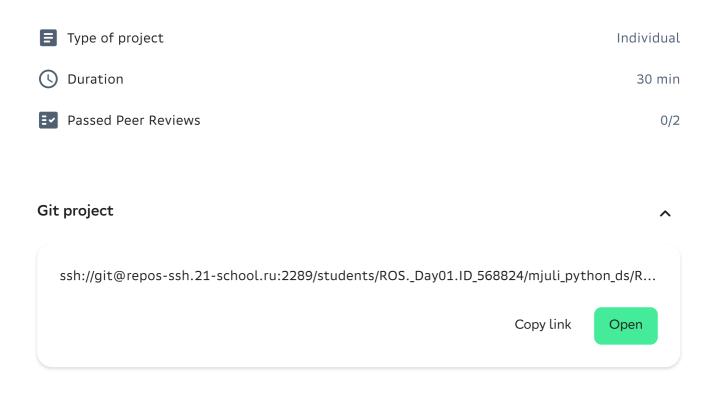


← Project review - ROS. Day01



Student



mjuli-python-ds

level 0

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 t his review.
- Highlight possible malfunctions of the work done by the person and take the time to disc uss and debate it.

- Keep in mind that sometimes there can be differences in interpretation of the tasks and t he 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 bef ore 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 do es 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 a ny 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 probl ems 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 - Writing a Simple Service and Client (C++).

- Does the package compile successfully?
- Run rosrun service_full_name service_name. Doesn't throw any errors? (leave it running)- R un in a new terminal rosrun service_full_name client_name your_last_name your_name your_pa tronymic. Did you get string addition in the terminal?
- Send a request to the service via rosservice call /summ_full_name your_last_name your_nam e your_patronymic. Did you get string addition in the terminal?



Exercise 01 - Writing a Simple Action Server and Action Client (C++).

- Does the package compile successfully?
- Start turtlesim. Run rosrun action_turtle_commands action_turtle_server. Doesn't throw an y errors? (leave it running)
- Run in a new terminal rosrun action_turtle_commands action_turtle_client. Did the turtle t ravel two meters forward, turn right 90 degrees, and travel another meter (L)?
- Check turtle movement via command (use tab): \$ rostopic pub /execute_turtle_commands/ goal action_turtle_commands/message_turtle_commandsGoal "header: seq: 0 stamp: secs: 0 nsecs: 0 frame_id: '' goal_id: stamp: secs: 0 nsecs: 0 id: '' goal: command: forvard s: 1 angl e: 0" Did the turtle move forward one meter?

- Check turtle movement via command (use tab): \$ rostopic pub /execute_turtle_commands/ goal action_turtle_commands/message_turtle_commandsGoal "header: seq: 0 stamp: secs: 0 nsecs: 0 frame_id: '' goal_id: stamp: secs: 0 nsecs: 0 id: '' goal: command: turn_left s: 0 ang le: 90" Did the turtle turn left 90 degrees?

- Check that while executing commands, Action sends the distance traveled with the comm and rostopic echo /execute_turtle_commands/feedback
- Check that after executing the commands Action returns the result rostopic echo /execute _turtle_commands/result



Exercise 02 - Recording and playing back data.

- The file turtle_cmd_vel.bag contains only one topic /turtle1/cmd_vel?
- In the pose_speed_x1.yaml file, there are messages from the topic /turtle1/pose?
- In the pose_speed_x2.yaml file, there are messages from the topic /turtle1/pose?



Exercise 03 - Getting started with roswtf

- Does the roswtf.txt file contain ROS state data?

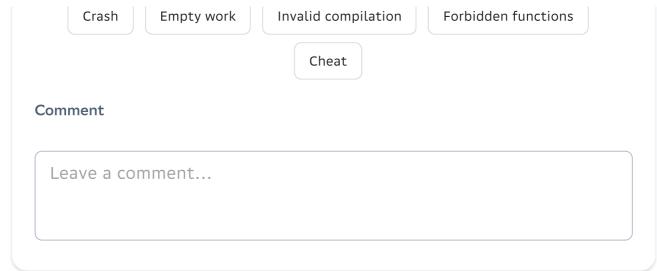


Exercise 04 - Navigating the ROS wiki

- Is the package compiling successfully?
- Run turtlesim in one terminal. Run rosrun service_full_name service_name 1 1 0 in another terminal. Did the turtle move to the given coordinates?
- Look at the source code of move_to_goal.cpp. The turtleX/cmd_vel and turtleX/pose tops a re used, but the turtleX/teleport_absolute and turtleX/teleport_relative tops are not?



Feedback



✓ Review