

en/catkin\_ws/src/turtl



gazebo11.desktop

"Gazebo" is ready

http://localhost:11311

th pid [3617]

.host:11311

a-183c-11ed-adee-471755cceda4

with pid [3627]

out]

with pi [3630]

rted with pid [3632]

rted with pid [3638]

706]: waitForService: Service [/gazebo/set\_physics\_properties] has not been advertised, waiti

139]: Finished loading Gazebo ROS API Plugin.

839]: Finished loading Gazebo ROS API Plugin.

106]: waitForService: Service [/gazebo\_gui/set\_physics\_properties] has not been advertised, w

680]: waitForService: Service [/gazebo/set\_physics\_properties] is now available.

755]: Physics dynamic reconfigure ready.

204, 0.176000000]: Camera Plugin: Using the 'robotNamespace' param: '/'

626, 0.176000000]: Camera Plugin (ns = /) &lt;tf\_prefix\_&gt;, set to ""

finished cleanly

s/log/38a9e6da-183c-11ed-adee-471755cceda4/spawn\_urdf-4\*.log

834, 0.176000000]: Laser Plugin: Using the 'robotNamespace' param: '/'

092, 0.176000000]: Starting Laser Plugin (ns = /)

945, 0.176000000]: Laser Plugin (ns = /) &lt;tf\_prefix\_&gt;, set to ""

708, 0.176000000]: Starting plugin DiffDrive(ns = //)

5280, 0.176000000]: DiffDrive(ns = //): &lt;rosDebugLevel&gt; = na

2152, 0.176000000]: DiffDrive(ns = //): &lt;tf\_prefix&gt; =

4009, 0.176000000]: DiffDrive(ns = //): Advertise joint\_states

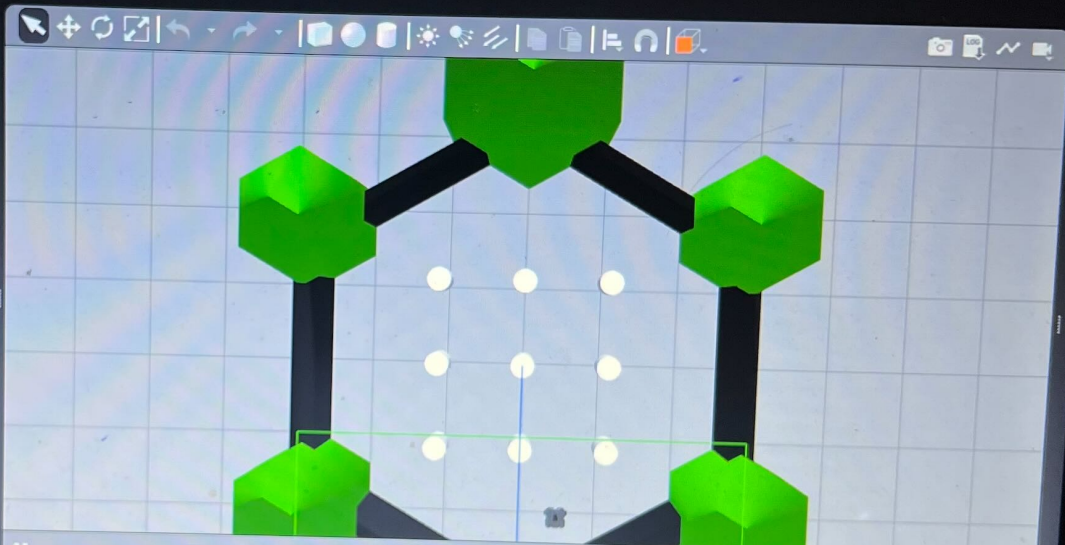
5576, 0.176000000]: DiffDrive(ns = //): Try to subscribe to cmd\_vel

