Professional Readiness for

Innovation, Employability and Entrepreneurship

SMART HOME

Submitted by,

Subarna Mukila.D,

961819106052,

B12-6A2E.

DOOR BUZZER USING ULTRASONIC SENSOR

CODE:

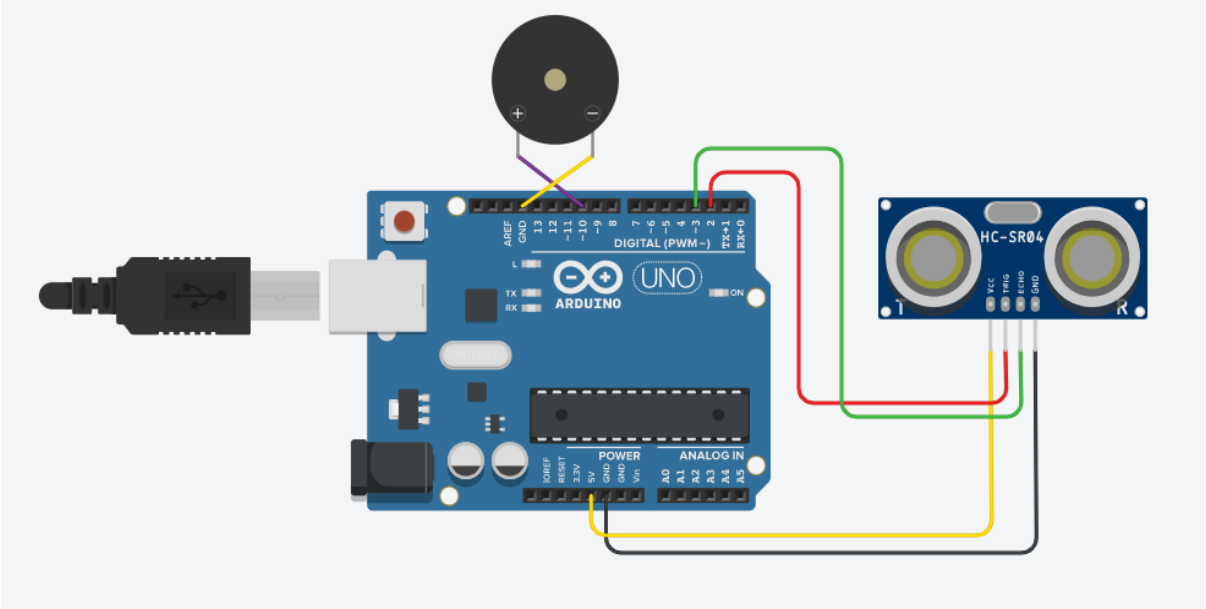
```
// Door Alarm using Arduino UNO and Ultrasonic sensor.

int trigger_pin=2;
int echo_pin=3;
int buzzer_pin=10;
int time;
int distance;
void setup ()
{
  Serial.begin(9600);
  pinMode (trigger_pin, OUTPUT);
  pinMode (echo_pin,INPUT);
  pinMode (buzzer_pin,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);
  digitalWrite(buzzer_pin,HIGH);
  delay(500);
}
else
{
   Serial.println("Door Closed");
   Serial.print("Distance");
   Serial.println(distance);
   digitalWrite(buzzer_pin,LOW);
   delay(500);
}
}
```

TINKERCAD LINK:

https://www.tinkercad.com/things/gTJjjZ5CfMC-swanky-bojo-bruticus/editel?tenant=circuits

FIGURE:



Whenever anyone comes in the path / range of the ultrasonic sensor, microcontroller detects the distance of the object is in the defined range, it sends the high signal to the buzzer and the buzzer starts beeping.