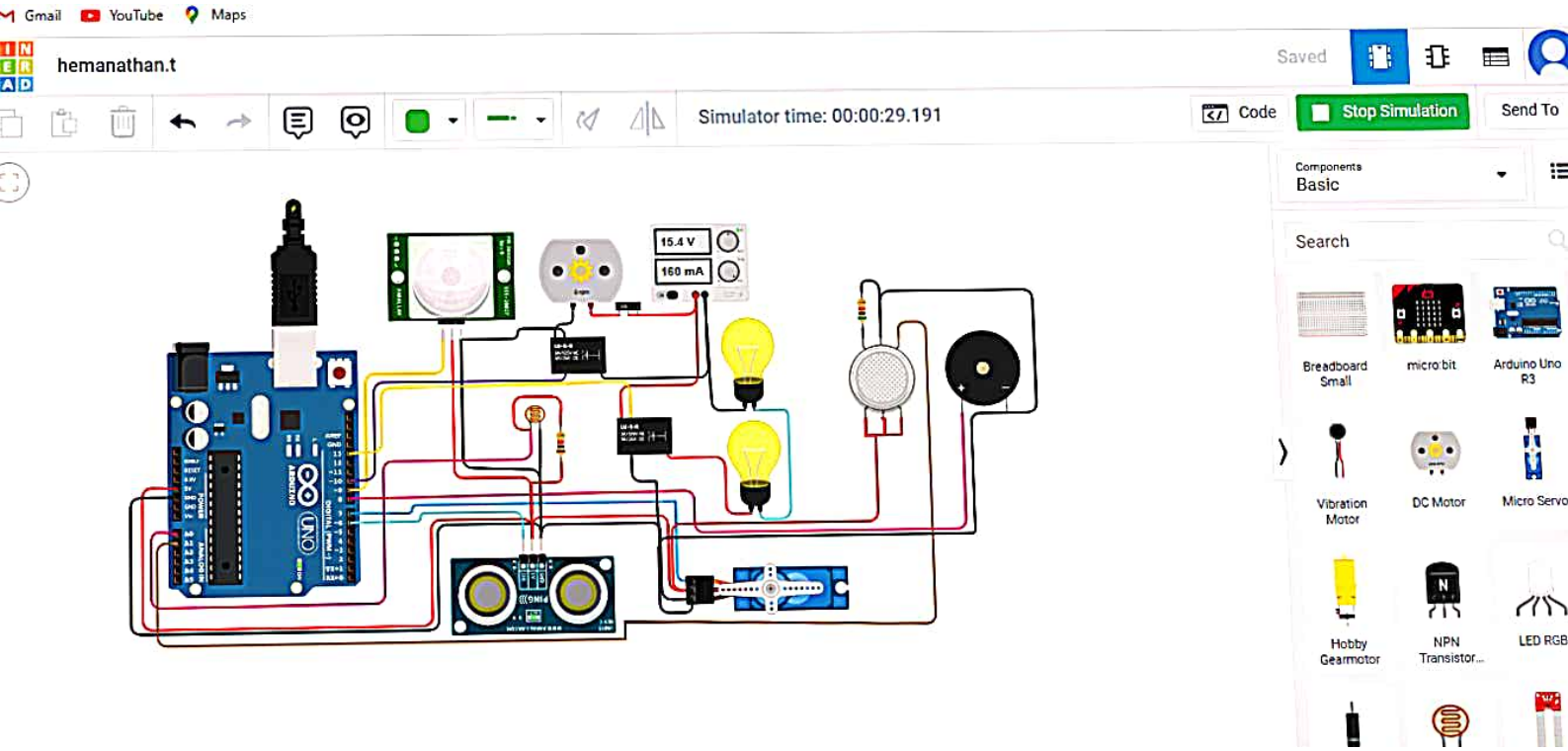
Gmail
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hemanathan.t
Saved
Simulator time: 00:00:29.191
Code
Stop Simulation
Send To
15.4 V
160 mA
Components
Basic
Search
Breadboard Small
micro:bit
Arduino Uno R3
Vibration Motor
DC Motor
Micro Servo
Hobby Gearmotor
NPN Transistor...
LED RGB

