**ASSIGNMENT 6 - Robot Functionality Testing**

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**Description of the problem**

The goal of this assignment is to test the functionality of our robot. We did not use the Jetson Nano and only connected our robot to the computer for testing purposes. By utilizing the yahboom car x1 workspace, we were able to functionally make the robot drive. We used a USB micro cable for the connection and a 7V battery for this assignment, we will use a stronger battery for future implementations.

**Tasks**

1. Test movement by manually publishing command velocities
2. Test movement by using the keyboard
3. Test movement by using the joystick.

To execute this task you must run the following steps

1. Connect the robot to your computer
2. Terminal 1
   1. cd to DesignAssignments/da6
   2. Catkin\_make
   3. Source devel/setup.bash
   4. Export ROBOT\_TYPE=X3
   5. Roslaunch yahboomcar\_bringup yahboom.launch
3. Terminal 2
   1. Source devel/setup.bash
   2. Export ROBOT\_TYPE=X3
   3. Rostopic pub /cmd\_vel
   4. Roslaunch yahboomcar\_ctrl yahboom\_keyboard.launch
   5. Roslaunch yahboomcar\_ctrl yahboom\_joy.launch

**Task Source Code Directory**

DesignAssignments/da6/src/

**Task Video**

<https://youtu.be/LUt6E66EWR8>