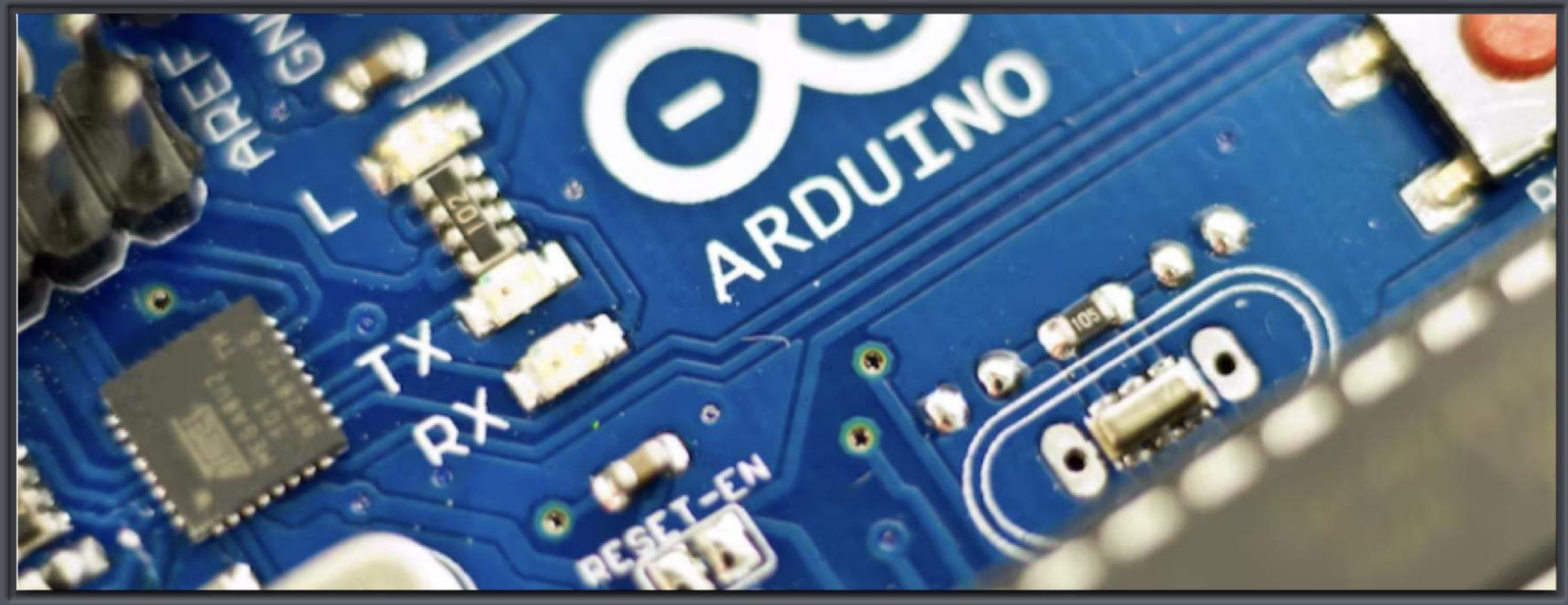
