Final Task (1)

1. Install the standalone version of gazebo and run it. After successfully installing it you should test and run gazebo to verify that the installation was successful.

2. Install the gazebo ros pkgs which are responsible for the communication and connection of gazebo to ROS. After successfully installing the package you should test and run gazebo from the gazebo ros package and check the topics and nodes available which are provided by gazebo.

3. Install the ready-made Husky mobile robot package .

4. Show the list of topics available when launching Gazebo with the Husky mobile robot

5. Move the Husky mobile robot in gazebo by sending/publishing the matching message with the matching topic using cpp code.

6. Write and implement a service. This service will be written in the same cpp file that is used to move the Husky robot. This service is responsible for changing/setting the angular velocity of the Husky mobile robot. The service should take as a request a msg of type ”float64” and return a message of type ”String”. The request represents the angular velocity we wish our Husky robot to rotate with, the string message is just a message that is printed saying ”Angular Velocity Set”.

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