Lab 2B.1

The objective of this module of the lab was to create a shared space for all the code that will be written over the course of the project. This was accomplished by using GitHub, a common tool for code sharing. This team website was also generated by one of our members to display the team's work throughout the project.

Lab 2B.2

Module 2 focuses on working with visualizations of the racecar in two tools: Gazebo and RViz. Team members published ROS messages to Gazebo containing an angle and velocity for the robot and watched simulations of it driving through the MIT tunnels, its eventual race course. ROS messages were also used to connect the simulators to the joypad, allowing team members to drive their robots around on the computer. RViz allowed the team to view the laser-scanning capabilities of the robot.

Lab 2B.3

Module 3 was the team's first attempt to operate the sensors on the robot. First, ssh (secure shell) was used to connect wirelessly to the machine and then RQT was utilized to see through the camera on a laptop. Last, RViz was again used to view the output from the laser scanners, allowing us to see motion in front of the robot in real time.