

ASSIGNMENT-4

1. CODE:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization = "gw4r4k"

#define deviceType = "abcd"

#define deviceId = "12"

#define authMethod = "token"

#define authToken = "12345678"


void setup(){

    Serial.begin(9600);

    pinMode(TRIG_PIN,OUTPUT);

    pinMode(ECHO_PIN,INPUT);

}


float readDistanceCM(){

    digitalWrite(TRIG_PIN,LOW);

    delayMicroseconds(2);

    digitalWrite(TRIG_PIN,HIGH);

    delayMicroseconds(10);

    digitalWrite(TRIG_PIN,LOW);

    int duration=pulseIn(ECHO_PIN,HIGH);

    return duration*0.034/2;

}


void loop(){

    float distance=readDistanceCM();
```

```

if(distance<=100)
{
    Serial.println("person detected");
}
else{
    Serial.print("Measured distance:");
    Serial.println(readDistanceCM());
}
delay(1000);
}

```

2. LINK:

<https://wokwi.com/projects/347041660434121300>

3. IBM CLOUD:

The screenshot displays the IBM Watson IoT Platform interface. The main window shows a list of devices, with one device selected and its details expanded. The 'Recent Events' tab is active, showing a table of events. A modal window is open for configuring a new event type.

Device Details:

| Device ID | Status | Device Type | Class ID | Date |
|-----------|--------------|-------------|----------|------|
| 12 | Disconnected | abcd | Device | Oct |

Recent Events Table:

| Event | Value | Format | Last Receive |
|---------|------------------------------------|--------|-------------------|
| event_1 | {"randomNumber":38,"distance":51} | json | a few seconds ago |
| event_1 | {"randomNumber":65,"distance":52} | json | a few seconds ago |
| event_1 | {"randomNumber":44,"distance":81} | json | a few seconds ago |
| event_1 | {"randomNumber":56,"distance":148} | json | a few seconds ago |
| event_1 | {"randomNumber":55,"distance":147} | json | a few seconds ago |

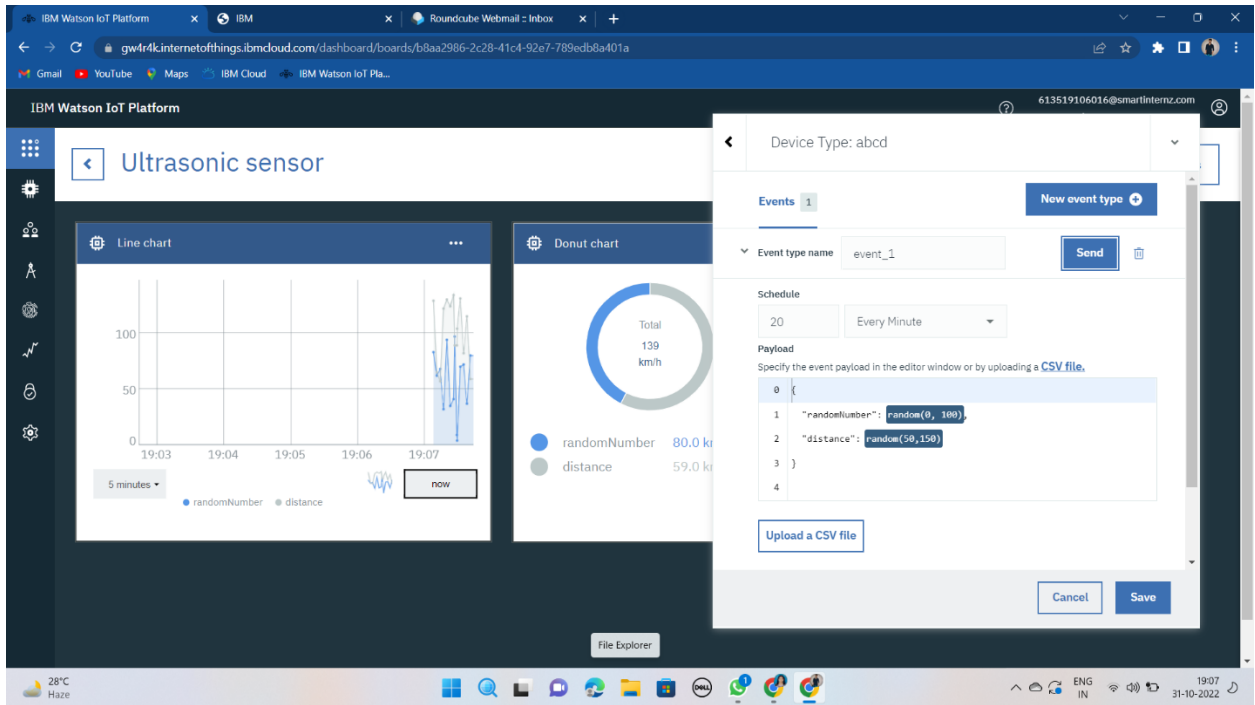
Event Configuration Modal:

- Device Type:** abcd
- Event type name:** event_1
- Schedule:** 20 Every Minute
- Payload:**

```

{
  "randomNumber": random(0, 100),
  "distance": random(50, 150)
}

```
- Buttons:** Send, Upload a CSV file, Cancel, Save



4. WOOLKI:

