

****SMART CAR PROJECT****

****Documentation for phase [1]****

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**DESCRIPTION**

_Vision:-

Create the start for playing Smart.

_IDEA:-

*Controlling RC cars using android application.

*Converting a simple toy to a Smart one.

_OBJECTIVES:-

*Receiving and sending basic control commands via Bluetooth.

*Allow the user to create a certain route for the car.

*Allow the child to learn coding throw playing.

*Adding extra options for the toy by using sensors(ex:ultrasonic sensor,Ir sensor ,flame detector,....etc).

**COMPONENTS**

****PRICE****

(FOR Phase one):-

1-Arduino UNO. ##145 LE.

2-LM298 H bridge Module. ##45 LE.

3-Robot chassis kit (body of car). ##40 LE.

4-2_ Motor. ##40 LE.

5-2_ Wheel ##40 LE.

6-Bluetooth Module. ##100 LE.

7-Caster wheel. ##25 LE.

8-ultrasonic sensor. ##40 LE.

9-servo Motor. ##60 LE.

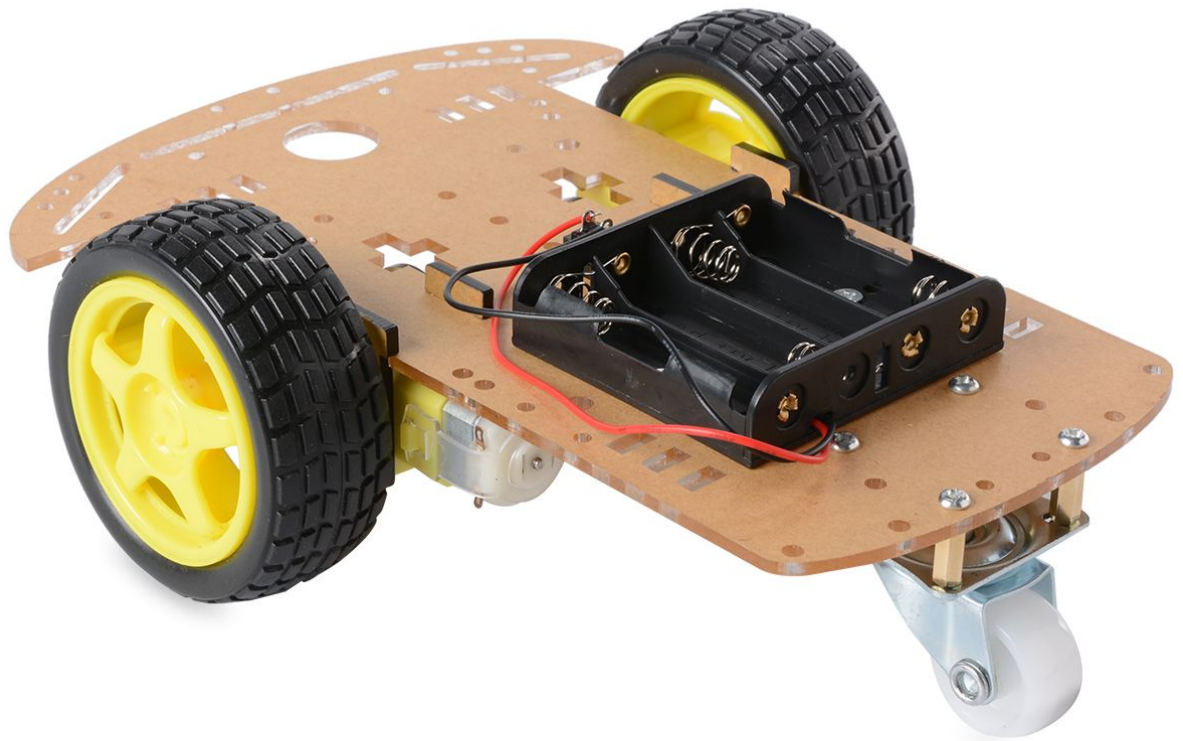
10-Mini Bread Board. ##12 LE.

11-Male-Female Jumper wires. ##5 LE.

12-3_ Lithium Batttries 3.7V & 1500mA ##90 LE.

