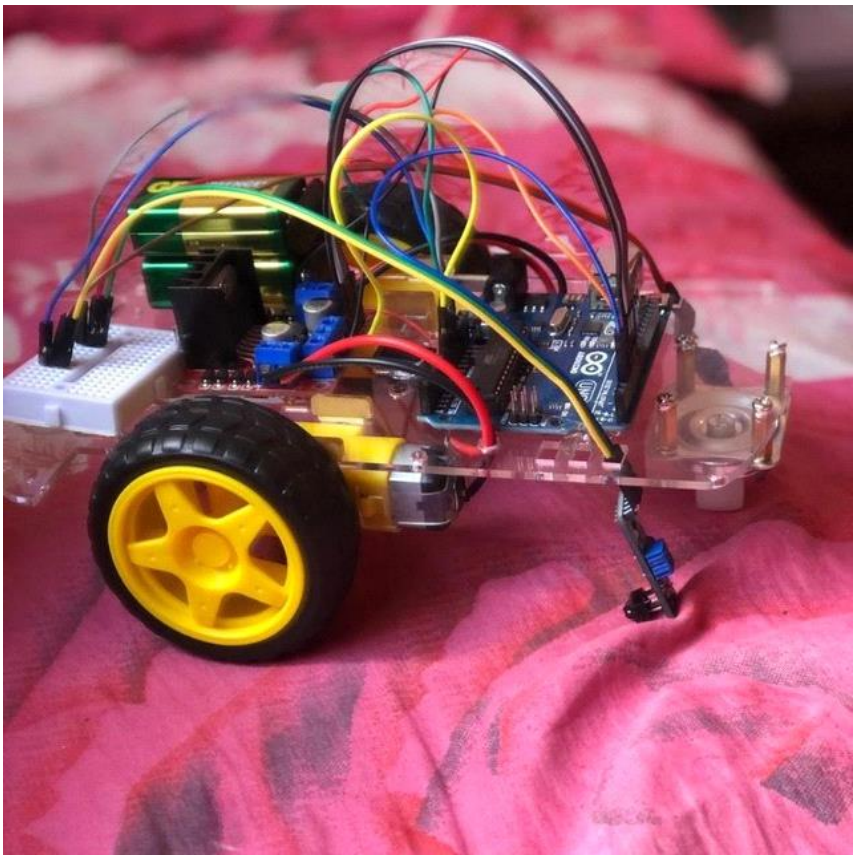
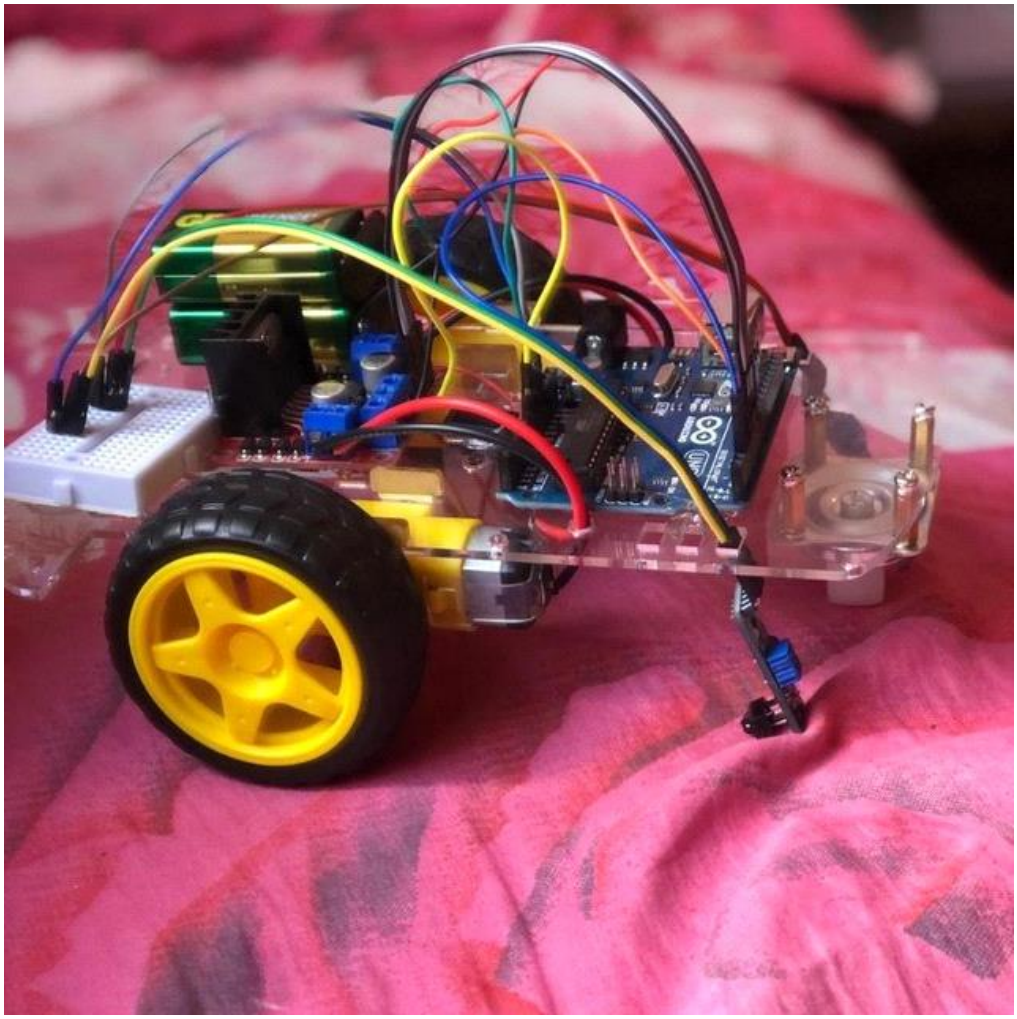
ROBOT