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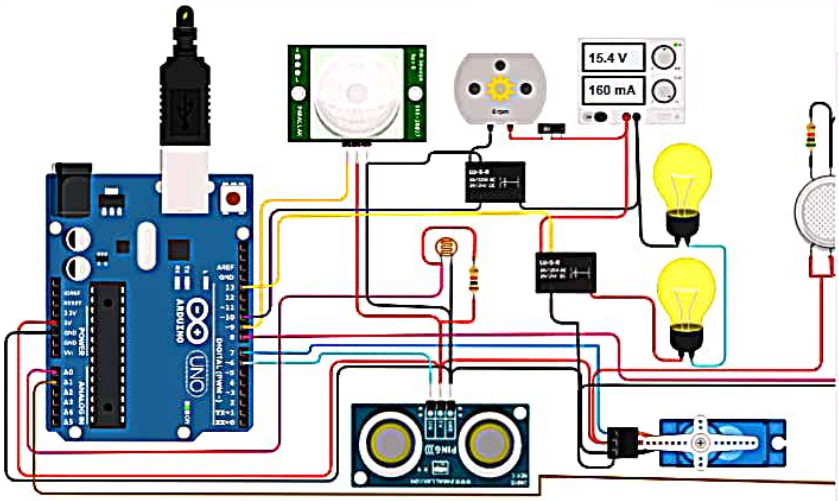
Saved

Simulator time: 00:00:53

Code | Stop Simulation | Send To



1 (Arduino Uno R3)

```
    int val1 = analogRead(LDR);
  if (val1 > 500)
    {
        digitalWrite(13, LOW);
    Serial.print("Bulb ON = ");
    Serial.print(val1);
    }
  else
    {
        digitalWrite(13, HIGH);
     Serial.print("Bulb OFF = ");
    Serial.print(val1);
    }

//-------------------------------------------------------------
        //------ light & fan control --------//
//-------------------------------------------------------------
  sen2Value = digitalRead(9);
  if (sen2Value == 0)
    {
        digitalWrite(10, LOW); //npn as switch OFF
        digitalWrite(4, HIGH); // Red LED ON,indicating no motion
        digitalWrite(3, LOW); //Green LED OFF, since no Motion de
    Serial.print("     || NO Motion Detected    " );
    }

  if (sen2Value == 1)
```

Serial Monitor

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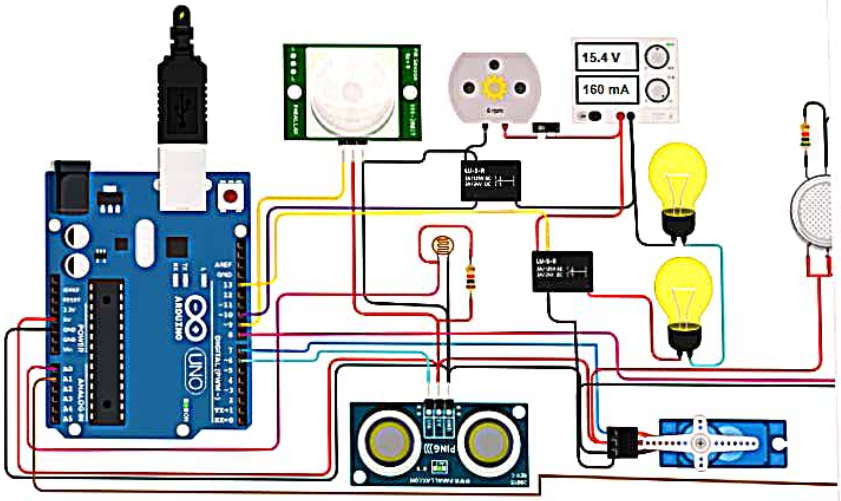
Saved

Simulator time: 00:01:01

Code | Stop Simulation | Send To



1 (Arduino Uno R3)

