

Assignment 4

Project Link: <https://wokwi.com/projects/290056311044833800>

Code:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization ="kv09p4"

#define device type ="Groot"

#define deviceId="13"

#define authmethod="token" #define
authToken="123456789"

void setup() { Serial.begin(115200);

  pinMode(LED_BUILTIN, OUTPUT);

  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);
}

```

Browse
Action
Device Types
Interfaces

Device ID	Status	Device Type	Class ID	Date
13	Disconnected	Groot	Device	Oct

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	{"distance":110}	json	a few seconds ago
event_1	{"distance":91}	json	a few seconds ago
event_1	{"distance":83}	json	2 minutes ago
event_1	{"distance":110}	json	2 minutes ago
event_1	{"distance":38}	json	2 minutes ago

Device Type: Groot

Events 1
New event type

Event type name
event_1
Send

Schedule
1
Every Minute

Payload
Specify the event payload in the editor window or by uploading a CSV file.

```

0 {
1   "distance": random(10, 120)
2 }
3

```

Upload a CSV file

What functions can I apply?

Cancel
Save

Ultrasonic

Line chart

1 minute
now

Device Type: Groot

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New event type

Event type name
event_1
Send

Schedule
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Specify the event payload in the editor window or by uploading a CSV file.

```

0 {
1   "distance": random(10, 120)
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Upload a CSV file

What functions can I apply?

Cancel
Save

```

6 #define ECHO_PIN 2
7 #define TRIG_PIN 3
8 #define organization "kv09p4"
9 #define device type ="Groot"
10 #define deviceId="13"
11 #define authmethod="token"
12 #define authToken="123456789"
13 void setup() {
14   Serial.begin(115200);
15   pinMode(LED_BUILTIN, OUTPUT);
16   pinMode(TRIG_PIN, OUTPUT);
17   pinMode(ECHO_PIN, INPUT);
18 }
19 float readDistanceCM() {
20   digitalWrite(TRIG_PIN, LOW);
21   delayMicroseconds(2);
22   digitalWrite(TRIG_PIN, HIGH);
23   delayMicroseconds(10);
24   digitalWrite(TRIG_PIN, LOW);
25   int duration = pulseIn(ECHO_PIN, HIGH);
26   return duration * 0.034 / 2;
27 }
28 void loop(){
29   float distance=readDistanceCM();
30   if(distance<=100)
31   {
32     Serial.println("person detected");
33   }
34   else{
35     Serial.print("Measured distance:");
36     Serial.println(readDistanceCM());
37   }
38   delay(1000);
39 }

```



00:22.280 99%

Measured distance:177.34
 Measured distance:177.24
 Measured distance:177.40
 Measured distance:177.24
 Measured distance:177.33
 Measured distance:177.24
 Measured distance:177.33

