

# SPRINT 1

TEAM ID	PNT2022TMID45392
PROJECT NAME	SMART WASTE MANAEMENT SYSTEM IN METROPOLITAN CITIES

## SIMULATION CREATION

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. The main content area shows a table of devices with columns: Device ID, Status, Device Type, Class ID, and Date Added. The device 'distance123' is highlighted with a status of 'Connected'. Below the table, there are tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Logs' tab is active, showing 'Diagnostic Logs' and 'Connection Logs'. The 'Diagnostic Logs' section indicates 'No logs are available.' The 'Connection Logs' section shows a list of connection events with columns for 'Message' and 'Timestamp'. The bottom section of the screenshot shows the 'State' tab, which displays 'Showing Raw Data | No Interfaces Available' and a table with columns: Property, Value, Type, Event, and Last Received. The table contains two rows of data: 'temp' with a value of 92 and 'Humid' with a value of 72, both of type 'Number' and from an 'IoT Sensor'.

Device ID	Status	Device Type	Class ID	Date Added
distance123	Connected	Distance	Device	12 Nov 2022 13:48

Severity	Message	Timestamp
	Token auth succeeded: ClientID='d:tubusr...	18 Nov 2022 17:27
	Closed connection. The connection was cl...	17 Nov 2022 22:43
	Token auth succeeded: ClientID='d:tubusr...	17 Nov 2022 22:08
	Closed connection. The operation is not a...	13 Nov 2022 21:41
	Closed connection. The operation is not a...	13 Nov 2022 21:41
	Closed connection. The operation is not a...	13 Nov 2022 21:38

Property	Value	Type	Event	Last Received
temp	92	Number	IoT Sensor	a few seconds ago
Humid	72	Number	IoT Sensor	a few seconds ago

ibmiotpublishsubscribe.py - D:\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 = "tubusr"
deviceType = "Distance"
deviceId = "distance123"
authMethod = "token"
authToken = "hd&J(n3fQRM26DMFQ"

# 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
```

Ln: 12 Col: 31

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

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: D:\ibmiotpublishsubscribe.py =====
2022-11-18 17:27:37,162 ibmiotf.device.Client INFO Connected successfully: ditubusr:Distance:distance123
Published Temperature = 108 C Humidity = 61 % to IBM Watson
Published Temperature = 94 C Humidity = 90 % to IBM Watson
Published Temperature = 108 C Humidity = 93 % to IBM Watson
Published Temperature = 102 C Humidity = 91 % to IBM Watson
Published Temperature = 93 C Humidity = 86 % to IBM Watson
Published Temperature = 92 C Humidity = 69 % to IBM Watson
Published Temperature = 98 C Humidity = 80 % to IBM Watson
Published Temperature = 92 C Humidity = 72 % to IBM Watson
Published Temperature = 95 C Humidity = 61 % to IBM Watson
Published Temperature = 97 C Humidity = 78 % to IBM Watson
Published Temperature = 91 C Humidity = 89 % to IBM Watson
Published Temperature = 110 C Humidity = 100 % to IBM Watson
Published Temperature = 100 C Humidity = 95 % to IBM Watson
Published Temperature = 109 C Humidity = 99 % to IBM Watson
Published Temperature = 101 C Humidity = 96 % to IBM Watson
Published Temperature = 94 C Humidity = 79 % to IBM Watson
Published Temperature = 104 C Humidity = 63 % to IBM Watson
```

Ln: 23 Col: 0