**Professional Readiness for**

**Innovation, Employability and Entrepreneurship**

## SMART HOME

## 

## Submitted By

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## INTERNET OF THINGS**–B12-6A2E -**

## 

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/iq0VuoWBWFZ>

## FIGURE:

## 

## Whenever anyone comes in the path/range of

## Ultrasonic Sensor, microcontroller detects the distance

## of object from the sensor and if the object is in the

## defined range, it sends the High signal to the buzzer and

## buzzer starts beeping.