reasoning slide show

Pending Issues:

- Talk with Dr. Jones about the BoM, revise document where needed and/or necessary
- Maze design and construction
- We have had much more downtime the past two weeks, so we need to make issues or tasks that we can complete in the down time. Some things we could to include:
 - Refine project site.
 - Start working on parts list for maze components.
 - Start playing with a personal arduino feather.

Individual Contributions:

Team Member	Contribution	Prev Week	This Week	Report Total	Total
Richard Anderson	Site setup, working on site, design doc v1, component graph	2+4	1+4	11	24
Austin Chesmore	Design document, BoM, research, components	2+4	0+3	9	34
Tyler Fuchs	Site Setup, document upload to site and Design Doc, BoM	1+3	1+2	7	24
Jorge Gomez	Researched parts, understanding parts, and design doc,	2+5	1+2	10	24
Aaron Walter	Worked on design document, BoM + research, component graph, (some) site tweaks	2+7	0+4	13	34
Joshua Wooi	Design Doc, BoM, Studied parts functionalities and schematic symbols to begin illustrating schematic diagram	2+4	1+4	11	23

Plans for Coming Week:

- Revise and finalize our BoM so that we can order parts and start working on the actual micromouse
- Potentially work on some SoftwareToHardware implementations (Wireless communication)
- Refine schematic diagram