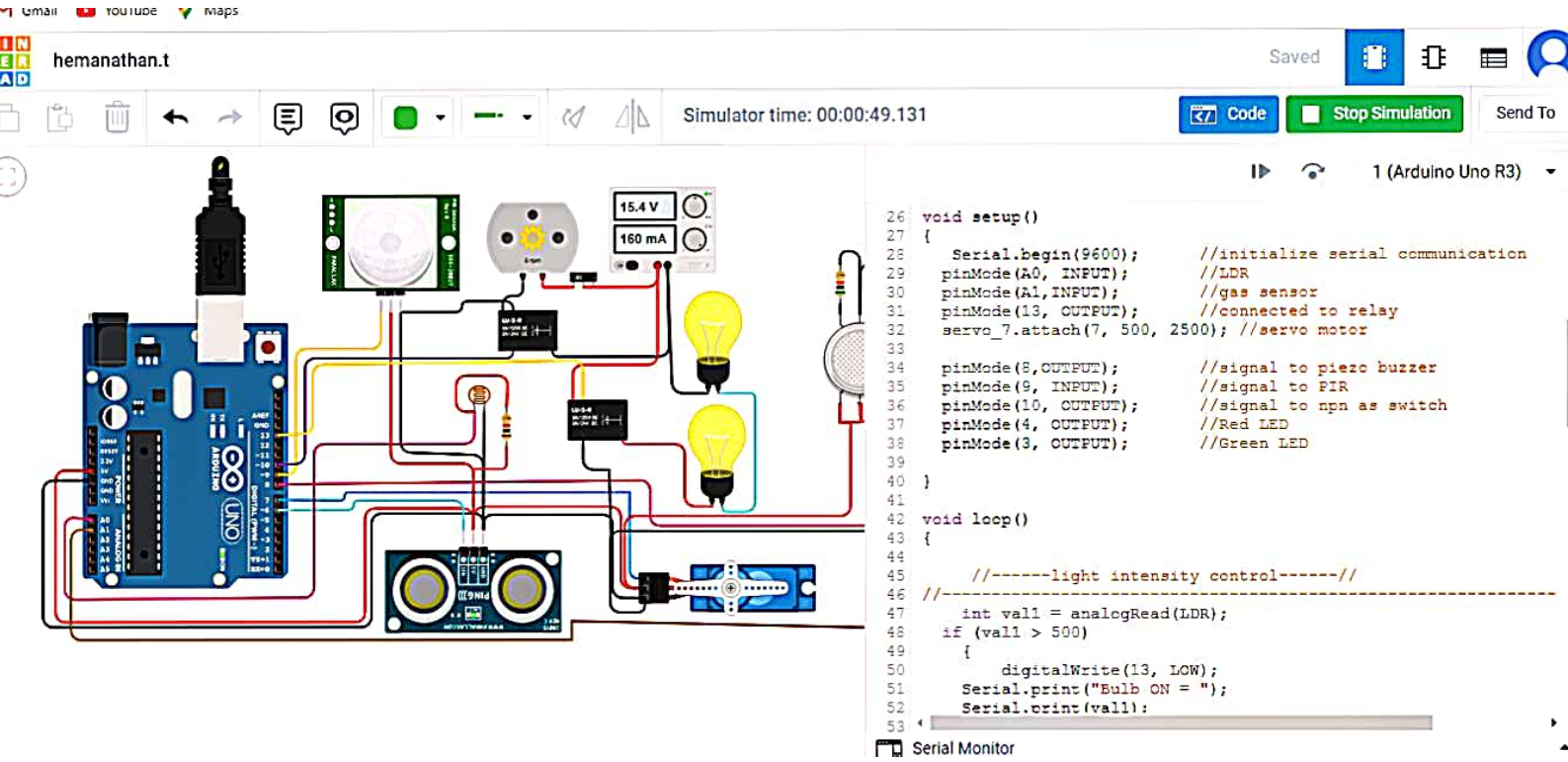
```
        tone(8, 650);
    }
    delay(300);
    noTone(8);

//-------------------------------------------------------------
    //-------  servo motor  ---------//
//-------------------------------------------------------------
 sen1Value = 0.01723 * readUltrasonicDistance(6, 6);

 if (sen1Value < 100)
   {
       servo_7.write(90);
   Serial.print("    || Door Open!  ; Distance = ");
   Serial.print(sen1Value);
  Serial.print("\n");

   }
 else
   {
       servo_7.write(0);
   Serial.print("    || Door Closed! ; Distance =  ");
   Serial.print(sen1Value);
   Serial.print("\n");
 }
 delay(10); // Delay a little bit to improve simulation perfor
}
```

Serial Monitor


Gmail
YouTube
Maps
hemanathan.t
Saved
Simulator time: 00:00:49.131
Code
Stop Simulation
Send To
15.4 V
160 mA
1 (Arduino Uno R3)
void setup()
{
Serial.begin(9600); //initialize serial communication
pinMode(A0, INPUT); //LDR
pinMode(A1,INPUT); //gas sensor
pinMode(13, OUTPUT); //connected to relay
servo_7.attach(7, 500, 2500); //servo motor
pinMode(8,OUTPUT); //signal to piezo buzzer
pinMode(9, INPUT); //signal to PIR
pinMode(10, OUTPUT); //signal to npn as switch
pinMode(4, OUTPUT); //Red LED
pinMode(3, OUTPUT); //Green LED
}
void loop()
{
//------light intensity control------//
int val1 = analogRead(LDR);
if (val1 > 500)
{
digitalWrite(13, LOW);
Serial.print("Bulb ON = ");
Serial.print(val1);
Serial Monitor