**Phase[1] Requirements :-**

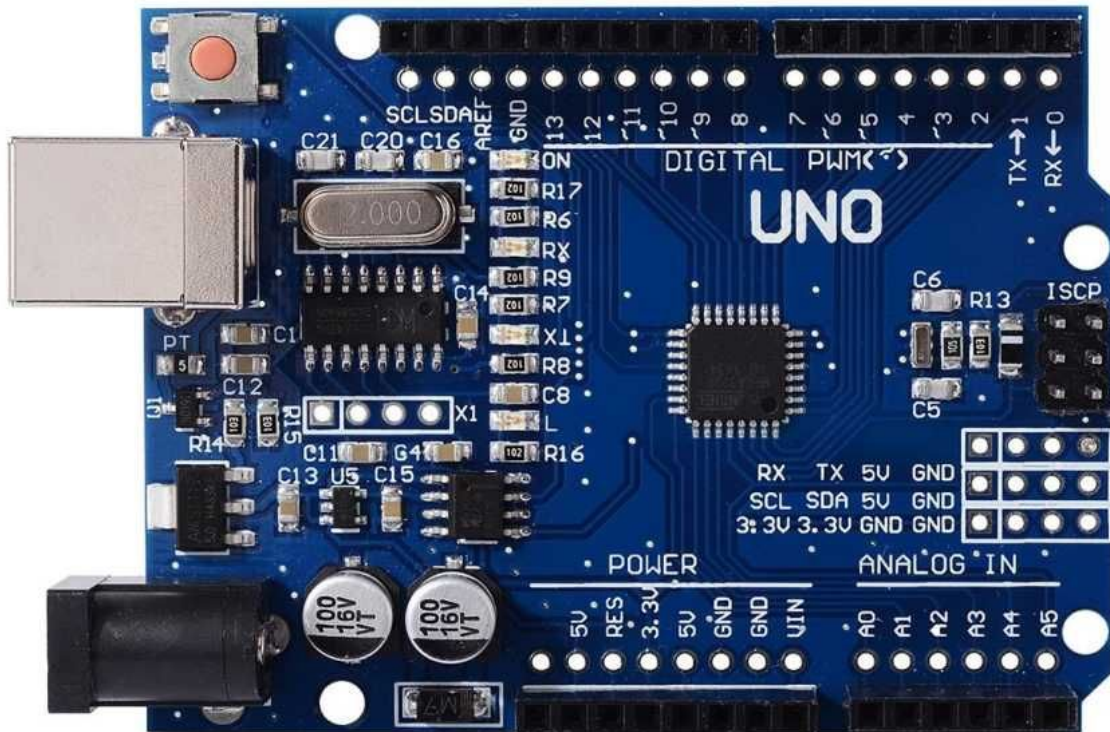
-Required in the initial phase (phase[1]) is Driving the car and make it avoid obstacles,and it was done using ultrasonic sensor , car Driving is controlled by using mobile application..



(Robot chassis kit)



(wheel&motor)



(arduino uno)



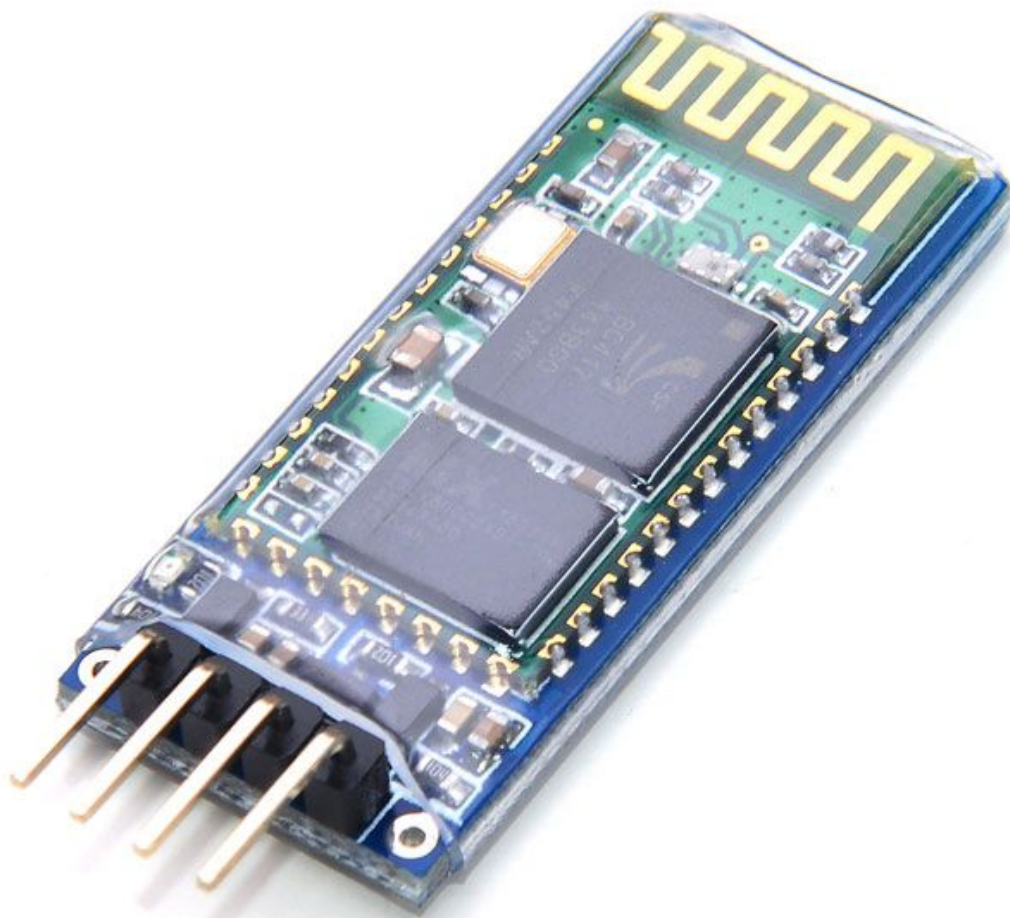
(ultra sonic)



(H-Bridge)



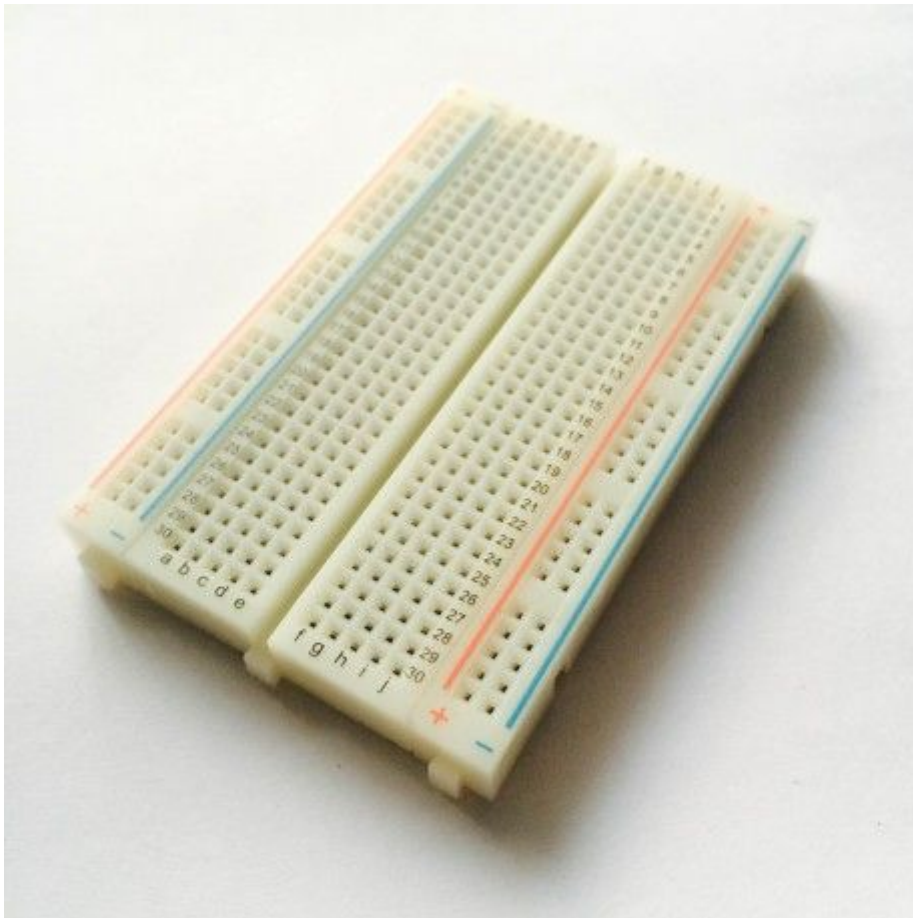
(servo motor)



(bluetooth module)



(caster wheel)



(mini breadboard)



(4-Lithium battery)



(jumpers)