
CprE 491 WEEKLY REPORT 07

10/25 – 10/31

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 we began disassembling the car that we have been doing research on. During the disassembly, we were able to understand how the components of the car work with one another and how the hardware of the car is connected through the schematic. We refined our schematic to follow a similar high-level concept the previous group had. We will be meeting later this week again to start assembly of the components we ordered from etg.

- **Past week accomplishments**

- Team Member 1: Alex Crandall: Helped disassemble the vehicle and gather components to prepare for the assembly of our RC car.
- Team Member 2: Wesley Jansen : Worked on meeting to see vehicles, found vehicles, storyboarded ideas, added ideas to document and collaborated with team sharing ideas. Thought about ideas for our track and contacted previous group member to ask questions we have.
- Team Member 3: Elizabeth Schmitt : Worked on meeting to see vehicles, looked at software, storyboarded ideas, added ideas to document and collaborated with team sharing ideas.
- Team Member 4: Benjamin Towle : Checked out the needed parts from ETG, Researched how each component can connect to the Raspberry Pi processing board, and assisted with Vehicle deconstruction along with Lalith.
- Team Member 5: Lalith Vattyam: Led the group in disassembly of the car and understood how the components were connected and how they worked with each

other. I also have an understanding of how the component layout should look when we assemble the car.

- **Pending issues**

This week we had troubles with assembly of the car as our schedules have been very busy and we weren't able to procure the components that we ordered from ETG.

- **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 ben for hardware schematic and started simulations	6	41
Wesley Jansen	Came up with assembly plan and port details for starting off basic movement in the software post completion of car assembly	7	41
Elizabeth Schmitt	Worked with Wes to come up with assembly plan and port details for starting off basic movement in the software post completion of car assembly	7	41
Ben Towle	Ordered the necessary parts needed to design our Vehicle HW. Including the Webcam and Raspberry Pi. Added to the Design Documentation as well.	7	42
Lalitha Vattiyam	Worked with the group to disassemble the car and brainstormed ideas for assembly	7	41

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

- **Plans for the upcoming week**

- Alex Crandall – Now that the previous RC car has been broken down, we can set up an initial prototype over the next few weeks
- Wesley – figure out code a bit more, try to start car we have. Meet Dr. Bigelow to set expectations. Figure out how the cars will be.
- Elizabeth – Meet with Dr. Bigelow and talk with him about ideas for obstacles and the course for the race. Try to get a better understanding of the code.
- Ben – Continue researching both the webcam and rplidar sensor's sdk's and determine which location on the vehicle is the most optimal for each sensor.
- Lalith – Keep the group on pace to finish the assembly of the car in the next couple of weeks, and specifically make sure the component assembly happens in the next 10 days.

- **Summary of weekly advisor meeting**

We did not meet with our advisor this week as we meet with Dr. Bigelow every two weeks. We informed him last week about how we plan on disassembling and assembling our car and was on board with the components we ordered and our plan. During this meeting we were also able to clarify doubts that we had about the use of raspberry pi and the processing power when looking at image recognition.