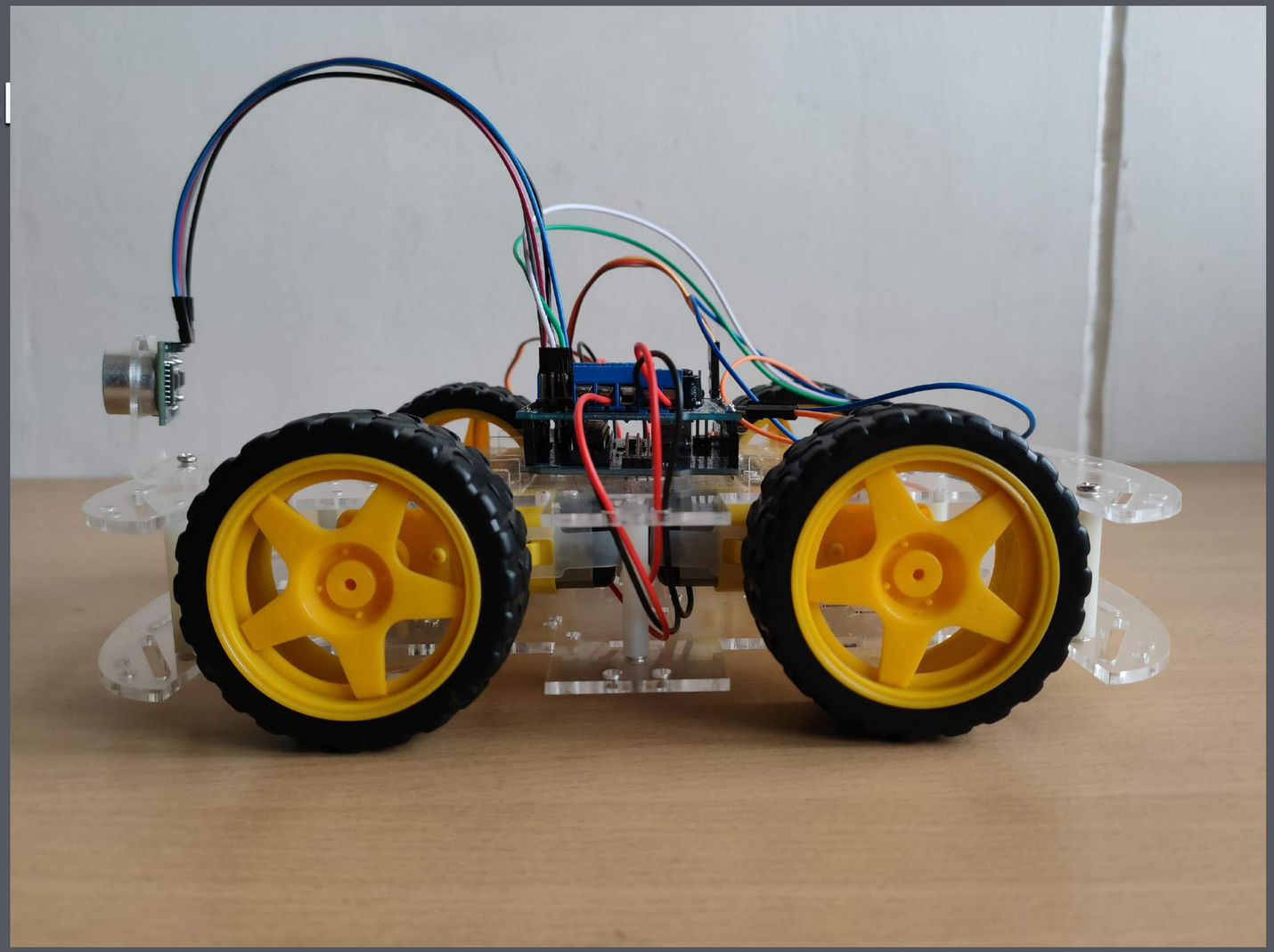


