

Iniziato	martedì, 21 gennaio 2025, 18:29
Stato	Completato
Terminato	martedì, 21 gennaio 2025, 18:34
Tempo impiegato	4 min. 38 secondi
Valutazione	0,00 su un massimo di 33,00 (0%)

Domanda 1

Risposta non data

Punteggio max.: 6,00

Please describe how you would change the implementation of your 1st assignment in case you would like to let the user modify the threshold related to the distance of the two robots.

Please refer to the practical implementation of your 1st assignment, clearly showing what you would change / add. However, the practical implementation of the code is not required here.

Domanda 2

Risposta non data

Punteggio max.: 8,00

Modify the implementation of your second assignment (ROS2) by adding:

- a publisher of the robot's distance to a fixed point in the environment (i.e., $x = 10$, $y = 10$);
- a service to modify the robot's linear velocity

Please upload the modified ROS2 package on a dedicated branch on your Github repository, and copy here the link.

Domanda 3

Risposta non data

Punteggio max.: 5,00

You have a robot that should move autonomously in a circuit, giving to the user the possibility of changing the maximum velocity of the robot. Please draw here a possible architecture of the system (if you want, you can upload a file, but it is not mandatory), including nodes, services, and topics that you will use to let the nodes interact with each other (include here the also the node for the simulation environment).

You can upload a picture, or use any kind of software to implement it.

Domanda 4

Risposta non data

Punteggio max.: 6,00

Speaking about the 2nd assignment (ROS part), suppose that you would like to provide the user with the possibility to set a list of waypoints instead of just a single target. Please describe how you would change the implemented architecture in order to achieve this aim.

Please refer to the practical implementation of your 1st assignment, clearly showing what you would change / add. However, the practical implementation of the code is not required here.

Domanda 5

Risposta non data

Punteggio max.: 8,00

Modify the node (a) that you have implemented here for your second assignment by adding:

- a service client for node (b), that also prints the response of the server, integrated with the user interface (e.g., callable by the user).
- a publisher of the distance of the closest obstacle (hint: you can reuse the node `reading_laser.py`)

Please upload the modified ROS package on a dedicated branch on your Github repository, and copy here the link.