

 Type of project

Individual

 Duration

30 min

 Passed Peer Reviews

0/2

## Git project



ssh://git@repos-ssh.21-school.ru:2289/students/ROS.\_Day05.ID\_568832/aarchiba\_python\_...

Copy link

Open

## Student



aarchiba-python-ds

level 1

## About



Introduction

The methodology of School 21 makes sense only if peer-to-peer reviews are done seriously. Please read all guidelines carefully before starting the review.

- Please, stay courteous, polite, respectful and constructive in all communications during this review.
- Highlight possible malfunctions of the work done by the person and take the time to discuss and debate it.
- Keep in mind that sometimes there can be differences in interpretation of the tasks and the scope of features. Please, stay open-minded to the vision of the other.
- If you have not finished the project yet, it is compulsory to read the entire instruction before starting the review.

## Guidelines

- Evaluate only the files that are in src folder on the GIT repository of the student or group.
- Ensure to start reviewing a group project only when the team is present in full.
- Use special flags in the checklist to report, for example, an “empty work” if repository does not contain the work of the student (or group) in the src folder of the develop branch, or “cheat” in case of cheating or if the student (or group) are unable to explain their work at any time during review as well as if one of the points below is not met. However, except for cheating cases, you are encouraged to continue reviewing the project to identify the problems that caused the situation in order to avoid them at the next review.
- Doublecheck that the GIT repository is the one corresponding to the student or the group.
- Meticulously check that nothing malicious has been used to mislead you.
- In controversial cases, remember that the checklist determines only the general order of the check. The final decision on project evaluation remains with the reviewer.

## Main part



### Exercise 00 - Learning SLAM Gmapping in turtlebot3 simulation.

- The folder contains the files map\_turtlebot3\_house.pgm and map\_turtlebot3\_house.yaml?
- Does map\_turtlebot3\_house.pgm look like the turtlebot3\_house map?
- Does map\_turtlebot3\_house.yaml contain map parameters?

### Exercise 01 - Exploring AMCL localization in turtlebot3 simulation

- The folder contains the file screenshot\_turtlebot3\_localization.png?
- Does the screenshot\_turtlebot3\_localization.png image look like the turtlebot3\_house map?
- Is the robot in an empty room in the screenshot\_turtlebot3\_localization.png image?

### Exercise 02 - Localization of your robot.

- Does the folder contain the ROS files of the robot metapackage (not turtlebot3) with everything needed to run?
- The folder contains the files map\_my\_robot\_house.pgm, map\_my\_robot.yaml, screenshot\_my\_robot\_localization.png?
- Does map\_my\_robot\_house.pgm look like the turtlebot3\_house map?
- Does map\_my\_robot\_house.yaml contain map parameters?
- Is the robot (not turtlebot3) in the screenshot\_my\_robot\_localization.png image in an empty room?

### Exercise 03 - Get out of the maze and return to the starting point on your robot

- You need to launch the robot from the participant's repository in the final maze of the competition. All participants are tested on one previously unknown maze, on the same computer, to ensure equal conditions.

The result should be the time for the robot to complete the task in minutes and seconds to find the exit from the maze to the green cube and return back to the starting point from the start of the command to the robot\_start topic until the command to the robot\_finish\_maze\_in topic after the robot stops completely. The time is taken from the time the message was received.

If the robot started moving before the robot\_start command, the task is not counted and 0 points are awarded.

If after the robot sends a command to the robot\_finish\_maze\_in topic, the robot continues to move, then the task is not counted and 0 points are awarded.

If, after the robot sent a command to the robot\_finish\_maze\_out topic, the robot did not leave the maze with the whole body, then the task is not counted and 0 points are awarded.

If, after the robot sends a command to the robot\_finish\_maze\_in topic, the robot is not in the place where it started from, then the task is not counted and 0 points are awarded.

- Does the folder contain the robot metapackage ROS files with everything needed to run?
- Does the metapackage compile without errors?
- Launch file of the robot on the competitive maze started without errors?
- Did the robot complete all the tasks and get the execution time?
- Did the robot violate any conditions?

- In the ROS metapackage of the robot, it is forbidden to use move\_base and scheduler plug ins from the Navigation stack ROS, if their use is detected, then the task is not counted.

## Feedback



### Fails

### Comment