

Prince Dr. K. Vasudevan College of Engineering and Technology

ASSIGNMENT- 1

PROJECT TITLE	Personal assistance for seniors who are self reliant
TEAM ID	PNT2022TMID38119
NAME	KARTHIKEYAN V
TEAM LEAD	BALAJI M

ASSIGNMENT 1: Built a smart home in tinkercad. Using at least 2 sensors, led, buzzer in a circuit. Stimulate in a single code.

COMPONENT ARE USED :

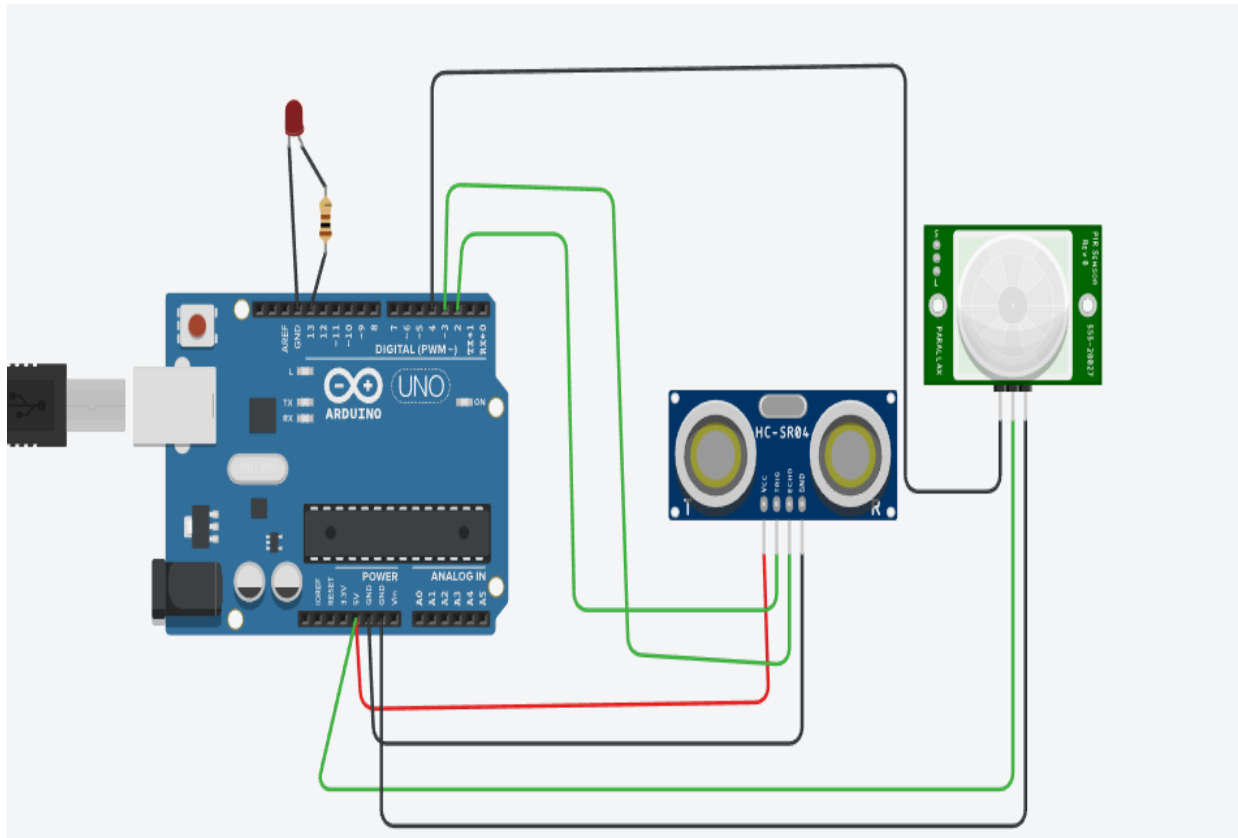
- Arduino
- PIR
- LDR
- LM35
- DC Power source
- Relay Board of 2 Channel

CODE FOR THE CIRCUIT :

```
int trigger_pin=2;
int echo_pin=3;
int time;
int distance;
void setup()
{
  Serial.begin(9600);
  pinMode(trigger_pin,OUTPUT);
  pinMode(echo_pin,INPUT);
  pinMode(4,INPUT);
  pinMode(13,OUTPUT);
```

```
}  
  
void loop()  
{  
    digitalWrite(trigger_pin,HIGH);  
    delayMicroseconds(10);  
    digitalWrite(trigger_pin,LOW);  
    time=pulseIn(echo_pin,HIGH);  
    distance=(time*0.034)/2;  
    if(distance<=10)  
    {  
        Serial.println("Door open");  
        Serial.print("Distance=");  
        Serial.println(distance);  
        delay(500);  
    }  
    else{  
        Serial.println("Door closed");  
        Serial.print("Distance=");  
        Serial.println(distance);  
        delay(500);  
        int p=digitalRead(4);  
        if(p)  
        {  
            digitalWrite(13,HIGH);  
            Serial.println("motion detected");  
        }  
        else  
        {  
            digitalWrite(13,LOW);  
            Serial.println("not detected");  
        }  
    }  
}
```

OUTPUT :



STIMULATION LINK:

<https://www.tinkercad.com/things/hesL7row3n1-smart-home-1/editel>.