

DEVELOPING PYTHON SCRIPT

Team ID	PNT2022TMID53674
Project Name	Project – Industry Specific Intelligent Fire Management system

- 1) OPEN ANY PYTHON IDE AND INSTALL pip install ibmiotf AND GENERATE THE CODE USING SUITABLE LIBRARIES.

```
ibm_weather_monitoring.py
1 import time
2 import sys
3 import ibmiotf.application
4 import ibmiotf.device
5 import random
6
```

- 2) PROVIDE THE CREDENTIALS ACQUIRED FROM THE IOT PLATFORM

```
7 #Provide your IBM Watson Device Credentials
8 organization = "j0mda0"
9 deviceType = "Weather_monitoring_Device"
0 deviceId = "weather_today"
1 authMethod = "token"
2 authToken = "1@2@3@4@"
3
```

- 3) RUN THE SCRIPT IN THE PYTHON IDE

```
ibm_weather_monitoring.py
33 #.....
34
35 except Exception as e:
36     print("Caught exception connecting device: %s" % str(e))
37     sys.exit()
38
39 # Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
40 deviceCli.connect()
41
42 while True:
43     #Get Sensor Data from DHT11
44
45     data={"d":{"temperature":temp,'pulse':pulse,'oxygen':oxygen,'latitude':latitude,'longitude':longitude}}
46     #print data
47
48     def myOnPublishCallBack():
49         print("Published Temperature = %s C" %temp , "Humidity = %s %" %pulse)
50
51     success=deviceCli.publishEvent("IotSensor", "json", data, qos=0, on_publish=myOnPublishCallBack)

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
Published Temperature = 28 C Humidity = 3 %
Published Temperature = 28 C Humidity = 3 %
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Published Temperature = 28 C Humidity = 3 %
2022-11-11 15:10:11,987 ibmiotf.device.Client INFO Connected successfully: d:j0mda0:Weather_monitoring_Device:weather_today
```

4) CLEARLY IT IS SHOWN THAT IT IS CONNECTED TO THE IBM CLOUD PLATFORM.

```
Published Temperature = 28 C Humidity = 3 %  
Published Temperature = 28 C Humidity = 3 %  
2022-11-11 15:10:11,987 ibmiotf.device.Client INFO Connected successfully; d:j0mda0:Weather_monitoring_Device:weather_today
```

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	Weather_Device	Device	Nov 11, 2022 11:35 AM	

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	{"TEMPERATURE":43,"HUMIDITY":14}	json	a few seconds ago
event_1	{"TEMPERATURE":12,"HUMIDITY":9}	json	a few seconds ago
event_1	{"TEMPERATURE":46,"HUMIDITY":39}	json	a few seconds ago
event_1	{"TEMPERATURE":1,"HUMIDITY":82}	json	a few seconds ago
event_1	{"TEMPERATURE":48,"HUMIDITY":88}	json	a few seconds ago

1 Simulation running

