Weekly Report #2

CPR E 491
Team 26
Robot League
10/10/2021

Members:

Brogden Worcester - Client interaction

Dalton Holdredge - Document submitter/creator

Noah Brooks - Hardware team leader

Joseph Holtkamp - Software team leader

Jordan Suby - Individual component design

Cheyenne Smith - Team organizer

Tejas Agarwal - Finance officer

David Quan - Progress coordinator

What we've accomplished in the past week / what we've been researching:

Brogden Worcester - Joined Jira and assigned tasks to myself. Light research on different types of motors and motor controllers. Reviewed GITLAB posts.

Dalton Holdredge - Researching which motor drivers will interface the best with the motors and raspberry pi. Worked on EML coursera course. Got the first prototype to be able to be driven over WiFi. Started working on a second prototype with a slightly different design to test its functionality.

Noah Brooks - Finished the first prototype- research into object detection and video streaming from bot.

Joseph Holtkamp - Tested different implementations of websocket connections in golang and python. Researched Unity and decided it is not the best fit for our project needs. Began researching Flutter as a possible environment to build our application in with cross-platform compatibility.

Jordan Suby - Worked on the first 2 modules of the Coursera course on machine learning. Coordinated with other software members for future in-person meetings.

Cheyenne Smith - Little more research on Machine Learning and Raspberry Pi

Tejas Agarwal -

David Quan - Still working through the machine learning coursera and helping out with documentation that's due this week. Helped develop and organize the lightning talk for the previous week

What we're planning to do in the coming week:

Brogden Worcester - Learn more about campus resources including Student Innovation center, the Hive, and 3D printing. Meet as a hardware subteam in addition to the weekly meetings. Inquire about abandoned electronic parts in building basement and look to see if any motors we can use.

Dalton Holdredge - Meet with hardware team to get us all on the same page. Make significant progress on coursera course. Start researching on different methods of object detection using a camera.

Noah Brooks - write a more interactive driving code for the bot and start work on camera operation

Joseph Holtkamp - Continue researching Flutter as a framework for our application's frontend. Experiment with implementations of socket servers more. Meet with the app-dev team to discuss the tools and technologies we will be using, what we need to learn, and divide ourselves to see who focuses on the frontend and who focuses on the backend.

Jordan Suby - Continue learning through coursera and other resources. Get a better understanding of where we're at and what we should focus on next at our in-person meeting.

Cheyenne Smith - Learning more about the framework we are working on. Working on machine learning and raspberry pi. Along with testing some code if time.

Tejas Agarwal - Make progress on the coursera course, meet with other hardware team members, and research object detection.

David Quan - Provide assistance for documentation needed for the upcoming weeks and hopefully interface with the bot in some way in the upcoming week or the week following.

Issues we had in the previous week:

Brogden Worcester - Recovering from family sickness, catching up on previous homework and deadlines.

Dalton Holdredge - The L293D and L298N motor drivers that we have are not easily connected to the rest of the hardware, so we will be getting a new motor driver shield that will hopefully have fewer issues. The battery pack we currently have does not supply enough current, so we got new batteries to raise the voltage from 7V to 18V, and more than double the current capacity.

Noah Brooks - no issues

Joseph Holtkamp - Busy with other course projects. Did not get to spend as much time as desired on the project.

Jordan Suby - Had a large assignment in my other class that took up most of my focus, including needing to write an essay from scratch unexpectedly.

Cheyenne Smith - Other course work took priority. Mental and physical health issues both should hopefully be solved next week.

Tejas Agarwal - Was left a little out of the loop on the hardware side, but I let the others know and we will be meeting in person next week to remedy that.

David Quan - No issues