

SPRINT – 4

Team ID	PNT2022TMID53587
Project Name	Industry-Specific Intelligent Fire Management System

ibmiotpublishsubscribe.py - C:\Users\shrut\Downloads\ibmiotpublishsubscribe.py (3.7.0)

File Edit Format Run Options Window Help

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "c00c308"
deviceType = "abcd"
deviceId = "12345"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    elif status == "lightoff":
        print ("led is off")
    else :
        print ("please send proper command")

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()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
deviceCli.connect()


while True:
    #Get Sensor Data from DHT11
    temp=random.randint(90,110)
    Humid=random.randint(60,100)

    data = { 'temp' : temp, 'Humid': Humid }
    #print data
    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "to IBM Watson")
```

Published Temperature = 109 C Humidity = 70 % to IBM Watson
Published Temperature = 98 C Humidity = 75 % to IBM Watson
Published Temperature = 99 C Humidity = 76 % to IBM Watson
Published Temperature = 92 C Humidity = 90 % to IBM Watson
Published Temperature = 104 C Humidity = 89 % to IBM Watson
Published Temperature = 97 C Humidity = 72 % to IBM Watson
Published Temperature = 102 C Humidity = 60 % to IBM Watson
Published Temperature = 110 C Humidity = 72 % to IBM Watson
Published Temperature = 109 C Humidity = 100 % to IBM Watson
Published Temperature = 101 C Humidity = 66 % to IBM Watson
Published Temperature = 99 C Humidity = 90 % to IBM Watson
Published Temperature = 95 C Humidity = 66 % to IBM Watson
Published Temperature = 107 C Humidity = 89 % to IBM Watson
Published Temperature = 93 C Humidity = 74 % to IBM Watson
Published Temperature = 96 C Humidity = 67 % to IBM Watson
Published Temperature = 102 C Humidity = 67 % to IBM Watson
Published Temperature = 90 C Humidity = 85 % to IBM Watson
Published Temperature = 96 C Humidity = 100 % to IBM Watson
Published Temperature = 103 C Humidity = 89 % to IBM Watson
Published Temperature = 90 C Humidity = 86 % to IBM Watson
Published Temperature = 104 C Humidity = 92 % to IBM Watson
Published Temperature = 99 C Humidity = 85 % to IBM Watson
Published Temperature = 108 C Humidity = 78 % to IBM Watson
Published Temperature = 105 C Humidity = 99 % to IBM Watson
Published Temperature = 98 C Humidity = 64 % to IBM Watson
Published Temperature = 92 C Humidity = 81 % to IBM Watson
Published Temperature = 103 C Humidity = 90 % to IBM Watson
Published Temperature = 100 C Humidity = 73 % to IBM Watson
Published Temperature = 92 C Humidity = 75 % to IBM Watson
Published Temperature = 109 C Humidity = 63 % to IBM Watson
Published Temperature = 109 C Humidity = 80 % to IBM Watson
Published Temperature = 106 C Humidity = 94 % to IBM Watson
Published Temperature = 98 C Humidity = 73 % to IBM Watson
Published Temperature = 106 C Humidity = 91 % to IBM Watson
Published Temperature = 109 C Humidity = 77 % to IBM Watson
Published Temperature = 110 C Humidity = 60 % to IBM Watson
Published Temperature = 91 C Humidity = 69 % to IBM Watson
Published Temperature = 108 C Humidity = 74 % to IBM Watson
Published Temperature = 92 C Humidity = 75 % to IBM Watson

Search by Device ID

Device Simulator ☒  

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	
▼ <input type="checkbox"/>	12345	 Disconnected	abcd	Device	Nov 17, 2022 9:39 PM		→ ...
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				
IoTSensor	{"temp":108,"Humid":89}	json	a few seconds ago				
IoTSensor	{"temp":96,"Humid":64}	json	a few seconds ago				
IoTSensor	{"temp":101,"Humid":74}	json	a few seconds ago				
IoTSensor	{"temp":95,"Humid":92}	json	a few seconds ago				
IoTSensor	{"temp":92,"Humid":85}	json	a few secor				

1 Simulation running

Node-RED

Deploy

filter nodes

status

link in

link call

link out

comment

function

function

switch

change

range

template

delay

trigger

filter

OpenWhisk

Flow 1

Helio Node-RED!

IBM IoT
connected

Temperature

Humidity

msg.payload

[get] /sensor

Output

http

debug

all nodes

all

11/17/2022, 11:12:29 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
108

11/17/2022, 11:12:29 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
78

11/17/2022, 11:12:39 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
105

11/17/2022, 11:12:39 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
99

11/17/2022, 11:12:49 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
98

11/17/2022, 11:12:49 PM node: 12f2649a.0d0d98
iot-2/type/abcd/id/12345/evt/iotSensor/rmt/json :
msg.payload : number
64

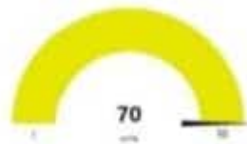
{"temp":92,"Humid":75}



IOT Fire Alarm



gauge



slider



MIT App Inventor interface showing a project titled "Intelligent_Fire_Management_System". The interface includes a "Blocks" panel on the left, a "Viewer" area in the center, and a "Media" panel at the bottom left.

Blocks Panel:

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Dictionaries
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArrangement1
 - Label1
 - TextBox1
 - HorizontalArrangement2
 - Label2
 - TextBox2
 - Web1
 - Rename
 - Delete
- Media
 - Upload File ...

Viewer Area:

The code blocks are as follows:

```
when Clock1.Timer do
  set Web1.Url to "http://159.122.183.64:30582/sensor"
  call Web1.Get

when Web1.GoToText do
  uri responseCode responseType responseContent
  do
    set TextBox1.Text to look up in pairs key "Temperature:" pairs call Web1.JsonTextDecode jsonText get responseContent
    set TextBox2.Text to look up in pairs key "Humidity:" pairs call Web1.JsonTextDecode jsonText get responseContent
```

Media Panel:

Upload File ...

Bottom Bar:

meet.google.com is sharing your screen. Stop sharing Hide

Fire Management System

Temperature: 104°C

Humidity: 85%