Work Report Summary

Date Assigned: 8th April, 2019
Date Submitted: 13th April, 2019
Name: Abhishek Deshpande
Subsystem: Coding

***WRO 2019* Progress:**

- Navigation: Code for navigation based on the readings from the ultrasonic sensor was written. The bot moves based on input taken from the user in the form of distance that is to be moved in the X and Y axes individually. The current code is written without the use of encoders. Those will be implemented once proper testing is completed on the current code.

  https://github.com/RoboManipal-9-0/Coding-FirstYears/blob/abhishekDeshpande/navCode/navCode.ino

***ROS* (Issue #1):**

https://github.com/RoboManipal-9-0/Coding-FirstYears/issues/1

- Installed ROS on Linux.
- Read up on the tutorials regarding packages, nodes, messages, topics and other terminology required to understand ROS and executed the given commands to better understand the terms and mechanisms involved.

Issues Faced

***Navigation*:**

- Issues faced and corrections made:
  - Avoiding obstacles and also navigating was troublesome when using the same function. Using a general function for avoiding the obstacle in any direction worked better.
  - By using encoders and ultrasonic sensors, we can know the direction in which the obstacle is present and can move the bot by the required distance while avoiding the obstacle.