Activity Sheet: Day 1

Link to bootcamp repo: https://github.com/UTSARobotics/ros1_bootcamp

1 Introduction

Today's activity will demonstrate the basic commands you have available in a ROS workspace.

2 ROS Basics

2.1 Basics

- 1. Launch Gazebo file: roslaunch smb_gazebo smb_gazebo.launch
- 2. Inspect ros nodes

```
rosnode list
rostopic list
rostopic echo [TOPIC]
rostopic hz [TOPIC]
rqt_graph
```

3. Give robot a velocity command

Note: For the rostopic pub you can do tab after /cmd_vel in order to generate the message format. I did x: +2 and then x:-2. Do whatever you like to give command.

2.2 Build a package

1. Build teleop twist keyboard package and use to control your robot

2.3 Create a launch file

1. Write a launch file that includes $smb_gazebo.launch$ and pass it an arg for the world: 'worlds/robocup14_spl_field.world'

