SPRINT-2

Team ID	PNT2022TMID37599
Project Name	Hazardous Area Monitoring For Industrial Plaint Powered By IOT
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Python code import time

import sys import

ibmiotf.application import

ibmiotf.device import

random

#Provide your IBM Watson Device Credentials

organization = "iagqzu" deviceType =

"Deepak" deviceId = "123" 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") else :

```
        print ("led is off")

    #print(cmd)




try:
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId,
"authmethod": 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(0,100)
        Humid=random.randint(0,100)


        data = { 'temp' : temp, 'Humid': Humid }
        #print data        def
myOnPublishCallback():
```

```
        print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, "to
IBM Watson")

      success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)        if not success:
print("Not connected to IoTF")        time.sleep(10)


      deviceCli.commandCallback = myCommandCallback


# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

OUTPUT:

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
======= RESTART: C:\Users\deeps\Desktop\IBM\ibmiotpublishsubscribe.py =======
2022-11-01 10:43:18,258   ibmiotf.device.Client      INFO    Connected successfully: d:iagqzu:Deepak:123
Published Temperature = 63 C Humidity = 71 % to IBM Watson
Published Temperature = 56 C Humidity = 91 % to IBM Watson
Published Temperature = 93 C Humidity = 66 % to IBM Watson
Published Temperature = 68 C Humidity = 3 % to IBM Watson
Published Temperature = 97 C Humidity = 57 % to IBM Watson
Published Temperature = 70 C Humidity = 9 % to IBM Watson
Published Temperature = 10 C Humidity = 66 % to IBM Watson
Published Temperature = 55 C Humidity = 72 % to IBM Watson
Published Temperature = 38 C Humidity = 50 % to IBM Watson
Published Temperature = 76 C Humidity = 22 % to IBM Watson
Published Temperature = 9 C Humidity = 30 % to IBM Watson
Published Temperature = 82 C Humidity = 5 % to IBM Watson
Published Temperature = 99 C Humidity = 7 % to IBM Watson
Published Temperature = 41 C Humidity = 75 % to IBM Watson
Published Temperature = 94 C Humidity = 66 % to IBM Watson
Published Temperature = 15 C Humidity = 32 % to IBM Watson
Published Temperature = 27 C Humidity = 86 % to IBM Watson
Published Temperature = 5 C Humidity = 68 % to IBM Watson
Published Temperature = 35 C Humidity = 93 % to IBM Watson
Published Temperature = 43 C Humidity = 55 % to IBM Watson
Published Temperature = 71 C Humidity = 68 % to IBM Watson
Published Temperature = 60 C Humidity = 45 % to IBM Watson
Published Temperature = 68 C Humidity = 18 % to IBM Watson
Published Temperature = 51 C Humidity = 61 % to IBM Watson
Published Temperature = 57 C Humidity = 43 % to IBM Watson
Published Temperature = 53 C Humidity = 5 % to IBM Watson
Published Temperature = 63 C Humidity = 19 % to IBM Watson
Published Temperature = 48 C Humidity = 11 % to IBM Watson
Published Temperature = 77 C Humidity = 13 % to IBM Watson
Published Temperature = 100 C Humidity = 95 % to IBM Watson
Published Temperature = 1 C Humidity = 99 % to IBM Watson
Published Temperature = 61 C Humidity = 89 % to IBM Watson
Published Temperature = 27 C Humidity = 100 % to IBM Watson
Published Temperature = 59 C Humidity = 34 % to IBM Watson
Published Temperature = 47 C Humidity = 14 % to IBM Watson
Published Temperature = 31 C Humidity = 36 % to IBM Watson
Published Temperature = 8 C Humidity = 44 % to IBM Watson
Published Temperature = 69 C Humidity = 65 % to IBM Watson
Published Temperature = 56 C Humidity = 86 % to IBM Watson
Published Temperature = 7 C Humidity = 59 % to IBM Watson
Published Temperature = 11 C Humidity = 49 % to IBM Watson
Published Temperature = 64 C Humidity = 8 % to IBM Watson
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