

Develop a Python Script

Team ID	PNT2022TMID52137
Project Name	Signs with smart connectivity for better road safety

```
import time

import sys

import ibmiotf.applicationimport ibmiotf.device import random

organization="8slgz2"
deviceType="sprint1type"
deviceId="sprint1id"
authMethod="use-token-auth"
authToken="9876543210"

temp=random.randint(0,100)
pulse=random.randint(0,100)
oxygen=random.randint(0,100)
lat=17
lon=18

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    print(cmd)

try:
    deviceOptions={"org": organization, "type": deviceType, "id": deviceId, "auth-method":
authMethod, "auth-token": authToken}

    deviceCli=ibmiotf.device.Client (deviceOptions)

except Exception as e:
    print("Caught exception connecting device: %s " % str(e))
    sys.exit()
```

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```
deviceCli.connect()

while True:

    temp=random.randint(0, 100)
    pulse=random.randint(0, 100)
    oxygen=random.randint(0,100)
    lat=17
    lon=18
    data={"d":{"temp":temp, "pulse": pulse, "oxygen": oxygen, "lat":lat, "lon":lon}}
    def myOnPublishCallback():
        print ("Published Temperature= %s C" % temp, "Humidity= %s %% " %pulse, "to IBM
Watson")
        success=deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IOTF")
            time.sleep(1)
            deviceCli.commandCallback=myCommandCallback

deviceCli.disconnect()
```

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Output:

BrowseActionDevice TypesInterfaces

Add Device

sprint1type_1

Connected

sprint1type

Device

17 Nov 2022 10:37

→ ...

IdentityDevice InformationRecent EventsStateLogs

X

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	{\"d\":{\"temp\":79,\"pulse\":10,\"oxygen\":52,\"lat\":91,\"...	json	a few seconds ago
event_1	{\"d\":{\"temp\":15,\"pulse\":21,\"oxygen\":57,\"lat\":35,\"...	json	a few seconds ago
event_1	{\"d\":{\"temp\":17,\"pulse\":78,\"oxygen\":92,\"lat\":27,\"...	json	a few seconds ago
event_1	{\"d\":{\"temp\":71,\"pulse\":59,\"oxygen\":61,\"lat\":85,\"...	json	a few seconds ago
event_1	{\"d\":{\"temp\":52,\"pulse\":96,\"oxygen\":8,\"lat\":68,\"L...	json	a few seconds ago

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1 Simulation running

```
2022-10-25 20:59:32,786 ibmiotf.device.Client INFO Connected successfully: dixqn2dp:weatherdevice:ibm-weather
Published Temperature = 90 C Humidity = 90 % to IBM Watson
Published Temperature = 50 C Humidity = 72 % to IBM Watson
Published Temperature = 95 C Humidity = 61 % to IBM Watson
Published Temperature = 95 C Humidity = 70 % to IBM Watson
Published Temperature = 75 C Humidity = 84 % to IBM Watson
Published Temperature = 9 C Humidity = 78 % to IBM Watson
Published Temperature = 65 C Humidity = 45 % to IBM Watson
Published Temperature = 11 C Humidity = 65 % to IBM Watson
Published Temperature = 18 C Humidity = 25 % to IBM Watson
Published Temperature = 13 C Humidity = 15 % to IBM Watson
Published Temperature = 80 C Humidity = 63 % to IBM Watson
Published Temperature = 29 C Humidity = 91 % to IBM Watson
Published Temperature = 46 C Humidity = 21 % to IBM Watson
Published Temperature = 94 C Humidity = 90 % to IBM Watson
Published Temperature = 41 C Humidity = 20 % to IBM Watson
Published Temperature = 48 C Humidity = 24 % to IBM Watson
Published Temperature = 46 C Humidity = 59 % to IBM Watson
Published Temperature = 69 C Humidity = 92 % to IBM Watson
Published Temperature = 20 C Humidity = 25 % to IBM Watson
Published Temperature = 27 C Humidity = 97 % to IBM Watson
Published Temperature = 85 C Humidity = 68 % to IBM Watson
Published Temperature = 55 C Humidity = 0 % to IBM Watson
Published Temperature = 94 C Humidity = 13 % to IBM Watson
Published Temperature = 71 C Humidity = 22 % to IBM Watson
Published Temperature = 10 C Humidity = 100 % to IBM Watson
Published Temperature = 15 C Humidity = 85 % to IBM Watson
Published Temperature = 86 C Humidity = 9 % to IBM Watson
Published Temperature = 70 C Humidity = 4 % to IBM Watson
Published Temperature = 98 C Humidity = 6 % to IBM Watson
```