

Maze Runner

IIT Palakkad

Team Name :- Server_down

Team Members :-

- 1.) Tanishq Chaudhary (Leader)
- 2.) Arjun PS
- 3.) Aaditya Pramod

A.) All the changes made in the given URDF

- 1.) a.) File name:- mobot.gazebo
b.) Line number:- 124
c.) Change:- Changed 5 to 720 to increase no of lasers which increases the accuracy of the bot.

B.) Extra Plugins

- 1.) No extra plugins were used.
- 2.) But yes we used the gazebo service to get the position and orientation of mobot in the gazebo. The file odom.py was created to get start the service for getting Odom as well as it publishes the tf of Odom which is further used in gmapping.

B.) Extra Packages

- 1.) Gmapping package used to create the map.
- 2.) The map server package is used to save the map of the maze.

C.) Key features of the algorithm

- 1.) It works on the left wall follower algorithm.
- 2.) It receives distances from obstacles with the help of lidar.

D.) The starting method of bot for each run

- 1.) Once the bot passes out of the maze it will reach the starting again by following the external wall.