

# EE/S E Senior Design: sddec20-28

## Micro-Mouse Maze Runner Showcase

### Week 3&4Report

*Client: Dr. Jones*

*Advisor: Dr. Jones*

#### **Team Members:**

Richard Anderson

Austin Chesmore

Tyler Fuchs

Jorge Gomez

Aaron Walter

Joshua Wooi

#### **Bi-weekly Summary**

During these past two weeks we have looked into the components for our first prototype. Now with the parts selected the team is planning on meeting with the client in order to verify and update the progress that has been made before proceeding to producing Prototype 1.

#### **Past Weeks Accomplishments:**

- First draft of the project's Part's List/Bill of Materials.
- Made arrangements for PCB design training with Lee at (ETG)
- Price of parts
  - Feather: (\$19.95 - For prototype)
  - IR sensor: (\$8.74)
  - Wheels
    - Pololu Wheel 60 x 8mm (\$4.25)
    - Solarbotics Hard Plastic Wheels 30 mm x 7 mm(\$1.00)
  - Motor: (\$2.95)
  - Batteries: (\$9.50)

**Pending Issues:**

- A second meeting with Dr. Jones yet to occur (will be meeting this upcoming monday Feb. 17.)
- Components used in our first prototype might need to be verified and approved by Dr. Jones
- Logistics in the construction of the maze is still to be determined since most of our current attention has been on the micromouse prototype

**Individual Contributions:**

<b>Team Member</b>	<b>Contribution</b>	<b>Prev Week</b>	<b>This Week</b>	<b>Report Total</b>	<b>Total</b>
Richard Anderson	Researched BFS algorithms, BFS paths, map nodes and node weight	2+1	2+2	7	13
Austin Chesmore	Researched sensors, batteries, and motors, PCB's	2+5	2+3	12	25
Tyler Fuchs	Researched Wheels and more Maze discovery	2+2	2+3	9	12
Jorge Gomez	Researched PCB, Checked prices for parts	2+3	2+1	8	14
Aaron Walter	Found designs that use Feather microcontroller, contributed to parts list	2+4	2+1	9	21
Joshua Wooi	Researched Wifi Modules	2+2	2+2	8	12

**Plans for Coming Week:**

- Receive approval for parts used in Prototype 1.
- Produce schematic layout of Prototype 1.
- Submit Parts List/BoM for Prototype 1