

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

```
#define ECHO_PIN 2
#define TRIG_PIN 3

#define organization = "pb6xw8"
#define deviceType = "abcd"
#define deviceId = "12"
#define authMethod = "token"
#define authToken = "12345678"

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();

  bool isNearby = distance < 100;
  digitalWrite(LED_BUILTIN, isNearby);

  Serial.print("Measured distance: ");
  Serial.println(readDistanceCM());

  delay(100);
}
```

IBM Watson IoT Platform

422519106032@smartinternz.com  
ID: n171mv

Browse Action Device Types Interfaces

Search for device

Add Device

Device ID	Status	Device Type	Class ID	Date Added
k	Disconnected	Priyanka	Device	Nov 19, 2022 2:34 PM

Identity Device Information Recent Events State Logs

Device ID: k  
Device Type: Priyanka  
Date Added: Nov 19, 2022 2:34 PM  
Added By: 422519106032@smartinternz.com  
Connection Status: Disconnected

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0 Simulations running

IBM Watson IoT Platform

422519106032@smartinternz.com  
ID: n171mv

Browse Action Device Types Interfaces

Search for device

Add Device

Device ID	Status	Device Type
8	Disconnected	AJAYSEKAR

Identity Device Information Recent Events

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

Event	Value
eventflow	{"randomNumber":81,"distance":72}
eventflow	{"randomNumber":61,"distance":79}
eventflow	{"randomNumber":50,"distance":86}
eventflow	{"randomNumber":14,"distance":74}
eventflow	{"randomNumber":49,"distance":98}

New event type

Event type name: eventflow

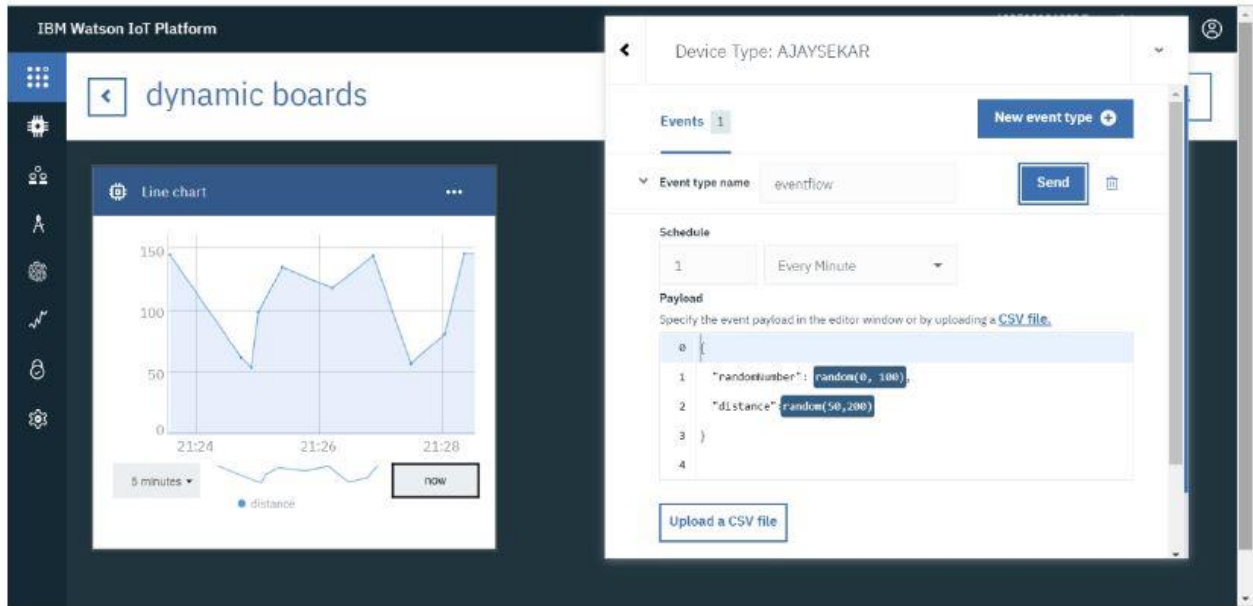
Schedule: 1 Every Minute

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

```
{
  "randomNumber": random(0, 100),
  "distance": random(60, 100)
}
```

Upload a CSV file

json a few seconds ago



WOKWI

SAVE SHARE

hc-sr04.ino by urish

Docs

hc-sr04.ino diagram.json Library Manager

```
1 /*
2  * HC-SR04 Ultrasonic Sensor Example.
3  *
4  * Turn the LED on when an object is within 100cm range.
5  *
6  * Copyright (C) 2021, Uri Shaked
7  */
8
9 #define ECHO_PIN 2
10 #define TRIG_PIN 3
11
12 void setup() {
13   Serial.begin(115200);
14   pinMode(LED_BUILTIN, OUTPUT);
15   pinMode(TRIG_PIN, OUTPUT);
16   pinMode(ECHO_PIN, INPUT);
17 }
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
29 void loop() {
30   float distance = readDistanceCM();
```

Simulation