1. **Install the dependent packages, starting from your catkin\_ws/src folder:**

1-cd ~/catkin\_ws/src/

2-git clone https://github.com/ROBOTIS-GIT/turtlebot3\_msgs.git

3-git clone https://github.com/ROBOTIS-GIT/turtlebot3.git

4-cd ~/catkin\_ws && catkin\_make

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**TurtleBot3 has three models, add this line export TURTLEBOT3\_MODEL=burger at the bottom of the file to go with "burger model" after you enter the command:**

gedit ~/.bashrc

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Save and quit the file.

#### reload .bashrc so that you do not have to log out and log back in.

source ~/.bashrc

### 2. Download the TurtleBot3 simulation files.

cd ~/catkin\_ws/src/

git clone https://github.com/ROBOTIS-GIT/turtlebot3\_simulations.git

cd ~/catkin\_ws && catkin\_make

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**3. Launch the virtual robot using Gazebo**

**First, launch TurtleBot3 in an empty environment by :**

source devel/setup.bash

roslaunch turtlebot3\_gazebo turtlebot3\_empty\_world.launch

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Your screen should look like this:

A screenshot of a computer screen

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### 4. To control the movement of your TurtleBot:

#### In a new terminal tap:

source devel/setup.bash

roslaunch turtlebot3\_teleop turtlebot3\_teleop\_key.launch

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