Obstacle avoiding, bluetooth control, voice control car using Arduino

Introduction

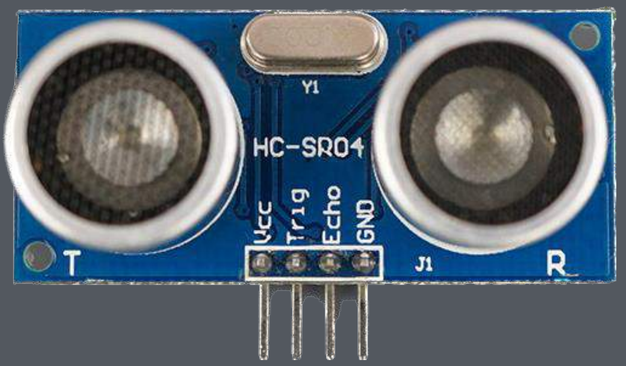
- Arduino is the go-to gear for artists, hobbyists, students, and anyone with a gadgetry dream.
- With Arduino, you can control almost everything around you be it simple LED or giant Robots.
- Basically Arduino is Microcontroller.

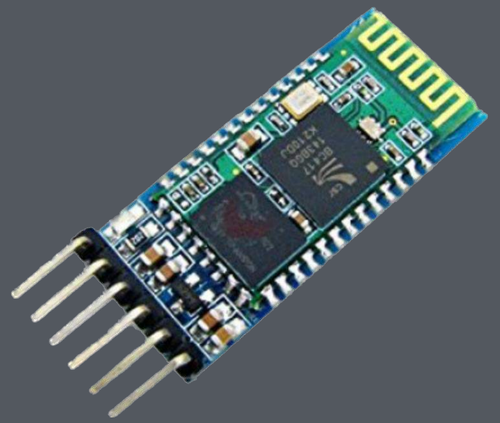
- This projects aims at designing a car which can be controlled using bluetooth, voice and avoid obstacl

