Bluetooth Vehicle Control

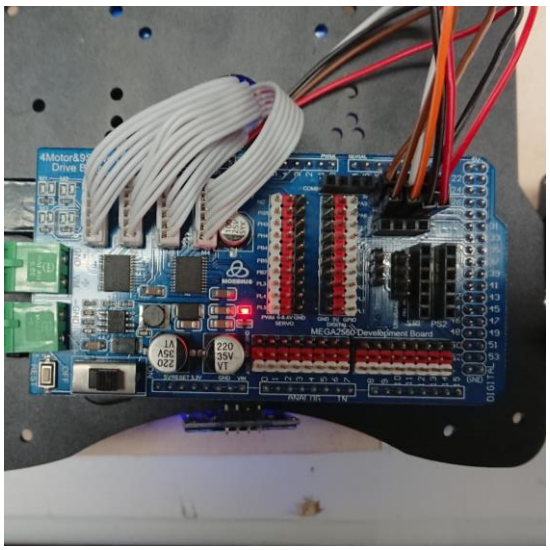
In this guide you will learn to test your vehicle and control it through your android phone

1. Hardware Setup

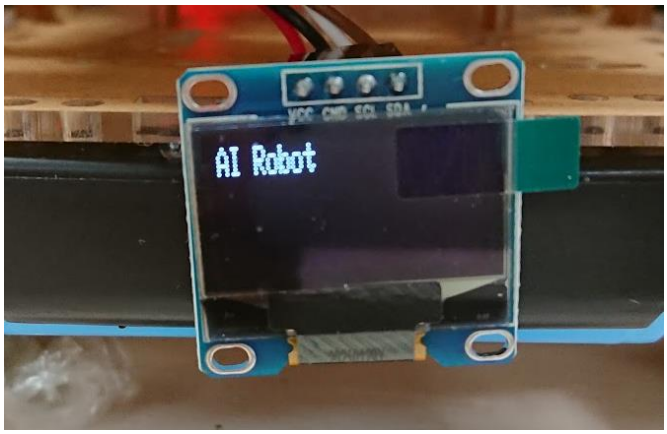
Program the Arduino with car.ino program. (You should have learnt it in the labs. Please ask TA for help if you have any problem. Thanks.)

Check the wiring with the TA. Power on the robot and observe the following.

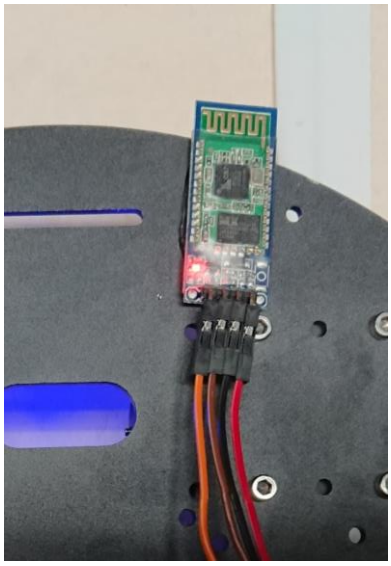
A red LED on the shield should be on, as well as the red LED on the arduino Mega. If the red LED does not turn on, please turn off the board and ask TA for assistance. Thanks.



And you should be able to see the OLED displaying the text "AI Robot"



Finally the red LED of the Bluetooth module should be rapidly blinking. Blinking means the bluetooth is waiting for connection.



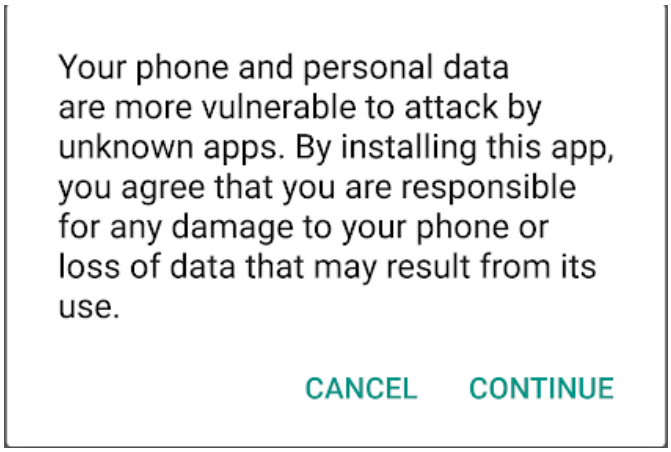
If all the above can be observed on your vehicle, it should be all set for testing.