7132, 0.176000000]: DiffDrive(ns = //): Subscribe to cmd\_vel

9690, 0.176000000]: DiffDrive(ns = //): Advertise odom on odom



- GUI
- Scene
- Spherical Coordinates
- Physics
- Atmosphere
- Wind
- Models
- Lights



```
>, set to ""
[spawn_urdf-4] process has finished cleanly
log file: /home/haneen/.ros/log/67632e20-183f-11ed-bf64-af4e04c8ef67/spawn_urdf-4*.log
A [ INFO] [1660089822.171972069, 0.001000000]: Laser Plugin: Using the 'robotNames
vspace' param: '/'
M [ INFO] [1660089822.172704168, 0.001000000]: Starting Laser Plugin (ns = /)
L [ INFO] [1660089823.159279968, 0.001000000]: Laser Plugin (ns = /) <tf_prefix_>
, set to ""
[ INFO] [1660089825.249626238, 0.001000000]: Starting plugin DiffDrive(ns = /)
Prop [ INFO] [1660089825.250248901, 0.001000000]: DiffDrive(ns = /): <rosDebugLevel>
= na
[ INFO] [1660089825.252426318, 0.001000000]: DiffDrive(ns = /): <tf_prefix> =
[ INFO] [1660089825.255244238, 0.001000000]: DiffDrive(ns = /): Advertise joint
_states
[ INFO] [1660089825.256632764, 0.001000000]: DiffDrive(ns = /): Try to subscrib
e to cmd_vel
[ INFO] [1660089825.261138859, 0.001000000]: DiffDrive(ns = /): Subscribe to cm
d_vel
[ INFO] [1660089825.262651390, 0.001000000]: DiffDrive(ns = /): Advertise odom
on odom
```

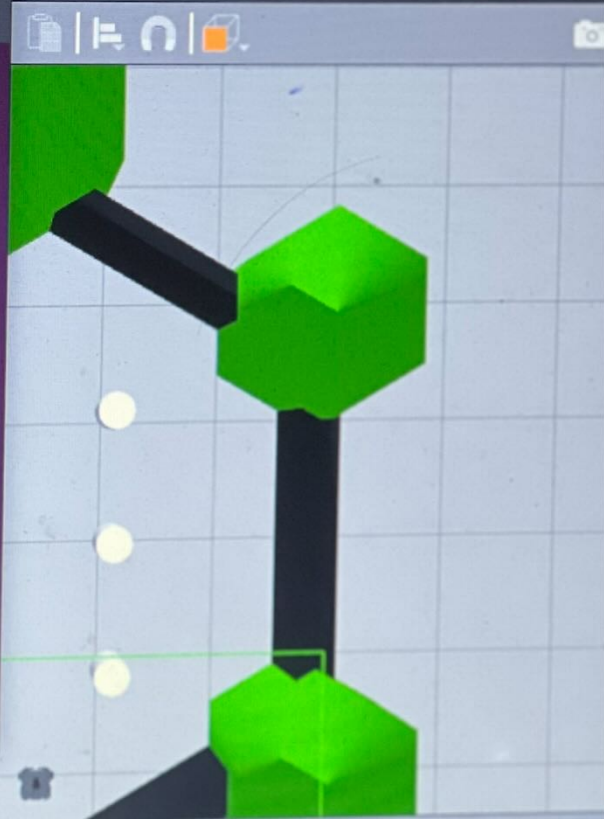


03:07 10 أغسطس

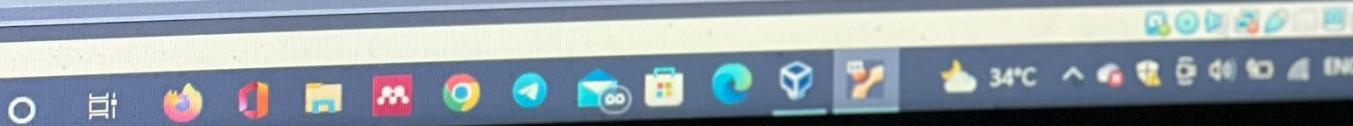
Gazebo

.../catkin\_ws/src/turtlebot3\_simulations/turtle...

```
process has finished cleanly
haneen/.ros/log/67632e20-183f-11ed-bf64-af4e04c8ef67/spawn_urdf-
822.171972069, 0.001000000]: Laser Plugin: Using the 'robotNames
822.172704168, 0.001000000]: Starting Laser Plugin (ns = /)
823.159279968, 0.001000000]: Laser Plugin (ns = /) <tf_prefix_>
825.249626238, 0.001000000]: Starting plugin DiffDrive(ns = //)
825.250248901, 0.001000000]: DiffDrive(ns = //): <rosDebugLevel>
825.252426318, 0.001000000]: DiffDrive(ns = //): <tf_prefix> =
825.255244238, 0.001000000]: DiffDrive(ns = //): Advertise joint
825.256632764, 0.001000000]: DiffDrive(ns = //): Try to subscrib
825.261138859, 0.001000000]: DiffDrive(ns = //): Subscribe to cm
825.262651390, 0.001000000]: DiffDrive(ns = //): Advertise odom
```



Real Time Factor: 0.97 Sim Time: 00 00:03:58.043 Real Time: 00 00:05:26.252 Iterations: 238043 FPS: 5.7





/opt/ros/noetic/share/turtlebot3\_slam/launch/turtlebot3\_s...

