ELTE | IK INFORMATIKAI KAR | DEPARTMENT OF ARTIFICIAL INTELLIGENCE

AI Robotics Labor Midterm no. 1

Description:

Allocated time: 80min + 10 min reserve

Story:

You have received a sensor, that's purpose is to measure the surroundings of the robot and give some encoded signal about environment. You could't find a documentation about the sensor, but Your collegue told You that the sensor is either giving You a negative number, a positive odd number or a positive even number.

You already done most of Your job regarding the understanding of the function and the following things You managed to figure out regarding the usage of the sensor in Your project:

- *IF the sensor gives a negative number → the robot needs to turn (120 degrees) right*
- *If the sensor gives a positive odd number → the robot needs to move 2 unit forward (4.0)*
- *If the sensor gives a positive even number → the robot needs to move 1 unit forward (2.0)*

Subtasks:

- Install the sensors package [*unzip midterm_sensor_1 to your work space and install it*]
- Investigate in which topic it sends the messages, and what are the types used (1 pt)
- Make a package for the solution with Your neptune code as package name (1 pt)
- Make a node that can subscribe the the sensors data (3 pt)
- Modify the node so it can send commands to TurtleSim (5 pt)

Total: 10 pts

Upload outcome (package + printscreen of the TurtleSim)!!!

If You finish earlier than the max time, You can ask me for checking.

After the midterm You have 2 working days to send me a 1-2 page summary of the task. (5pts)