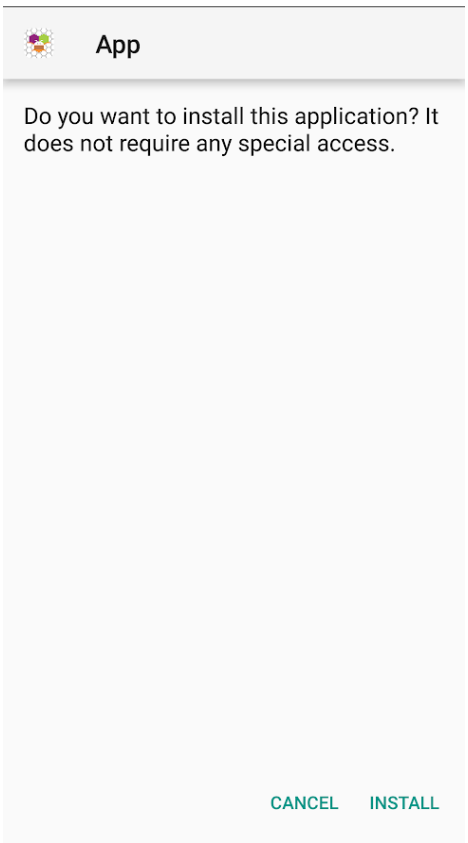
2. Set up the control application

Step 2.1

Download the simple control application, named "car.apk" from Moodle, open it in a file manager of your choice.

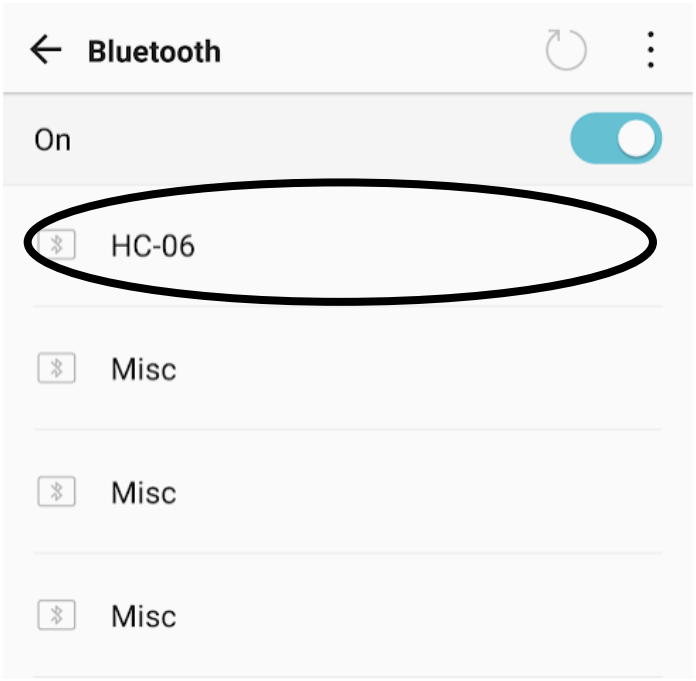
Note: There might be a pop up warning you about the file, click "Install anyway" button to allow the installation

