

Agenda

- **Introductions:**
 - Gavin Petrak, Computer Engineering
 - Andrew Kraft, Electrical Engineering
 - Peter Wissman, Computer Engineering
 - Jack Doe, Software Engineering
 - Jacob Nedder, Cybersecurity Engineering

- **Design Review:**
 - Premade RC car and modifying it to run on a Raspberry Pi
 - Photoelectric sensors pointed at ground to locate tape
 - LiDAR sensor can scan in any direction to spot obstacles
 - Autonomous steering, variable speed controlled by user
 - Using PuTTY to obtain feedback from the Raspberry Pi
 - Remote control altered to only allow speed to be controlled

- **Design Changes:**
 - Photoelectric sensors pointed at angle towards ground
 - Potentially need to redesign RC car body if components don't fit underneath it
 - Need to create a mount for all components on the car
 - Look into distributing weight on the car to prevent tipping

- **Objectives and Requirements:**
 - Finalize design of RC car
 - Finish implementing design in RC car, while keeping in mind the requirements and constraints of the project
 - Research implementation strategies from F1Tenth

- **Schedule and Milestones:**
 - **Jan 14 - Feb. 18** - Create a bridge connecting the RC car to the computer and/or host.
 - **Feb. 1 - Feb. 18** - Ensure a secure method of communication between the car and the computer is made.
 - **Feb. 18 - Mar. 10** - Build software to handle information being sent from the RC car to the PC.
 - **Mar. 3 - Mar. 10** - Ensure old test values are not stored which could mess with autonomous functionality.

- **Mar. 10 - May. 5** - Create autonomous features based on the software previously built.
- **Apr. 10 - May. 5** - Improve the efficiency of all functions to a 90% success rate.
- **Team Review:**
 - Each group, consisting of the track and car groups, wanted a quick check-in on our current progress. Based off of the information we have presently given each other, individual testing of our components seems to be of utmost importance. Also, we want the track team to give us specific requirements when it comes to constraints.
- **Q/A:**
 - There was no concrete Q/A built into the session. We concurred with the other groups to figure out what each group was working on in the moment as this information will be updated on a weekly basis as the team representatives will be meeting on that time interval.

Meeting Notes

- Track team needs to find a location to build the track.
- Look into protection of RC car if light rain were to occur.
- Get turning radius of RC car and tell track team
- Continue study of Robot OS

Summary

- Race Of Doom: Car Team 2
 - Attendance: Peter Wissman, Gavin Petrak, and other team's representatives
- Main Points:
 - The track team needs to find a spot to demo the final project. While this does not directly involve our team, we were told to continue to look out for possible locations and communicate with the track team accordingly.
 - Find a time to meet with your team members at least once a week to work on the project. (We've completed this action before meeting with the advisor)
 - Come up with a timeline for the rest of the semester

- Divide up the work how the team sees fit, make sure everyone is working on something. Ask for help if needed.
- Contact the advisor if a team member is not contributing enough to the project or not communicating with the team.
- Decisions Made:
 - No concrete decisions made, just continue to communicate with your team and the other teams
- Future Actions:
 - Come up with a design track for the team for the semester
- Next Steps:
 - Research implementation
 - Create a timeline for the team
 - Assign tasks to each member in accordance with major (most likely)