Project log - Robotica

Augello Andrea Castiglione Francesco Paolo La Martina Marco

December 12, 2020

Contents

| 1 | Setup | 1 |
|---|---------------------------|---|
| 2 | Name | 1 |
| 3 | Libraries and environment | 1 |

1 Setup

| OS | Ubuntu 18.04 |
|-----------------|-------------------|
| | Ubuntu 20.04 |
| ROS version | melodic |
| | noetic |
| Webots | R2020b revision 1 |
| Target hardware | Raspberry Pi 4B |
| | Raspberry Pi 3B+ |

2 Name

Our team has chosen the name **Change**, which resembles **Chang'e 4** [1], the spacecraft mission part of the second phase of the Chinese Lunar Exploration Program, which achieved humanity's first soft landing on the far side of the moon.

3 Libraries and environment

We have used the **webots_ros** [2] package in order to gain deeper understanding of how to interface ROS nodes with the standard ROS controller for Webots. We have also studied the ROS documentation [3] in order to install and configure the ROS environment and also to understand fundamental ROS concepts related to nodes and topics. Moreover, we set-up the ROS interface in Webots following the cyberbotics documentation [3].

References

- [1] https://www.theguardian.com/science/2019/jan/03/china-probe-change-4-land-far-side-moon-basin-crater.

 The Guardian. 3 January 2019. Archived from the original on 3 January 2019. Retrieved 3 January 2019.
- [2] https://github.com/cyberbotics/webots_ros.
 Github page for the webots_ros package from cyberbotics.
- [3] https://wiki.ros.org/ROS/Tutorials. ROS documentation from ROS.org.
- $[4] \ \ https://www.cyberbotics.com/doc/guide/tutorial-8-using-ros.$ Cyberbotics documentation.