Robot Operating System(ROS)

Linux for Robotics

Task 0

- Inside your workspace (~/catkin_ws/src/), create a new folder named linux_exam.

Task 1

- Inside the linux_exam folder, create a new bash script named task1.sh, that does the following:

  a) First, it moves inside the linux_exam folder.

  a) Once it is there, it generates a folder structure like the following one: this->is->my->linux->exam

  b) Inside the final folder, named exam, it creates a new file named my_file.py

  c) Finally, it prints to the screen the following string:

This bash script has finished!

Task 2

Given the following ROS commands:

- To make the Turtlebot robot perform a small square movement:

  rosrun linux_exam small_square.py

- To make the Turtlebot robot perform a medium square movement:

  rosrun linux_exam medium_square.py

- To make the Turtlebot robot perform a big square movement:

  rosrun linux_exam big_square.py

Inside the linux_exam folder, create a new bash script, named **task2.sh**, that does the following:

It receives one parameter, which can contain one of the following values:

small_square
medium_square
big_square

If the parameter is small_square, the bash script will make the Turtlebot robot perform the small square movement.

If the parameter is medium_square, the bash script will make the Turtlebot robot perform the medium square movement.

If the parameter is big_square, the bash script will make the Turtlebot robot perform the big square movement.

Task 3

Inside the linux_exam folder, create a new bash script, named task3.sh, that does the following:

a) First, it goes to the folder named exam, which you created in Task 1.

b) Once there, it removes any existing file, and it creates 3 new ones, named like this: exam1.py, exam2.py and exam3.py.

c) Finally, it assigns to each file the following permissions:

exam1.py:

Owner: Read, Write and Execute

Group: Read and Execute

All others: Read

exam2.py:

Owner: Read and Execute

Group: None

All others: Execute

exam3.py:

Owner: Write

Group: Read

All others: Execute