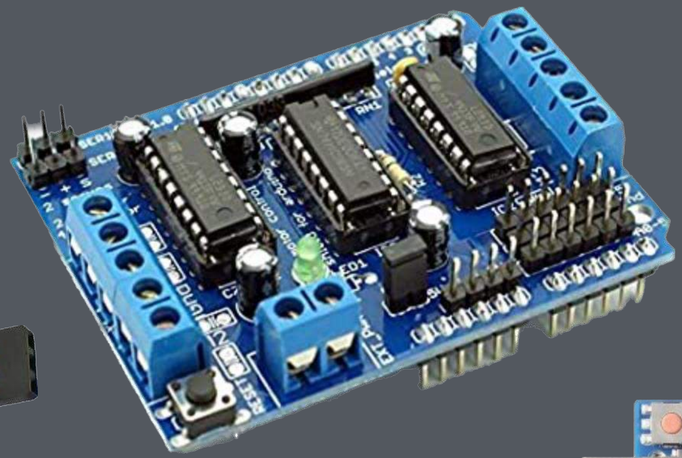


Components Required

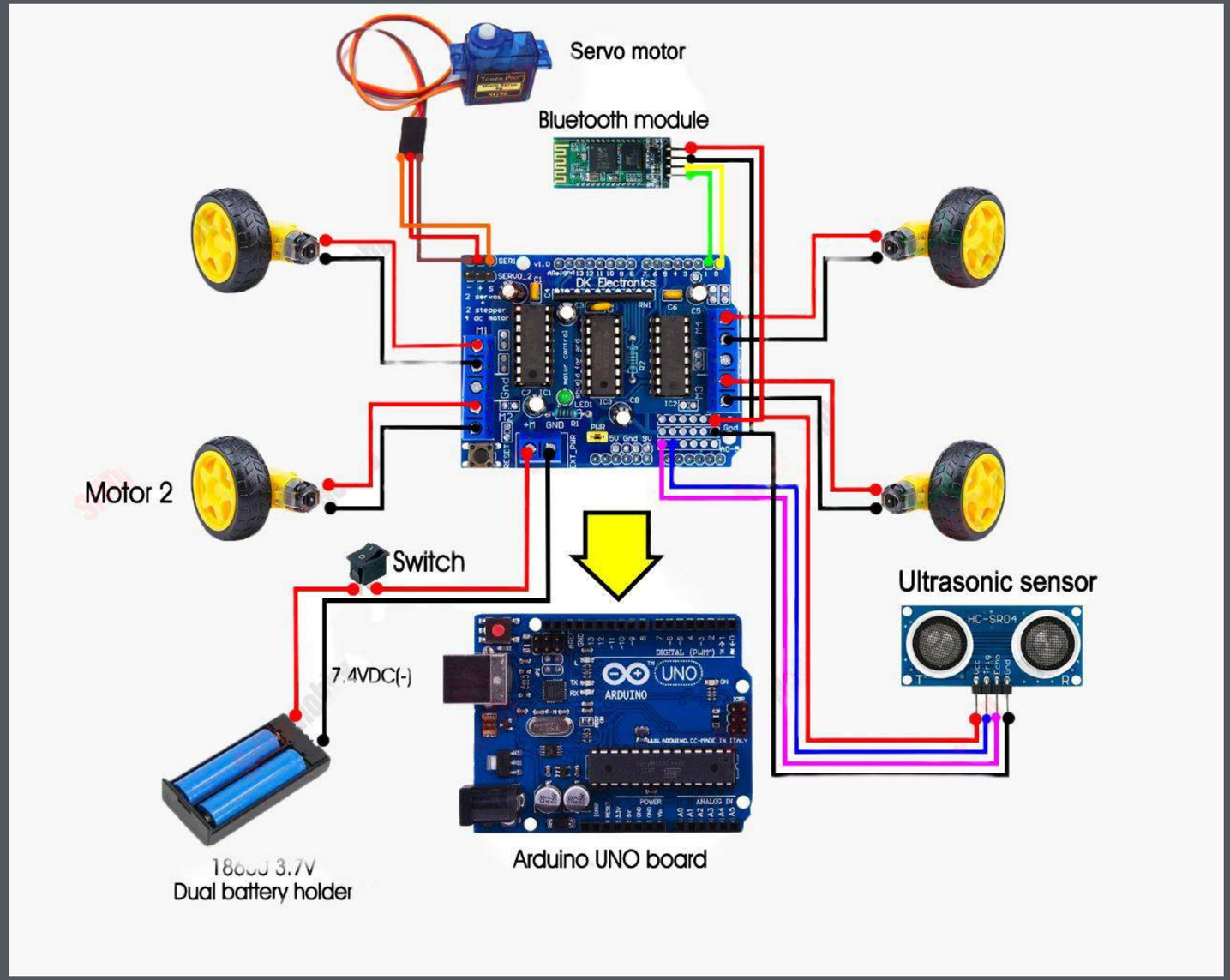
- Arduino UNO board
- L293D Motor driver shield
- Ultrasonic sensor
- Bluetooth module
- Servo motor
- Car robo kit
- Jumper wires
- LI ION battery







