

Assignment -4

Assignment Date	16 th November 2022
Team ID	PNT2022TMID22052
Project Name	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 = “fkxdqs”

#define deviceType = “Arduino”

#define deviceId = “1200”

#define authMethod = “use-token-auth”

#define authToken = “00000000”

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(readDistanceC

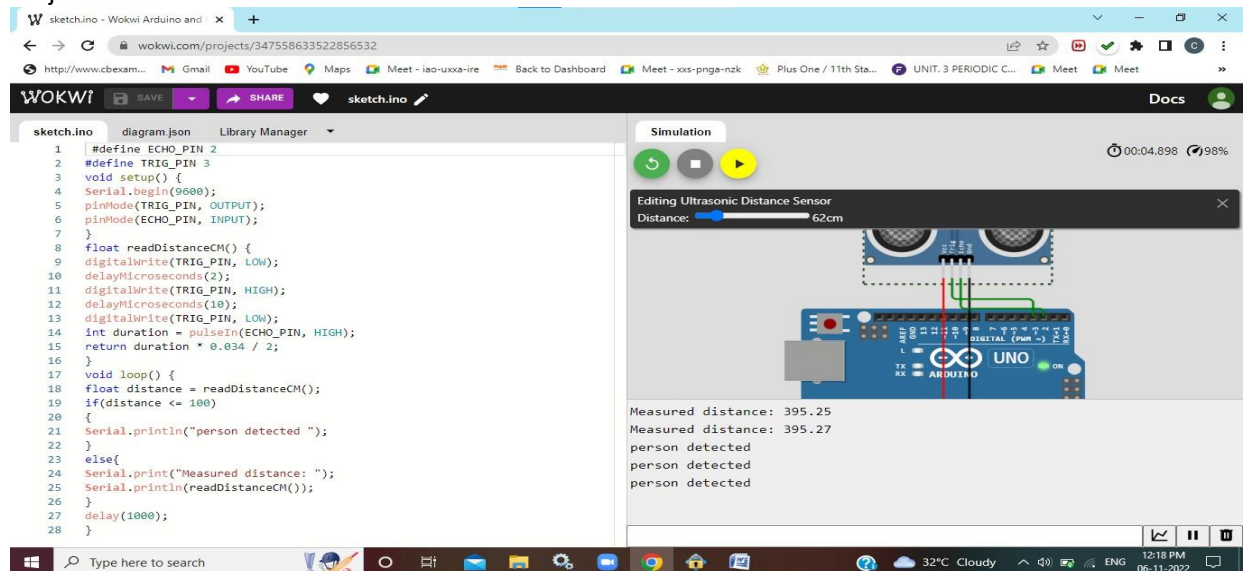
M());

    }

    delay(1000);

}

```



Wokwi Link: <https://wokwi.com/projects/347558633522856532>

