**Plan of Study**

Essentially I’m thinking of doing a majority of the mechanical portions of my project before my software requirements.

During the month of September, I plan to create the robot, but also at the same time see if there’s any other improvements I’d like to do and make notes on it. I also plan to get the robot up and running and see both speed and turning abilities. Also during this time, I can make notes on how the “game field” should look like.

October will have to be part 1 of developing the software. I need to figure out firstly how communications will be between the software and the robot so a simple test or going forward, left, right and backwards seems to be good. I will also plan here if for the movement of the robot if going backwards is better or if turning the robot 360 degrees would be better. I also plan to see if I’m able to make a rudimentary website/game page to at least make the robot follow my control inputs as well as see how the final game should look like.

November will be part 2 of developing the software as all the kinks from mechanical should be done at this point. I would need to polish and build on the web game interface as well as see how the Raspberry Pi camera would work probably by overlaying the camera feed over the controls or better yet just have them always on providing a cool first person experience.

December will be the final phase with me working on the write-up, collecting all my research notes and basically getting ready for the presentation. I also plan to see if I can get any last minute additions onto the robot or software. I will also do some more stress testing (this will be done in every stage), but it’s honestly just to have a final stress test, for movement, software, robot controllability, visuals, and also even battery so I can see if I would need extra batteries for the presentation.

Overall a lot of this project depends if mechanical parts don’t fail as well as the software not encountering some hiccups but it should be thought of as there will be thus when issues arise work on them immediately.

**Gantt Chart**