

DEVELOP THE PYTHON CODE

Date	17 November 2022
Team ID	PNT2022TMID39018
Project Name	Gas leakage monitoring and alerting system for industries

Source Code:

Import random

```
print('Hazardous Gas Level=',str(random.randint(0,100)))
```

```
print('Temperature=',str(random.randint(0,100)))
```

```
print('Humidity=',str(random.randint(0,100)))
```

```
print('Pressure=',str(random.randint(0,100)))
```

OUTPUT:

The screenshot displays the IBM Watson IoT Platform dashboard. The main interface shows a list of devices, with one device (ID: 123456) selected. A modal window titled 'Device Type: GASLEAKAGE' is open, showing configuration options for an event type named 'pro1'. The event is scheduled to occur every minute at 20 seconds. The payload is a JSON object with three fields: 'randomNumber' (range 0-100), 'temp' (range 10-100), and 'hum' (range 80-100). The dashboard also shows a table of recent events and a search bar for device IDs.

Device ID	Status	Device Type	Class ID	Date Added
123456	Disconnected	NodeMCU	Device	Nov 17, 2022 9:45 AM

Search by Device ID

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

Device Type: GASLEAKAGE

Events 1

New event type

Event type name pro1

Send

Schedule

20 Every Minute

Payload

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

```
0 {
1   "randomNumber": random(0, 100)
2   "temp": random(10, 100)
3   "hum": random(80, 100)
4 }
5
```

Upload a CSV file

Cancel Save

The screenshot shows a Python 3.4.0 Shell window with the following code and output:

```
import random
print(Hazardous Gas Level==,str(random.randint(0,100)))
print(Temperature==,str(random.randint(0,100)))
print(Humidity==,str(random.randint(0,100)))
print(Pressure==,str(random.randint(0,100)))
```

Python 3.4.0 Shell

File Edit Shell Debug Options Windows Help

Python 3.4.0 (v3.4.0:04f714765c13, Mar 16 2014, 19:24:06) [MSC v.1600 32 bit (Intel)] on win32

Type "copyright", "credits" or "license()" for more information.

>>> ===== RESTART =====

>>>

Hazardous Gas Level= 99

Temperature= 67

Humidity= 38

Pressure= 79

>>>

Verify your identity - siranjevik...IBMNew TabService Details - IBM CloudIBM Watson IoT Platform

pp95gw.internetofthings.ibmcloud.com/dashboard/devices/browse

GmailYouTubeMaps

IBM Watson IoT Platform422119104025@smartintrnz.comID: pp95gw

BrowseActionDevice TypesInterfaces

Search by Device ID

Device ID	Status	Device Type	Class ID	Date Added
123456	Disconnected	NodeMCU	Device	Nov 17, 2022 9:45 AM
GASLEAKAGE_1	Connected	GASLEAKAGE	Device	Nov 17, 2022 12:12 PM

IdentityDevice InformationRecent EventsStateLogs

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

Event	Value	Format	Last Received
pro1	{"randomNumber":54}	json	a few seconds ago
pro1	{"randomNumber":97}	json	a few seconds ago
pro1	{"randomNumber":86}	json	a few seconds ago
pro1	{"randomNumber":55}	json	a few seconds ago
pro1	{"randomNumber":66}	json	a few seconds ago

SimulationsImport/Export simulation

4/50 Simulations RunningNew Simulation

Device TypeGASLEAKAGE1 Event

1 DeviceS GASLEAKAGE_1

1 xCreate Simulated DeviceUse Registered Device

Device TypeNodeMCU2 Events

91 events sent4.14 KB sent

Type here to search30°C Sunny13:4817-11-2022