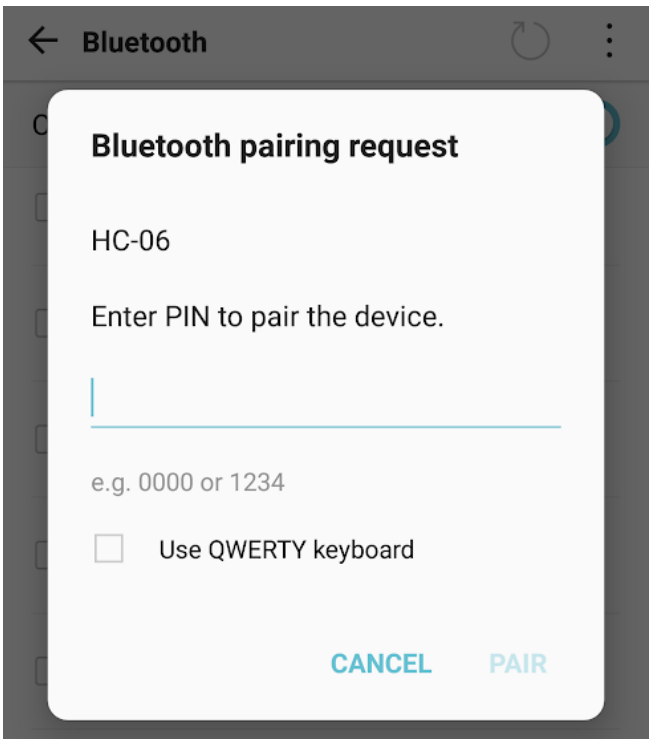




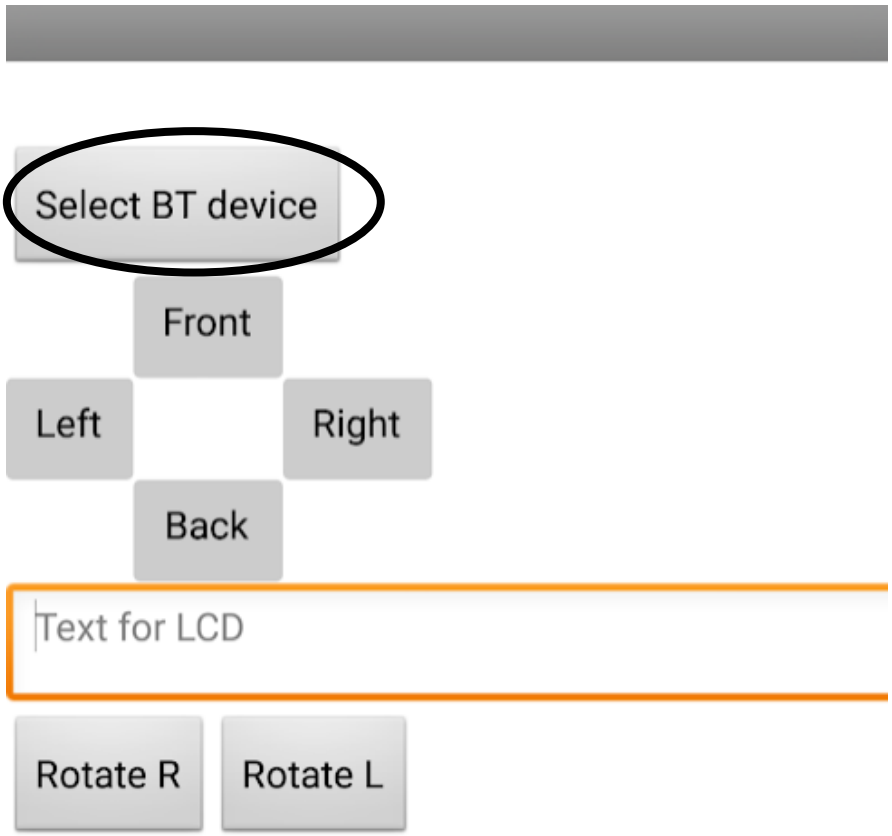
Step 2.2

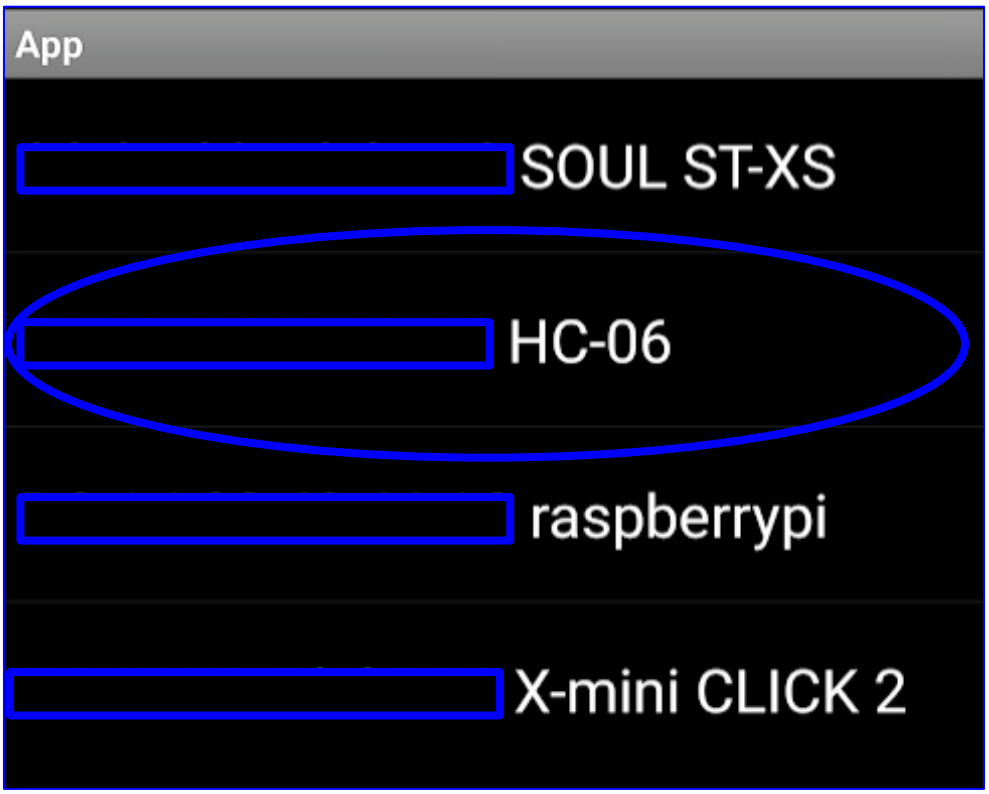
Once the install is finished, open bluetooth settings, and find the name of the bluetooth module "HC-06" and use the code "0000" or "1234" to connect. Since there are many teams in the lab, there may be a chance of connecting other team robots. Please ask the TA for assistance if there is more than one HC-06 appears. (Note: we may change each Bluetooth name to HC-06-xx later for different teams.)



