smart home -parameshwari

assignmint-https://wokwi.com/projects/363157457969940481

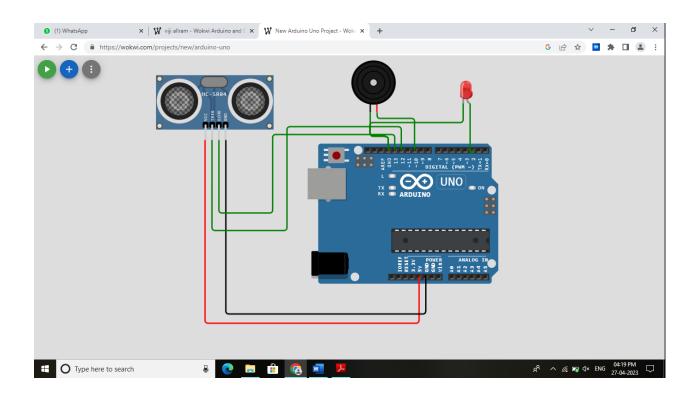
```
//define variables
#define trigerPin 12
#define echoPin 13
#define ledPin 2
#define speakerPin 10
#define pitch 262
double duration, distance;
void setup() {
 //setup for sensor
 Serial.begin(9600);
  pinMode(trigerPin,OUTPUT);
  pinMode(echoPin,INPUT);
  //setup for LED
  pinMode(ledPin,OUTPUT);
  //setup for speaker
  pinMode(speakerPin,OUTPUT);
}
void loop() {
 //looping sensor(create sound wave)
  digitalWrite(trigerPin,LOW);
  delayMicroseconds(2);
  digitalWrite(trigerPin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigerPin,LOW);
  delayMicroseconds(2);
//getduration
duration = pulseIn(echoPin,HIGH);
//caculate distance
```

```
distance = (duration/2) * 0.0343;

//consider maximum width of the door = 200 cm

if(distance<200){
    digitalWrite(ledPin, HIGH);
    tone(speakerPin, pitch);
    delay(300);

    digitalWrite(ledPin, LOW);
    noTone(speakerPin);
    delay(300);
}
else{
    digitalWrite(ledPin,LOW);
    noTone(speakerPin);
}
</pre>
```



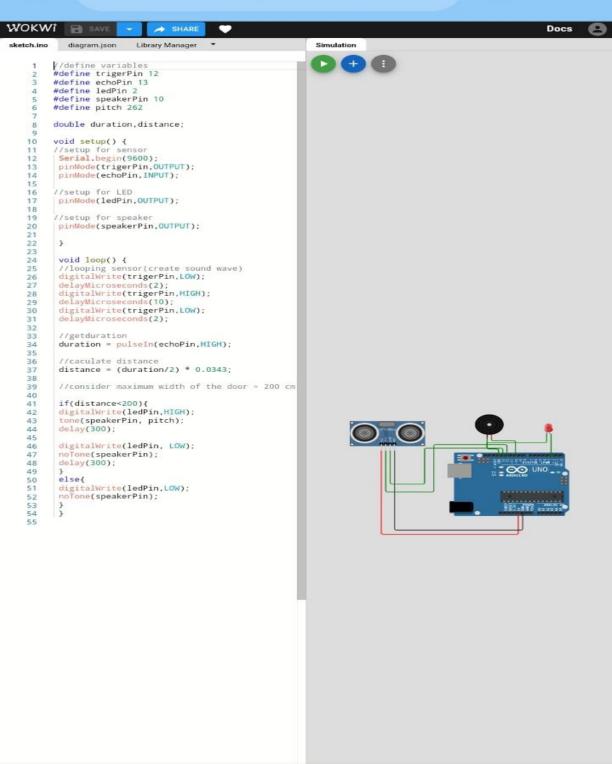






mobwi.com/projects/3631574







English

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