TE3001B Robotics Foundation

Final Challenge Report Rubric

The grade consists of two parts:

* Video Report TBD

Deadline: TBD.

Teams:

* + The students must form teams for this mini-challenge.
  + The students must respectfully help each other to understand all the topics.

1. Video Report

* Duration: Under 5 min. (If longer, increase speed)
* Show the team, names. Only one team member can speak at a time (not necessary for the whole team to speak in the video).
* Video on YouTube (Unlisted)
* Video English

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| **Task** |
| Brief introduction (problem to be solved, solution strategy, team tasks, etc.) |
| Explain how the program works (launch files, libraries made, the structure of the project, etc.)   * The student must show pseudocode/flowcharts explaining how the control strategy was implemented (no code). * If custom messages were implemented, parameter files or namespaces implemented, how were they implemented, and why were they required? * The student must explain the selection of the sampling time. * The student must show the methodology for parameter tunning e.g., if done by trial and error, the student must demonstrate the algorithm followed, restrictions (Hardware, software, ROS), acceptance criteria, etc. * Advantages and disadvantages of the controller and its implementation in ROS. |
| Show the results of the (motor moving at different speeds with different inputs), and the methodology followed to solve it.   * The student must show a series of reflections about the problems presented during the implementation of the motor control in ROS (Hardware and software), and its relationship with the theoretical foundations. * Reflect and compare with the simulated system |
| A brief set of conclusions from the task. |