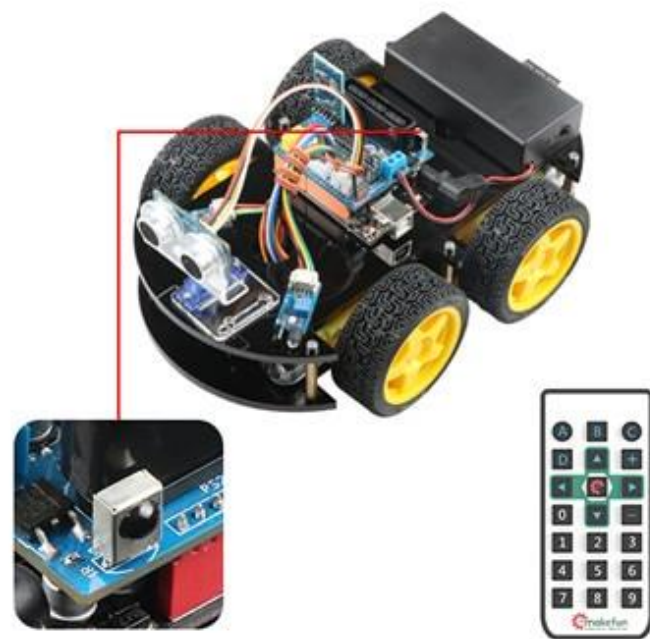


SEMESTER -05

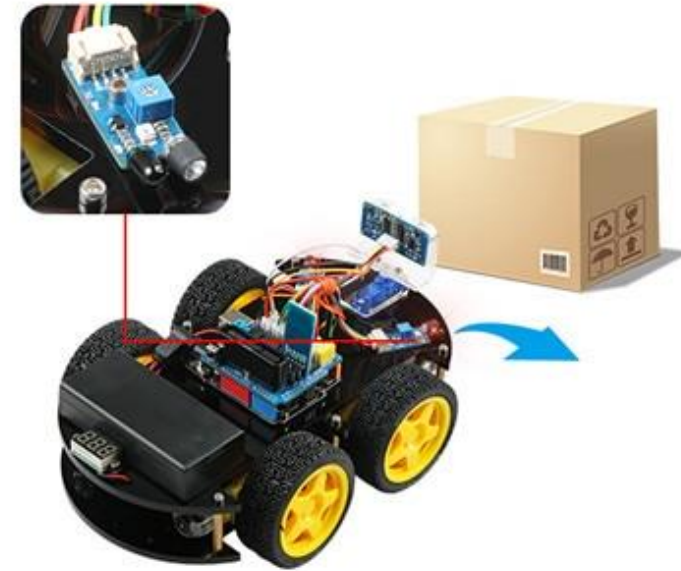
ENGINEERING CLINICS

PROJECT FALLSEM 2022-23
REVIEW - 01

SMART ROBOT CAR USING ARDUINO



Infrared remote control



Infrared obstacle avoidance



Infrared tracking



Ultrasonic obstacle avoidance

Android based smart robot control car





GUIDE NAME

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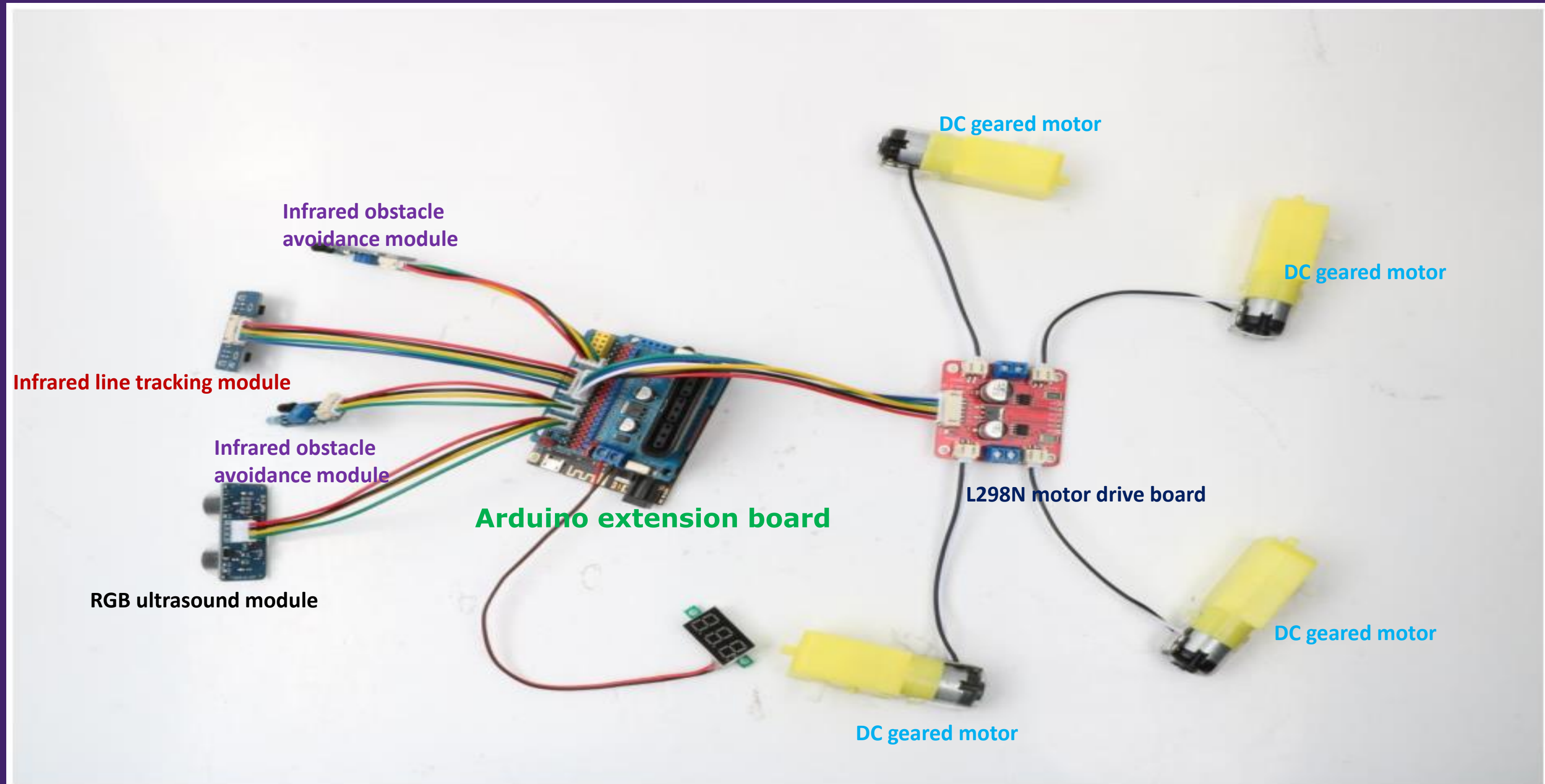


Required components

- *Arduino BLE-UNO Mother board*
- *Arduino extension board*
- *Infrared line tracking module*
- *Infrared obstacle avoidance module*
- *L298N motor drive board*
- *RGB ultrasound module*
- *Power indicator digital tube*
- *65mm wheel*
- *DC geared motor*
- *18650 battery charger*
- *SG90 servo*
- *18650 li-battery*



Schematic diagram of overall connection



Approximate Budget

S.NO	REQUIRED COMPONENT	APPOX.COST
01	Arduino BLE-UNO Mother board	700