Team:GDFM



1st project



المشروع:

- روبوت يتبع الخط الأسود

- ?????? ???:

• [illegible] [illegible] [illegible] [illegible] 206	[illegible] [illegible] [illegible] [illegible] 75
[illegible] [illegible] [illegible] [illegible] 127	• [illegible] [illegible] [illegible] [illegible] 155

• الأجزاء:

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- [illegible] [illegible].
- **2 IR .Sensors**
- [illegible] [illegible].
- [illegible] [illegible].
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• [illegible] [illegible]:

```
#define LS 2 // left sensor

#define RS 3 // right sensor
```

```
#define LM1 5 // left motor M1a

#define LM2 4 // left motor M2a

#define RM1 7 // right motor M2a

#define RM2 6 // right motor M2b


Void setup()

{

pinMode(LS, INPUT);

pinMode(RS, INPUT);

pinMode(LM1, OUTPUT);

pinMode(LM2, OUTPUT);

pinMode(RM1, OUTPUT);

pinMode(RM2, OUTPUT);

pinMode(10,OUTPUT);

pinMode(11,OUTPUT);

analogWrite(10,100);// control the spead of left motor

analogWrite(11,100);// control the speed of right motor


}

Void loop()

{

If(!digitalRead(LS) && !digitalRead(RS)) // Move Forward on line
```

{

digitalWrite(LM1, HIGH);

digitalWrite(LM2, LOW);

digitalWrite(RM1, HIGH);

digitalWrite(RM2, LOW);

}

If(digitalRead(LS) && !(digitalRead(RS))) // turn left by rotationg left motors in forward and right ones in backward direction

{

digitalWrite(LM1, HIGH);

digitalWrite(LM2, LOW);

digitalWrite(RM1, LOW);

digitalWrite(RM2, HIGH);

}

If(!(digitalRead(LS)) && digitalRead(RS)) // Turn right by rotating right motors in forward and left ones in backward direction

{

digitalWrite(LM1, LOW);

digitalWrite(LM2, HIGH);

digitalWrite(RM1, HIGH);

digitalWrite(RM2, LOW);

}

If((digitalRead(LS)) && (digitalRead(RS))) // Finish line, stop both the motors

{

digitalWrite(LM1, LOW);

digitalWrite(LM2, LOW);

digitalWrite(RM1, LOW);

digitalWrite(RM2, LOW);

}

}