INSTRUCTIONS FOR RUNNING THE CODE

1. The package for running the simulation is named **velocity_publisher.**
2. Please run the below command to launch the turtlebot3 in the gazebo environment:

   roslaunch velocity_publisher velocity_publisher.launch
3. After launching the above file, please run the below command to make the robot go to the goal position:

   rosrun velocity_publisher robot_control

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4. If you want to run the planning algorithm run the following command:

   rosrun velocity_publisher rrt_pygame or
   rosrun velocity_publisher rrt_star_pygame or
   rosrun velocity_publisher rrt_star_quick_pygame

   It will generate a **shortest_path.txt** file with the waypoint nodes for the robot to follow.
5. Then you can follow steps 2 and 3 again to simulate that path.
6. External Dependencies required for the ROS **robot_control** node:
   a. rospy
   b. rospkg
   c. tf
   d. geometry_msgs
   e. sensor_msgs

PS: Feel free to contact me if you have any difficulties in running the code. Thank you.