

## ASSIGNMENT-4

### 1. CODE:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization = "a778pt"

#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);
}

```

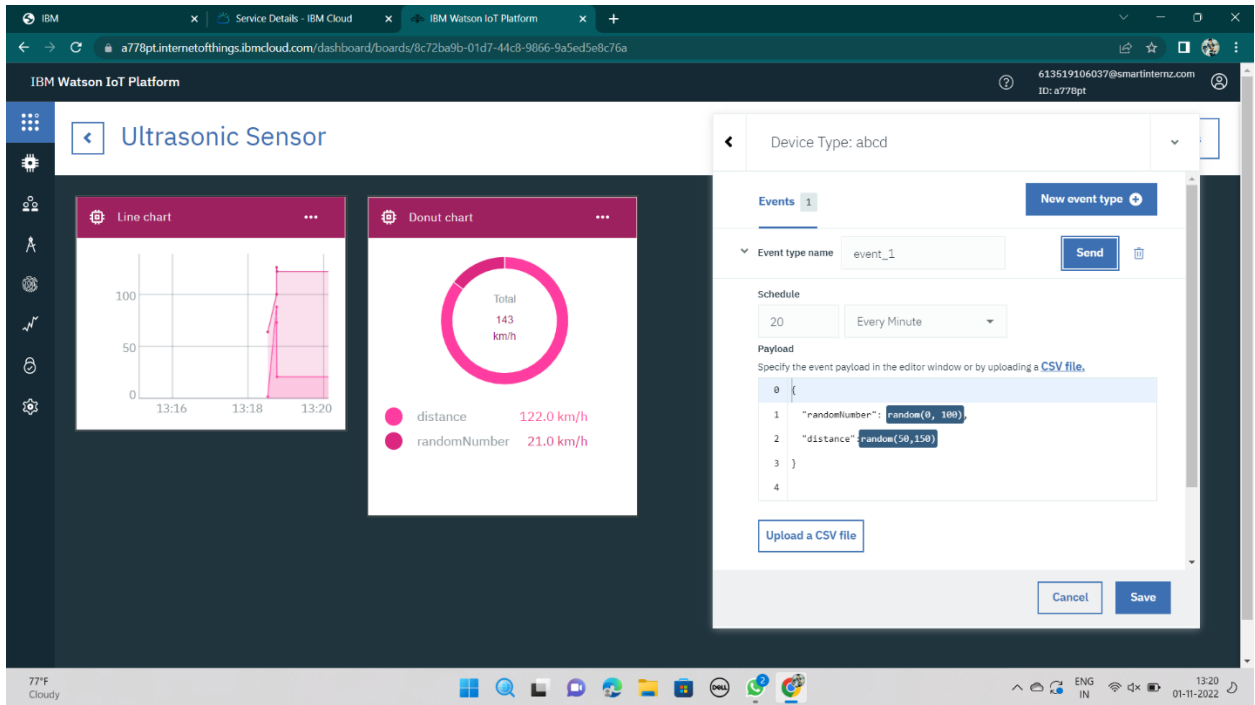
## 2. LINK:

<https://wokwi.com/projects/347110557404365395>

## 3. IBM CLOUD:

The screenshot displays the IBM Watson IoT Platform interface. The main window shows a list of devices, with one device selected. A modal window titled "Device Type: abcd" is open, showing the configuration for a new event type. The "Event type name" is "event\_1". The "Schedule" is set to "Every Minute" with a delay of "20". The "Payload" is a JSON object: `{ "randomNumber": random(0, 100), "distance": random(50, 150) }`. The "Upload a CSV file" button is visible. The background shows a table of recent events for the selected device.

Event	Value	Format	Last Received
event_1	{"randomNumber":53,"distance":150}	json	6 minutes ago
event_1	{"randomNumber":30,"distance":149}	json	6 minutes ago
event_1	{"randomNumber":56,"distance":98}	json	6 minutes ago
event_1	{"randomNumber":79,"distance":54}	json	6 minutes ago
event_1	{"randomNumber":82,"distance":111}	json	6 minutes ago



#### 4. WOOLKI:

