

CprE 491 WEEKLY REPORT 05
10/11 – 10/17

Group number: 8

Project title: Race of Doom

Client &/Advisor: Dr Bigelow

Team Members/Role: Alex Crandall, Wesley Jansen, Elizabeth Schmitt, Ben Towle, Lalitha Vattyam

- **Weekly Summary**

This week our group met and ended on the same page as to how we should section out the work in a timeline. We got the components that we wanted to use to revise the car ordered on ETG. We also started to put together the pieces of how the hardware of the car works by looking at the schematic from groups that worked on the project in the previous year.

- **Past week accomplishments**

- Team Member 1: Alex Crandall: Met with the group at the Lab to deconstruct the previous car along with gather an idea of components we need to order from ETG for our own assembly
- Team Member 2: Wesley Jansen: I have gone into lab to view how the wires are mapped and trying to understand the cars current condition. I started the vehicle and it drove a little bit uncontrollably. I also tried to connect the arduino that is on there to the battery and see if I could get it to move that way. I think I messed it up however and burnt a wire.
- Team Member 3: Elizabeth Schmitt: Helped plan course of action with timeline and discussed parts and when to meet in the future since a lot of times do not work with everyone. Worked on design document to keep on track and complete it while fresh on mind. Planned to deconstruct current vehicle next week but keep the parts to move car.
- Team Member 4: Benjamin Towle: I worked alongside Wesley to deconstruct the R.C car while gaining a general, high-level understanding of what the hardware design looked like. I also located the Arduino Pinout diagram/Schematic to help understand the way each sensor was connected.

- Team Member 5: Lalith Vattyam: Made a revised version of our timeline and also worked with Alex and the rest of the group to get a high level understanding of the hardware for the car that we received from ETG from previous groups.

- **Pending issues**

Currently we are facing the most issues in understanding how the big car (received from ETG) works. For this we all are going to meet next Monday or Wednesday to get a high level, overall understanding about the hardware behind the car and then demolish and add our components to the revised car.

- **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Alex Crandall	Worked with the team to find resources along with briefly deconstruct the previous vehicle.	6	29
Wesley Jansen	Looked at car mechanics. Viewed current pins. Planned plan of attack to figure out vehicle	7	27
Elizabeth Schmitt	Design Documentation, deconstructive plan.	7	27
Ben Towle	Assisted Wesley with analyzing the car mechanics, also ordered parts from ETG which include the RealSense Camera, and the Raspberry Pi 5	6	28
Lalitha Vattyam	Made revised timeline	6	27

***Starting cumulative hours count on weekly report #1**

- **Plans for the upcoming week**

- Alex Crandall – Using the manuals from the car we plan to work with to better understand the basics of setting up the vehicle. This will allow for us to be able to deconstruct the vehicle with a clear understanding of our goals
- Wesley – Deconstruct current bot after figuring out pins. Get hardware from ETG checked out. Figure out our raspberry pi and see how it can connect to the sensors we have right now.
- Elizabeth – Deconstruct current bot. Solve current mapping. Find out how the camera system works and try to see how to connect camera to raspberry pi.
- Ben – Retrieve parts ordered from ETG, and help to deconstruct the current version of the R.C car. Also, research how we can implement a similar design with the different components that we have.

- Lalith – Work on understanding the hardware of the car along with keeping the group on par with our timeline.
- **Summary of weekly advisor meeting**

During our bi-weekly advisor meeting, we updated Professor Bigelow on what components we have readily available from ETG and the car from last year. After figuring out what we have available, we concluded that our goal for this project will be to have both subgroups work on the hardware design of the vehicle (designed from scratch). That way, our hardware will be standardized and we set up our implementation to diverge based on the software of the vehicle. This meeting was very helpful in giving us a solid blueprint for what we need to get done during the next few weeks.