Lab 6

Due Mar 23 by 7:30pm **Points** 40 **Submitting** a file upload
File Types zip, tgz, and bz2 **Attempts** 1 **Allowed Attempts** 1
Available until Mar 26 at 7:30pm

This assignment was locked Mar 26 at 7:30pm.

In this assignment you will rework lab 3, but you will have to implement your node as a class that inherits from the class `rclcpp::Node`. The assignments is as follows:

- The setup is exactly the same as lab 3 -- please refer to the instructions therein.
- Either reuse the CSE180 workspace you used in previous weeks, or create one from scratch, also called CSE180.
- Inside CSE180, create a package called `lab6`. This package will contain the solution to this lab.
- Write a node `replicateoop` that subscribes to `/turtle1/pose`, extracts the velocity of the turtle and publishes the velocity commands to `/p2dx/cmd_vel`. To prepare your solution you are welcome to both look at the posted solutions for lab3, as well as the examples presented in chapter 5 in the textbook and available for download in the GitHub. Your class must inherit from the `rclcpp::Node` and perform the same functions described in lab3.
- Update the manifest file and `CMakeLists.txt` as needed.

Submission: submit your entire workspace as a single zipped file. Before zipping the file, remove the folders build, install, log, otherwise your file will be way too big. You can zip your workspace with any program generating the file formats listed below (zip, tgz, bz2). No other formats will be accepted. If you do not follow these instructions we will apply a 10% penalty to your grade.

Administrative notes:

- This assignment **must** be solved individually. If we determine you have copied from other students or from the web without proper attribution, all involved parties will receive a 0 for the assignment, and will be reported as per the CSE academic honesty policy discussed during the first lecture with all the associated consequences.
- If you wish, is ok to include the packages from previous weeks in your submission, and we will not consider it during grading. However, whatever you submit must be correctly built using `colcon build`. Please doublecheck before submitting, and if previous weeks' lab causes problems, remove them from this week's submission.
- This assignment can be submitted only once. Please check your solution carefully before hitting "Submit".
- Pay attention to the posted deadlines, as they will be enforced by CatCourses. This assignment is due seven days after it is released to your lab session. Assignments marked "late" with respect to

the due deadline will receive a 50% penalty. Assignments submitted more than 72 hours after the posted deadline will receive a 0 grade. Do not wait until the last minute to submit your solution.