

ASSIGNMENT 4

Date	27 October 2022
Team ID	PNT2022TMID18361
Project Name	Smart Farmer-IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

```
#define ECHO_PIN 2
#define TRIG_PIN 3
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);
}
```

Simulation:

Simulation

00:19.604 72%

Measured distance: 395.35

Measured distance: 395.25

Measured distance: 395.25

Measured distance: 395.25

Measured distance: 395.25

Measured distance: 395.27

Measured distance: 395.25

IBM WATSON:

Browse

Action

Device Types

Interfaces

Add Device

1234

Disconnected

Ultrasonic

Device

Oct 26, 2022 8:53 PM

Ultrasonic_1

Connected

Ultrasonic

Device

Oct 26, 2022 8:55 PM

Identity

Device Information

Recent Events

State

Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	["status":"person detected"]	json	a few seconds ago
event_1	["status":"person detected"]	json	a few seconds ago
event_1	["status":"person detected"]	json	a few seconds ago
event_1	["status":"person detected"]	json	a few seconds ago
event_1	["status":"person detected"]	json	a few seconds ago

1 Simulation running

