Assignment -4

Assignment Date	25 October 2022
Student Name	Selvabharathi. Ａ
Team ID	PNT2022TMID33110
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Question-1:

Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send "alert" to ibm cloud and display in device recent events.
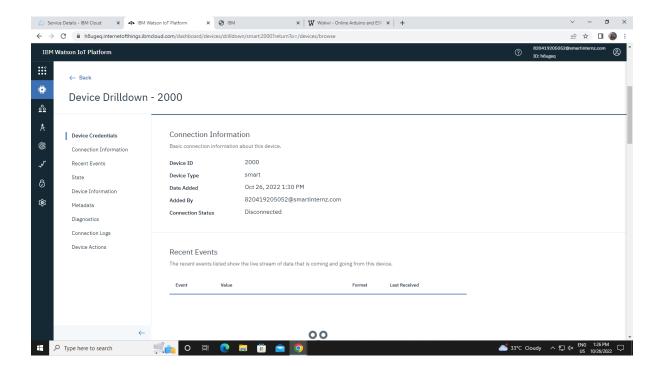
Solution:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization ="h8ugeq"

#define deviceType="smart"

#define deviceId ="2000"

#define authMethod ="use-token-auth"

#define authToken ="12200018"

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);
}
```


Wokwi Link: https://wokwi.com/projects/346570453642379860

IBM Cloud

Device Recent Events

Wokwi Link: https://wokwi.com/projects/346570453642379860