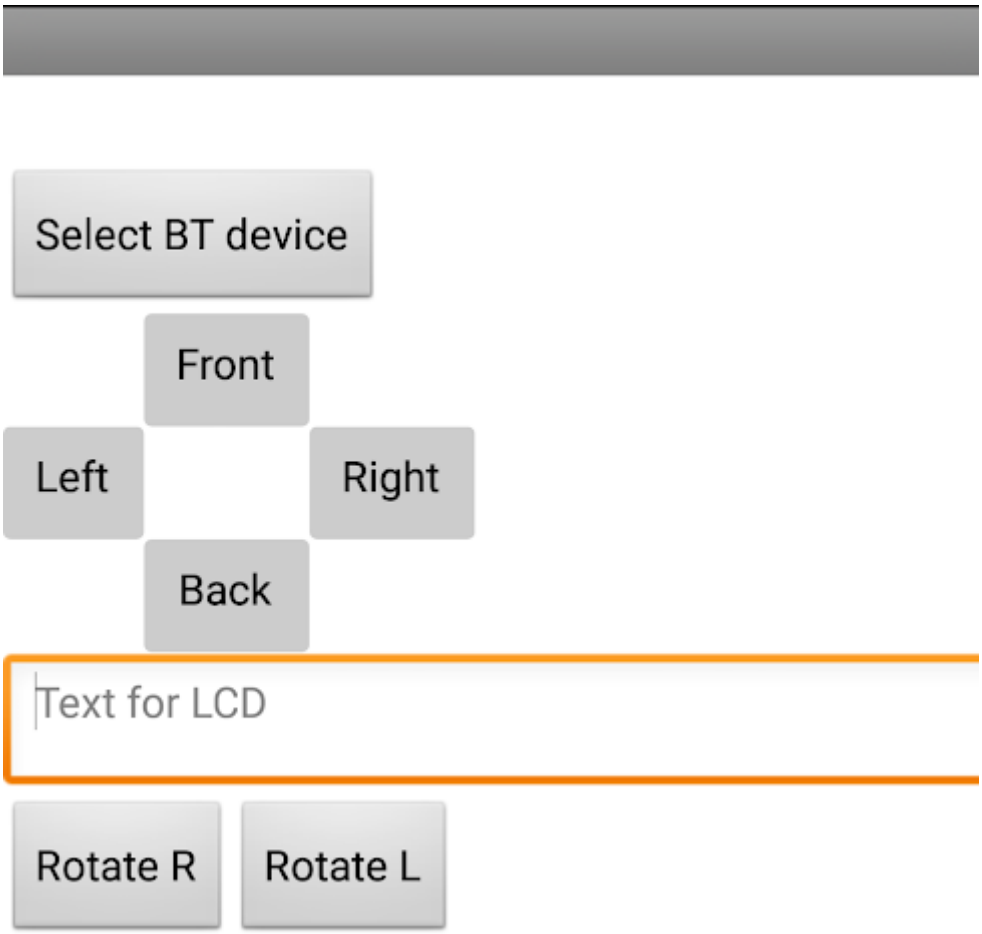


Now open the application and press the "Select BT Device" button





Give it a test!



You may now test the movement of the vehicle by pressing the buttons on the interface