ASSIGNMENT-1

Domain: IoT

Assignment on **SMART HOME AUTOMATION IN TINKERCAD**

Team Members:

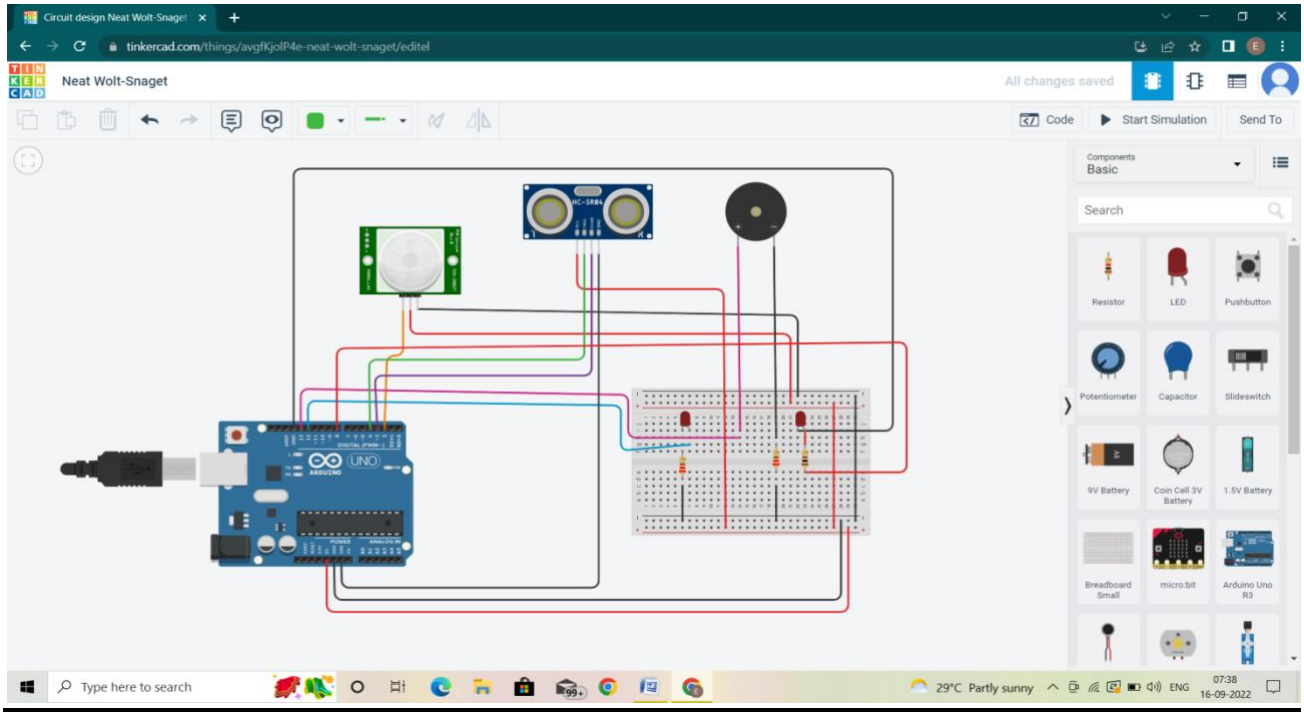
SUBALAKSHMI G-513119106314

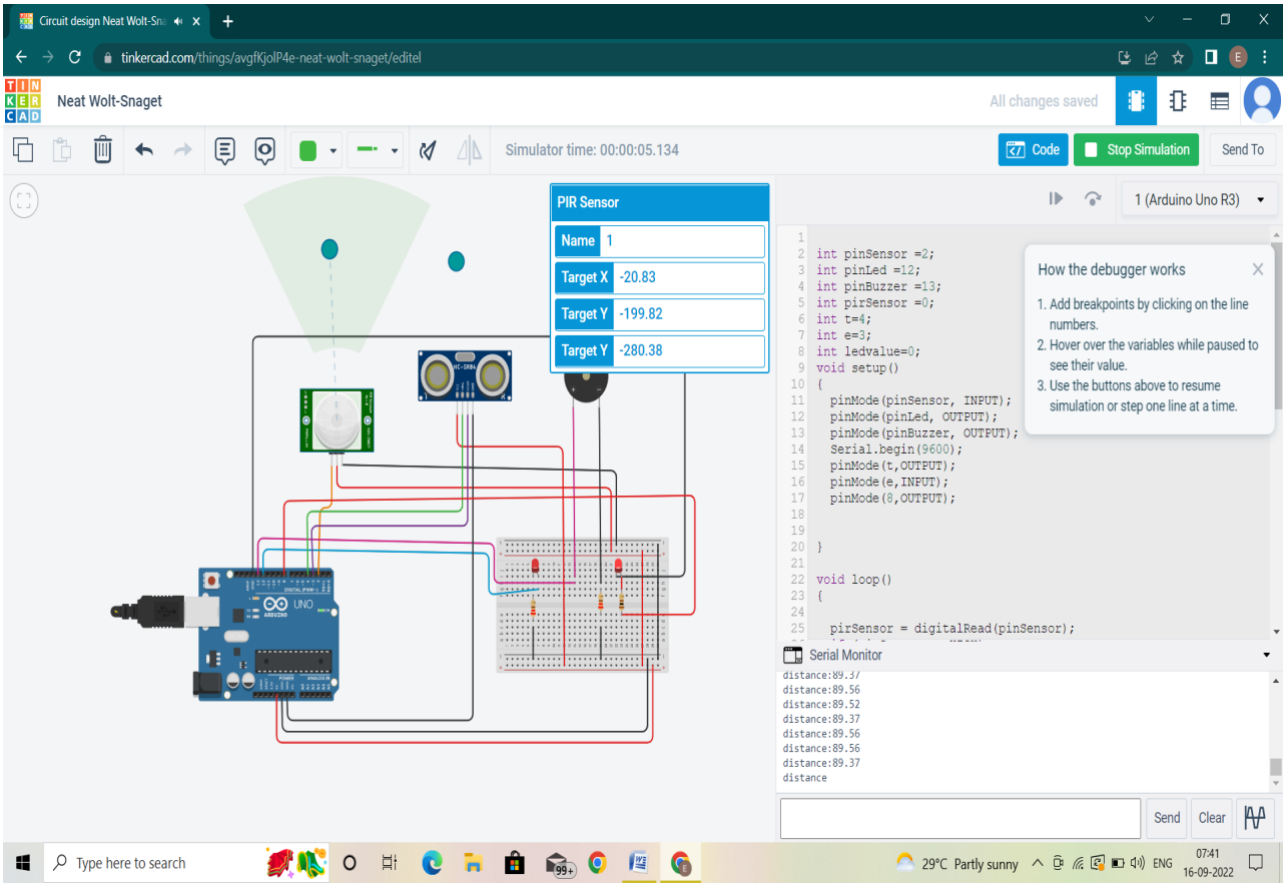
RANJITH KUMAR R-513119106311

TAMIZH D-513119106316

VELMURUGAN V-513119106317

CIRCUIT:





Components used:

Name	**Quantity**	**Components**
U1	1	Arduino Uno R3
PIR1	1	-20.8374493192873,-199.82134232419207,-280.3753125931,-269.74676887641135 PIR Sensor
D1 D2	2	Red LED
R1 R2	2	220 Ω Resistor
PIEZO1	1	Piezo
DIST 1	1	Ultrasonic Distance Sensor
R3	1	100Ω Resistor

Code:

```
intpinSensor =2;

intpinLed =12;

intpinBuzzer =13;

intpirSensor =0;

int t=4;

int e=3;

intledvalue=0;

void setup()
```

```
{
pinMode(pinSensor, INPUT);
pinMode(pinLed, OUTPUT);
pinMode(pinBuzzer, OUTPUT);
Serial.begin(9600);
pinMode(t,OUTPUT);
pinMode(e,INPUT);
pinMode(8,OUTPUT);
}
void loop()
{
pirSensor = digitalRead(pinSensor);
if (pirSensor == HIGH)
 {
digitalWrite(pinLed, HIGH);
tone(pinBuzzer, 1000, 500);
    }
else {
digitalWrite(pinLed, LOW);
 }

delay(10);
 {
digitalWrite(t,LOW);
digitalWrite(t,HIGH);
delayMicroseconds(10);
```

```
digitalWrite(t,LOW);
floatdur=pulseIn(e,HIGH);
float dis=(dur*0.0343/2);
Serial.print("distance:");
Serial.println(dis);
ledvalue = map(dis,330,10,0,255);
analogWrite(8,ledvalue);
  }
}
```

Tinkercad Link:

https://www.tinkercad.com/things/avgfKjolP4e-neat-wolt-snaget