Circuit diagram

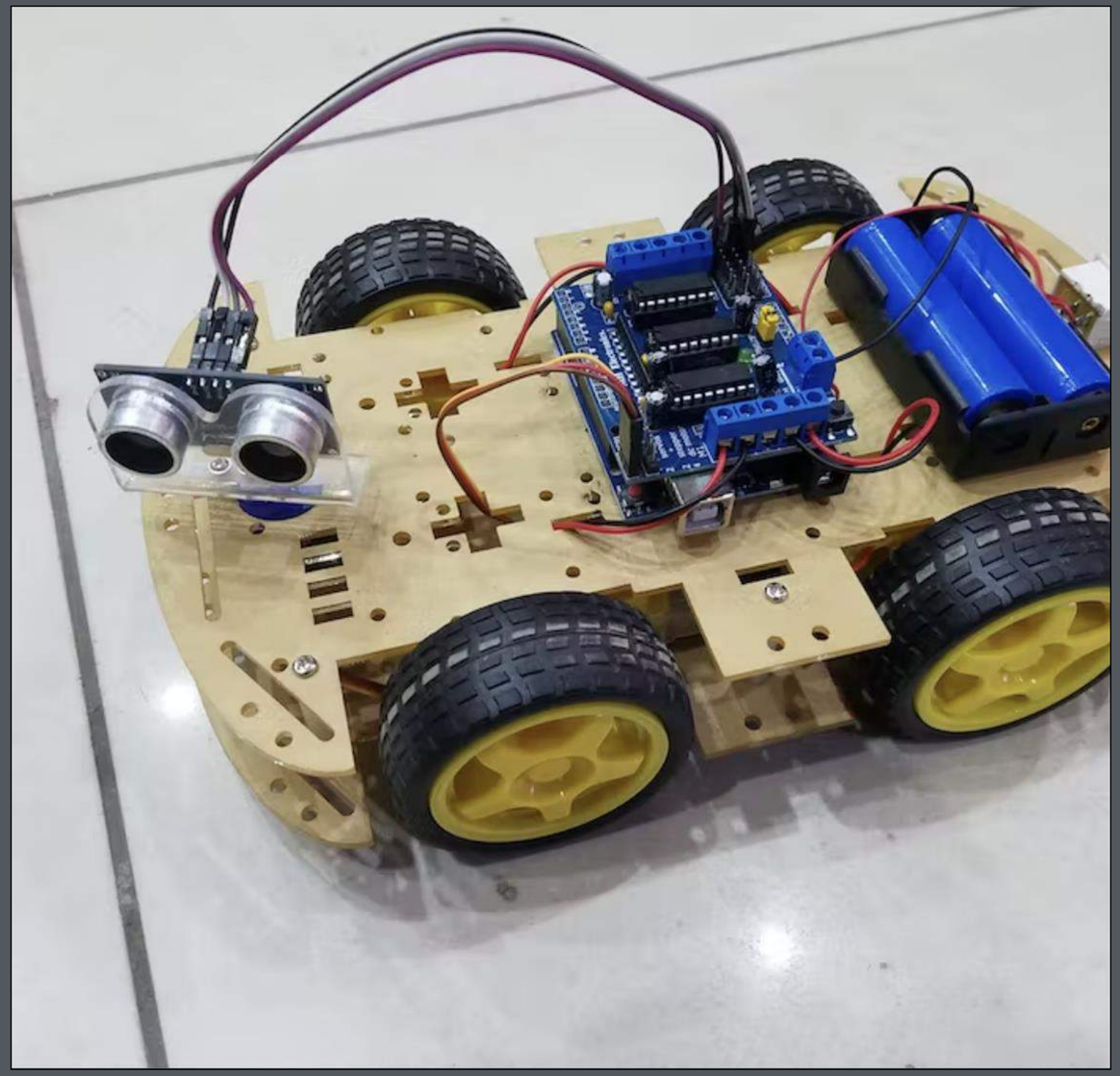


Procedure

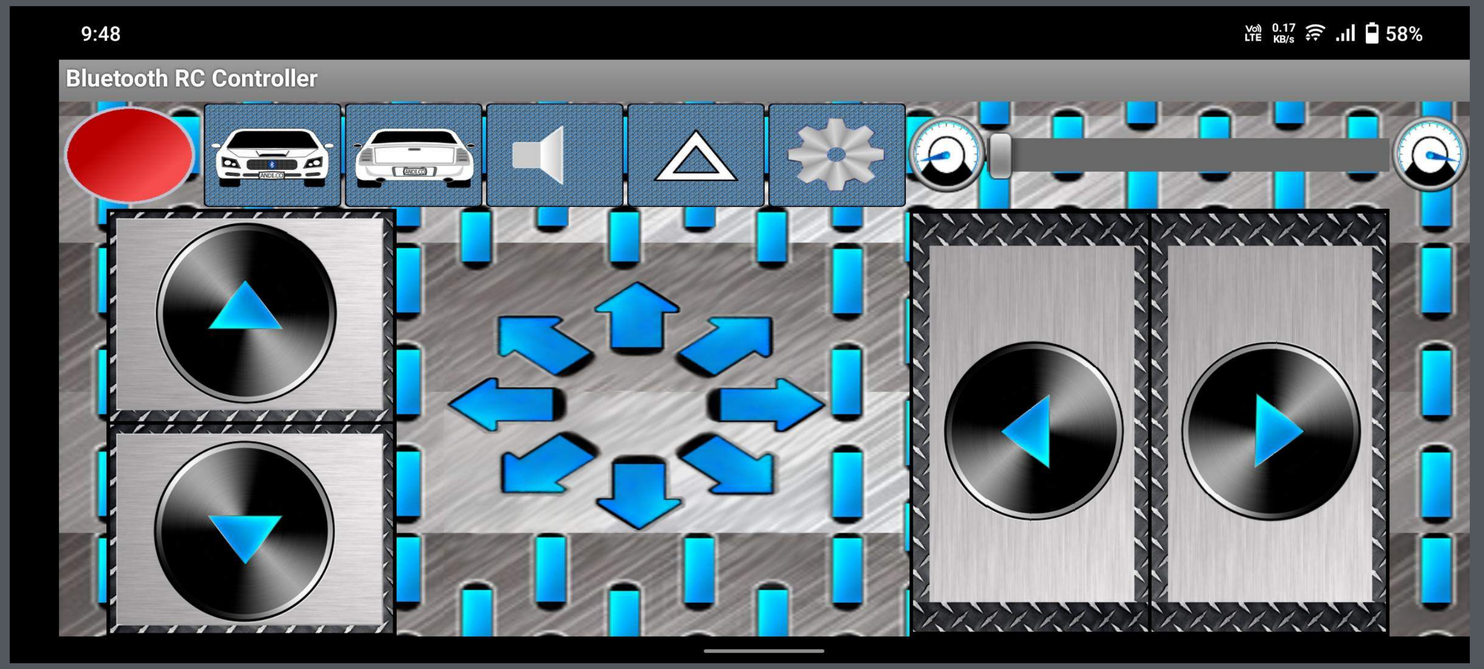
- First we mount our motor driver on Arduino board and make all the connections shown in circuit digram using jumper wires
- We use servo motor ,ultrasonic sensor for obstacle detection and bluetooth