Professional Readiness for

Innovation, Employability And Entrepreneurship

SMART HOME

SUBMITTED BY:

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Door Buzzer Using Ultrasonic Sensor

CODE:

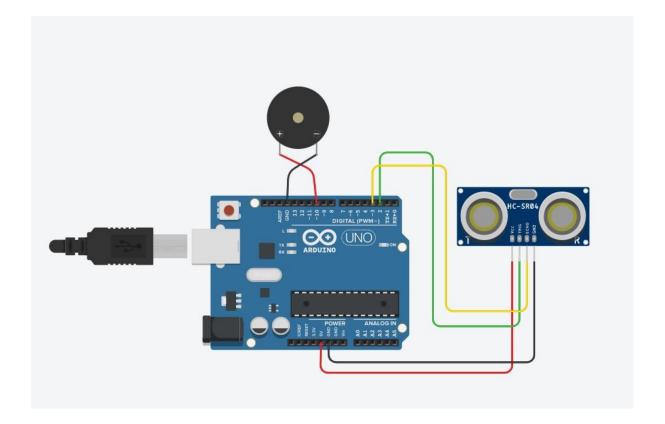
```
// Door Alarm Using Arduino UNO and Ultrasonic Sensor
// Code to be used in the Text sub-window of tinkercad.com circuit page
int trigger pin=2;
int echo_pin=3;
int buzzer_pin=10;
int time;
int distance;
void setup()
{
 Serial.begin(9600);
 pinMode(trigger_pin,OUTPUT);
 pinMode(echo_pin,INPUT);
 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/hNa6o efzPDi-fantabulous-densor-kieran/editel

FIGURE:



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