Checkpoint #2 Motors Control

[ICN5406] Mobile Robot 2021

Due: October 22, 2021

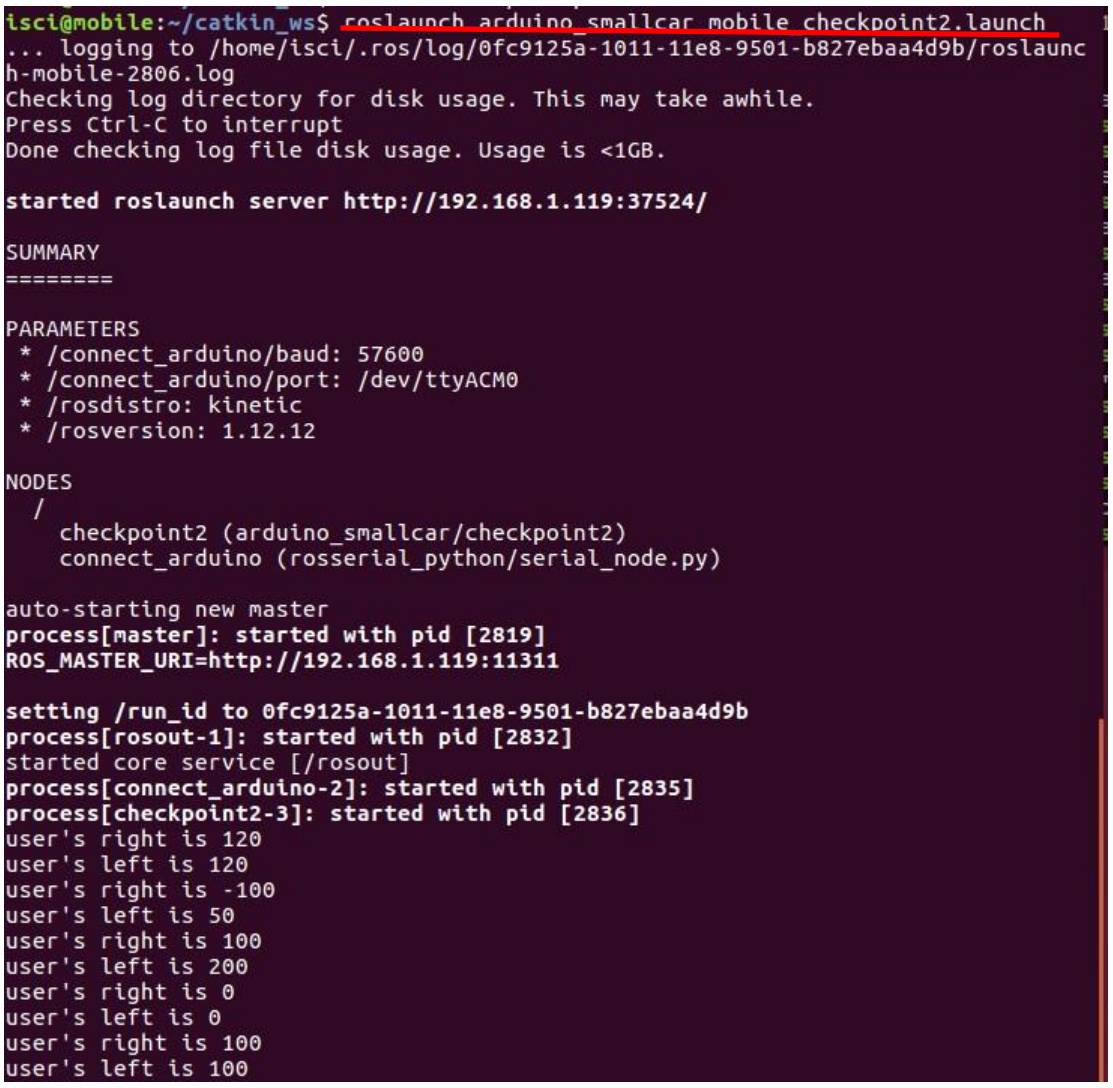
- Purpose:

The purpose of this checkpoint is to make sure you can control the motion of a basic DC motors by using PWM with Raspberry Pi and Arduino.

- Tasks:

Please demonstrate your robot performing the following actions by by giving PWM value to motor individually.

1. Move forward. (25%)
2. Move backward. (25%)
3. Turn right. (15%)
4. Turn left. (15%)
5. How straight when moving forward. (20%)

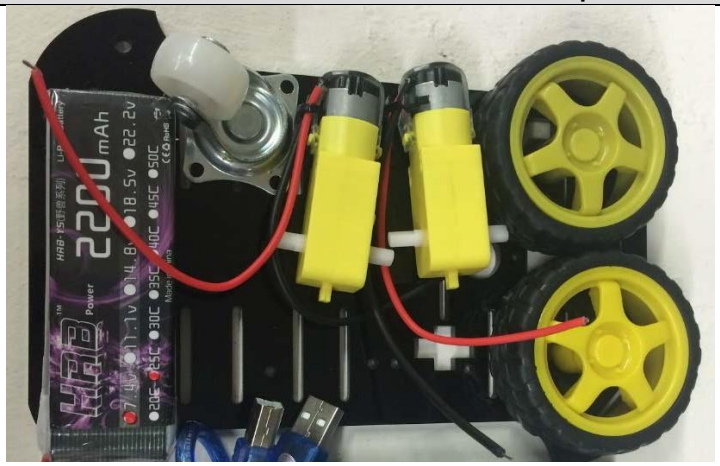


Hint: Use rosserial package to communicate Raspberry Pi and Arduino to help you know the keyboard values to control the corresponding actions.
P.S. Every team should use their own mobile power supply for their own robot.

- Materials list:

	Material	Number
1	Chassis	1
2	DC motors	2
3	wheels and caster wheel	3
4	L298N Motor driver module	1
5	Lipo battery	1
6	A pack of screws	1
7	Screwdrivers	2

Chassis & DC motors & wheels & Lipo battery



L298N Motor driver module	Screws and screwdrivers