module for bluetooth control , voice control.
- After making all connections we check if the wires are rightly placed, and also correct loose connections if any.
- Then we compile the code and upload the code, while uploading the code we remove some jumper wires.

Working procedure

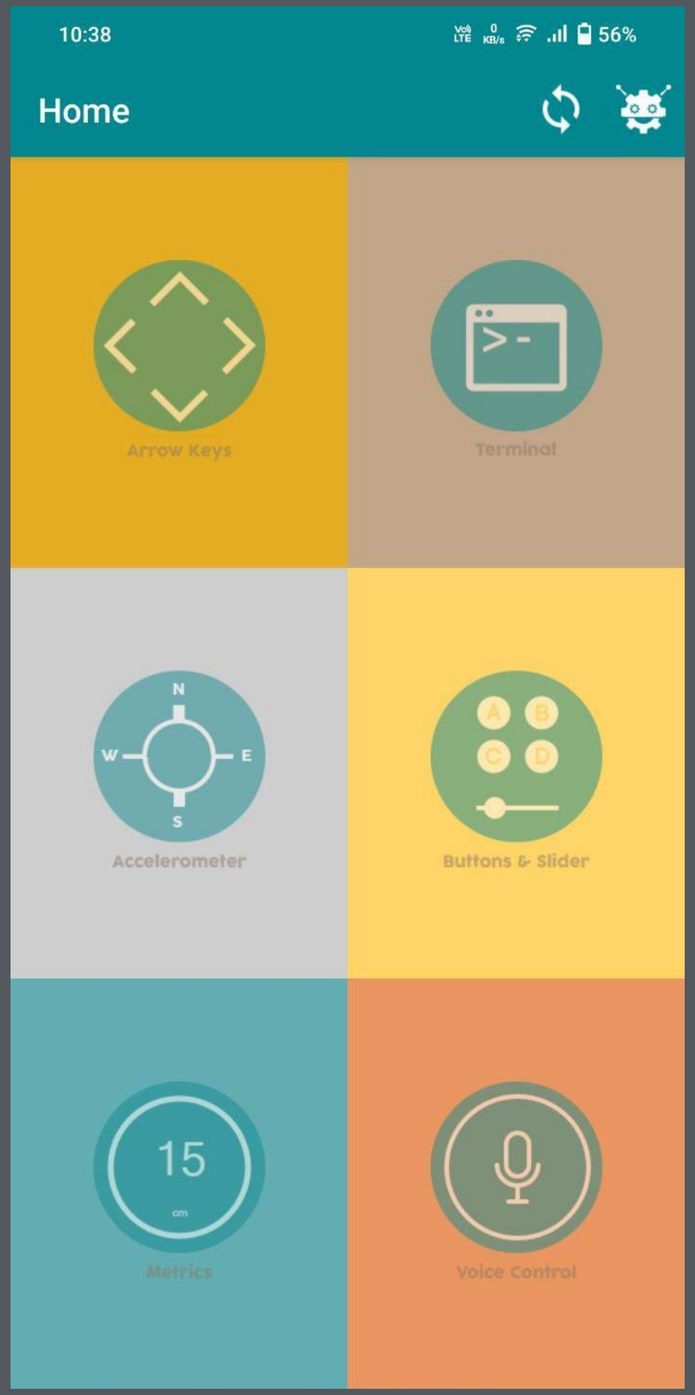
- The ultrasonic sensor is mounted on servo motor which allows the sensor to rotate freely in one circular direction.
- The ultrasonic sensor sends and receives the signals, so the sensor can detect the obstacles and move away from it.
- In this way the robo car avoid the obstacles.

