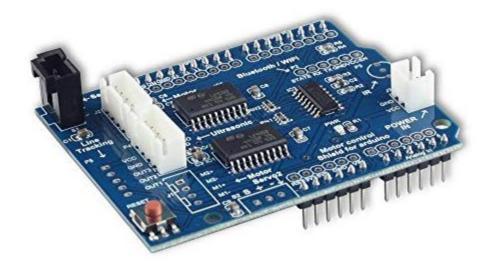
Arduino Car Functionalities

Robotics 360

Objective

Build a mini car (like in Class 1) where the car runs till it senses an obstacle, and then moves accordingly



It is a special electronic circuit board, that can fit on top of a Arduino UNO Board

It has pre-designed pin to connect with

- Ultrasonic Sensor
- Servo Motor
- DC Motor

Arduino Shield

Components needed

DC Motors (20 to 200 RPM)





Other components from previous weeks:



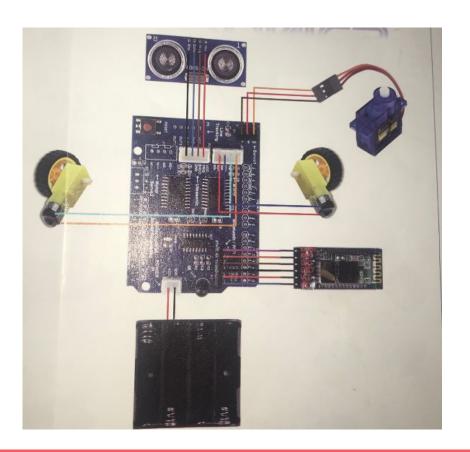
Ultrasonic Distance Sensor



Micro Servo Motor 9G

Arduino Car - Design

Follow the demonstration!



Arduino Car - Programming

Create an extra variable: distance (this is a replacement of the sensor's distance variable)

This program keeps the car running till the sensor senses something within 15 cm, then it stops.

```
UCTRONICS Program
forever
  set distance ▼ to read uctronics ultrasonic module
        distance > 15 then
    set uctronics robot car (forward) with speed (150)
    set uctronics robot car (stop*) with speed 0*
```