Professional Readiness for

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SMART HOME

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Door Buzzer Using Ultrasonic Sensor

CODE:

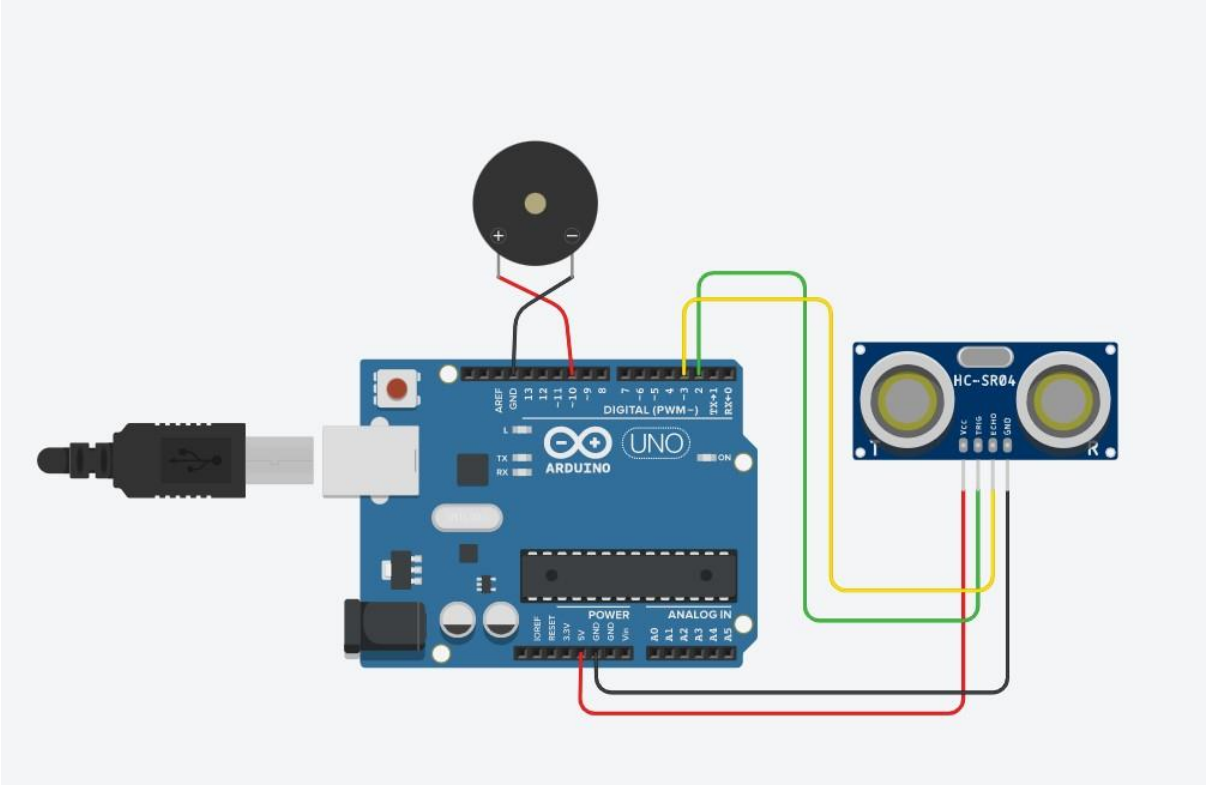
```
 // Door Alarm Using Arduino UNO and Ultrasonic Sensor
// Code to be used in the Text sub-window of tinkercad.com circuit page


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/8IgU3MQO6zi-neat-snicket/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.