← Project review - ROS. Day08

Type of project	Individual
Duration	30 min
Passed Peer Reviews	0/2

Git project

Student

About

Main part

Feedback

Git project

ssh://git@repos-ssh.21-school.ru:2289/students/ROS._Da... Copy link Open

Student

mjuli-python-ds level 1

About

Introduction

The methodology of School 21 makes sense only if peer-to-peer reviews are done seriou
sly. Please read all guidelines carefully before starting the review.
- Please, stay courteous, polite, respectful and constructive in all communications duri
ng 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 a
nd 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 gr
oup.
- 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 repositor
y does not contain the work of the student (or group) in the src folder of the develop br
anch, or “cheat” in case of cheating or if the student (or group) are unable to explain th
eir work at any time during review as well as if one of the points below is not met. How
ever, except for cheating cases, you are encouraged to continue reviewing the project t
o identify the problems that caused the situation in order to avoid them at the next rev
iew.
- Doublecheck that the GIT repository is the one corresponding to the student or the gr
oup.
- 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 - Publisher and color space switcher.

- Does the package compile successfully?
- Launch file day_08_ex_00.launch starts successfully?
- Run rosrun rqt_graph rqt_graph in console. Are there 2 ROS nodes?
- Run rostopic list in console. Are there topics /image/color and /image/gray?
- Run rostopic hz /image/color in console. The frequency is approximately 10?
- Run rostopic hz /image/gray in console. The frequency is approximately 10?
- Look at images in the topics using rosrun rqt_image_view rqt_image_view. Do you see color image in the /image/color topic and gray image in the /image/gray topic?

No ✓ Yes

Exercise 01 - Image correction.

- Does the package compile successfully?
- Launch file day_08_ex_01.launch starts successfully?
- Run rosrun rqt_graph rqt_graph in console. Are there 2 ROS nodes?
- Run rostopic list in console. Are there topics /image/origin, /image/contrast_brightness and /image/gamma?
- Look at images in the topics using rosrun rqt_image_view rqt_image_view. Do you see color image in the /image/origin?
- Run rosrun rqt_reconfigure rqt_reconfigure in console and select params for corrector. Does the image in the /image/contrast_brightness topic change when changing the contrast and brightness settings in rqt_reconfigure?
- Does the image in the /image/gamma topic change when changing the gamma settings in rqt_reconfigure?
- Set contrast = 5 and brightness = 55 in rqt_reconfigure. The image in the /image/contrast_brightness topic should become pretty awesome.
- Set gamma = 0.25 in rqt_reconfigure. The image in the /image/gamma topic should become pretty awesome (but the contrast-brightness image should be better).

No ✓ Yes

Exercise 02 - Canny detector.

- Does the package compile successfully?
- Launch file day_08_ex_02.launch starts successfully?
- Run rosrun rqt_graph rqt_graph in console. Are there 2 ROS nodes?
- Run rostopic list in console. Are there topics /image/origin and /image/canny?
- Look at images in the topics using rosrun rqt_image_view rqt_image_view. Do you see color image in the /image/origin?

- Run rosrun rqt_reconfigure rqt_reconfigure in console and select params for canny detector. Check that you can set only 3 (3x3), 5 (5x5) or 7 (7x7) for blur kernel size and canny kernel size.
- Does the image in the /image/canny topic change when changing settings in rqt_reconfigure?
- Set Blur kernel 3x3, Canny kernel 5x5, Canny low threshold 387, Canny high threshold 4085 using rqt_reconfigure. You should see detected edges in the /image/canny topic. It should look like the image in the instruction for this exercise.

No ✓ Yes

Exercise 03 - Aruco detector.

- Does the package compile successfully?
- Run rosbag play --loop Day08/misc/bags/day_08_circle.bag in console.
- Launch file day_08_ex_03.launch starts successfully?
- Run rostopic list in console. Are there topics /camera/markers and /tf?
- Look at images in the topics using rosrun rqt_image_view rqt_image_view. Do you see color image in the /camera/color/image_raw and the same image with detected markers in the /camera/markers topic?
- Run rviz, select marker_frame as a fixed frame and add TF data. You should see moving trajectories of the camera. It should look like a circle.

No ✓ Yes

Feedback

Fails

Crash | Forbidden functions | Cheat | Invalid compilation | Empty work

Comment

Leave a comment...

✓ Review