**ASSIGNMENT 8**

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**Create the Robot Simulation Environment and Perform Build navigation applications using Turtlebot3 Burger.**

**Steps:**

* export TURTLEBOT3\_MODEL=burger
* $ roslaunch turtlebot3\_gazebo turtlebot3\_world.launch
* In another terminal, launch the following commands:
* export TURTLEBOT3\_MODEL=burger
* $ roslaunch turtlebot3\_navigation turtlebot3\_navigation.launch map\_file:=$HOME/map.yaml
* Initial Pose Estimation must be performed before running the Navigation as this process initializes the AMCL parameters that are critical in Navigation. TurtleBot3 has to be correctly located on the map with the LDS sensor data that neatly overlaps the displayed map.
* For this click on 2D pose estimate and overlap
* Then finally using the 2D nav goal and drag the green arrow to allow the robot to move into that point.