02	Arduino extension board	300
03	Infrared line tracking module	70
04	Infrared obstacle avoidance module	50
05	L298N motor drive board	90
06	RGB ultrasound module	70
07	Power indicator digital tube	60
08	65mm wheel	60
09	DC geared motor	$(70*4)=280$
10	18650 battery charger	50
11	SG90 servo	120
12	18650 li-battery	$(50*2)=100$
	TOTAL COST	1,950

EQUIPMENTS



R3



**Arduino
extension board**



**Infrared line
tracking module**



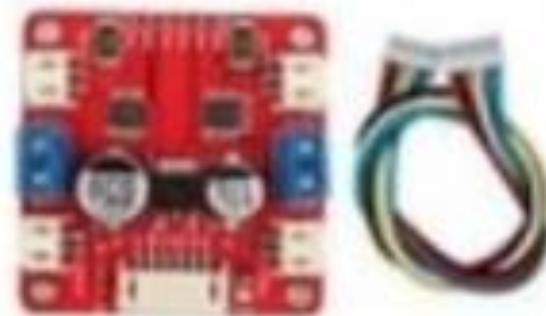
**Power indicator
digital tube**



DC geared motor



**Infrared obstacle
avoidance module**



**L298N motor
drive board**



RGB Ultrasonic Module



SG90 servo



18650 li-battery box



REFERENCE



- <https://www.scribd.com/books>
- <https://www.scribd.com/document/449237250/Hummer-Bot-4-0-Instruction-Manual-V-1-5>
- <https://create.arduino.cc/projecthub/samanfer/bluetooth-controlled-car-d5d9ca>





THANK YOU