/home/haneen/catkin\_ws/src/turtleb...

/opt/ros/noetic/share/turtlebot3\_sla...

```
* /turtlebot3_slam_gmapping/str: 0.1
* /turtlebot3_slam_gmapping/stt: 0.2
* /turtlebot3_slam_gmapping/temporalUpd
* /turtlebot3_slam_gmapping/xmax: 10.0
* /turtlebot3_slam_gmapping/xmin: -10.0
* /turtlebot3_slam_gmapping/ymax: 10.0
* /turtlebot3_slam_gmapping/ymin: -10.0
```

#### NODES

```
robot_state_publisher (robot_state_p
rviz (rviz/rviz)
turtlebot3_slam_gmapping (gmapping/s
```

```
ROS_MASTER_URI=http://localhost:11311
```

```
process[robot_state_publisher-1]: starte Initializing
```

```
ERROR: cannot launch node of type [gmapping/slam_gmapping]: gmapping
ROS path [0]=/opt/ros/noetic/share/ros
ROS path [1]=/home/haneen/catkin_ws/src
ROS path [2]=/opt/ros/noetic/share
process[rviz-3]: started with pid [4193]
```



r1.14.14 (noetic)

```
$ export TURTLEBOT3_MODEL=burger
$ roslaunch turtlebot3_teleop turtlebot3_teleop_key.launch
```

Control Your TurtleBot3!

Alt + T and launch the SLAM node. The Gmapping is  
keyword among burger, waffle, waffle\_pi for the

ter?

will be exploring unknown area of the map using  
nts such as changing the linear and angular speed too  
good practice to scan every corner of the map.

from the Remote PC.

le, waffle\_pi for the TURTLEBOT3\_MODEL parameter.

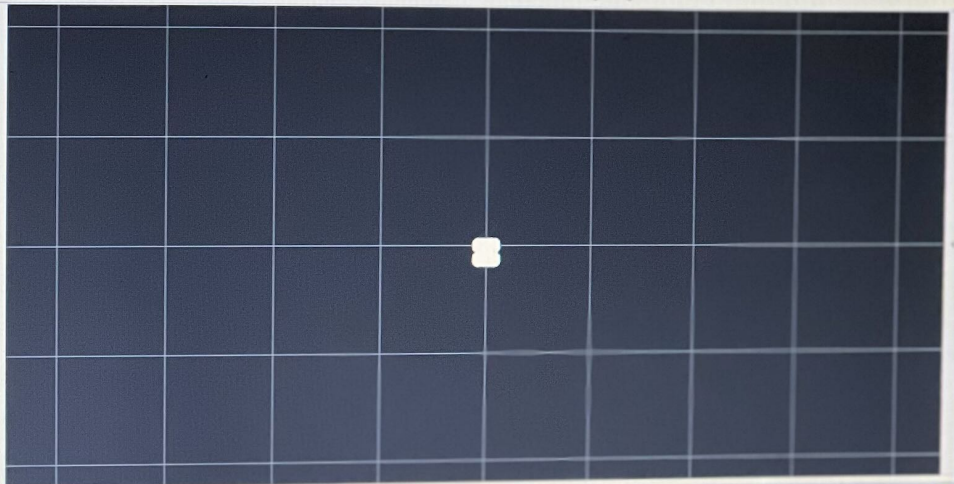
File Panels Help

Interact Move Camera Select Focus Camera Measure 2D Pose Estimate 2D Nav Goal Publish Point

Displays

- Global Options
- Global Status: Error
- Grid ☒
- RobotModel ☒
- TF
- LaserScan ☒
- Image
- Map ☒
  - Status: Warn
  - Topic /map
  - Alpha .5
  - Color Scheme map
  - Draw Behind ☐
  - Resolution .
  - Width .
  - Height .

Add Duplicate Remove Rename



Time

ROS Time: 1283.15 ROS Elapsed: 202.62 Wall Time: 1660091187.76 Wall Elapsed: 231.18

Reset RViz is ready.

Experimental 9 fps