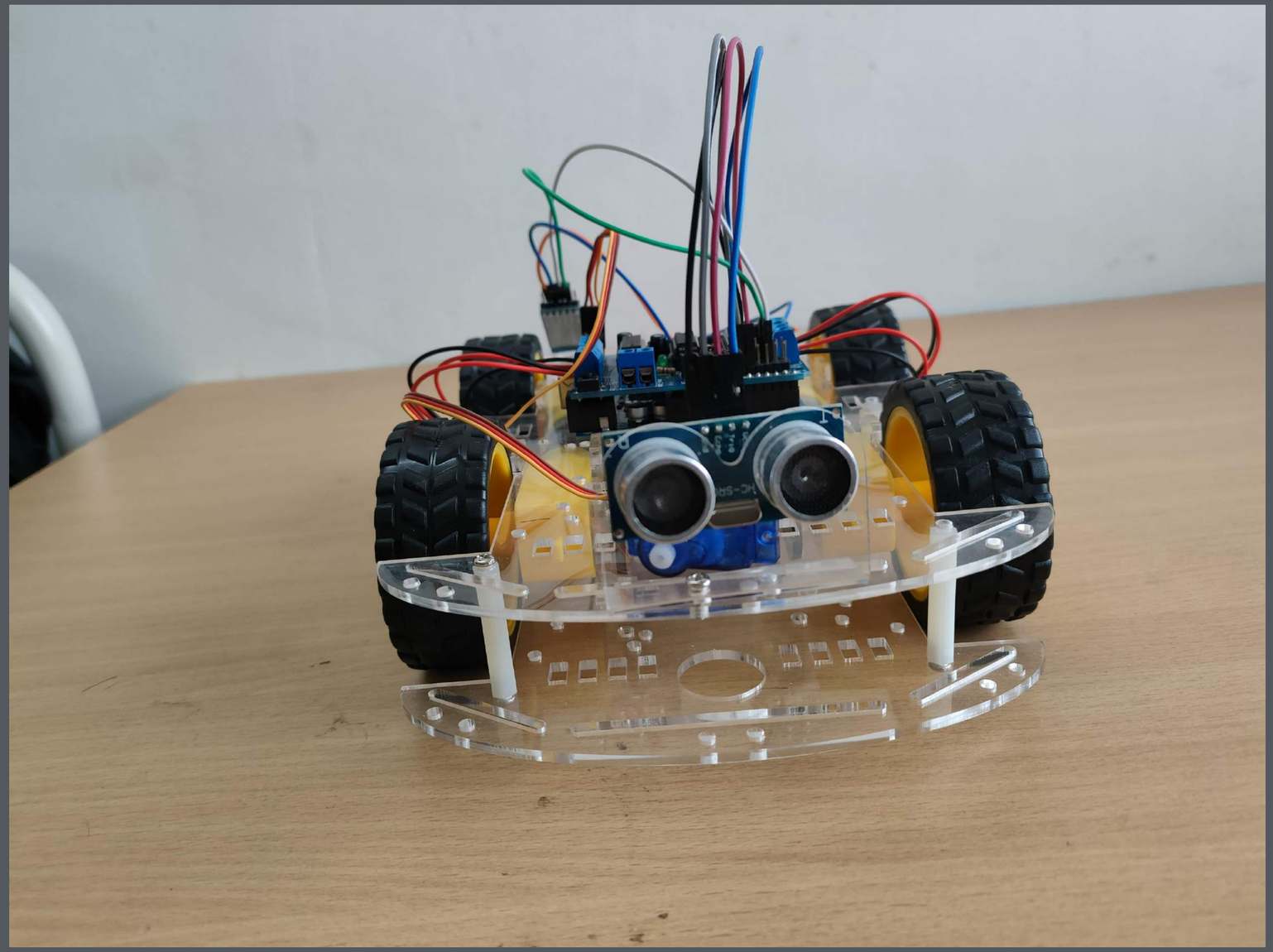


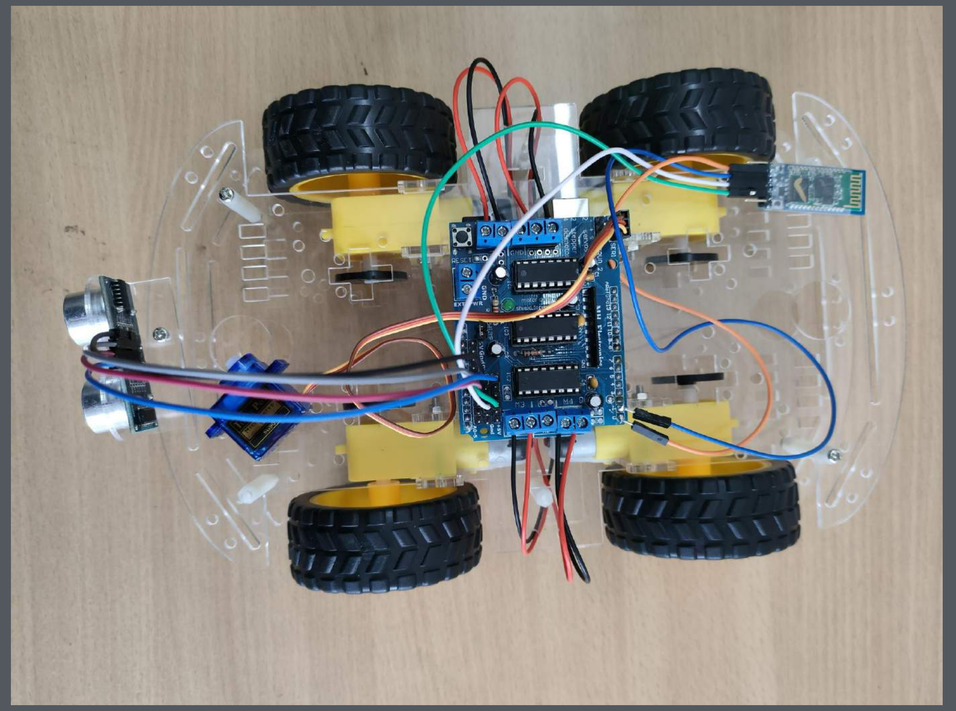
- For bluetooth control, you have to install a app called Bluetooth RC car.
- After installing the app, turn on bluetooth and connect to the car
- After connecting with car you we be able to control the car using given icons in the app as shown in figure.



- For voice control, you have to install a app called Arduino Bluetooth Control.
- After installing the app connect to the car using bluetooth and customise the vocal settings.
- Then click on voice control icon and give the instructions.
- These all instructions had been ran using bluetooth module.







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