

DELIVERY OF SPRINT 1

TEAM ID	PNT2022TMID50056
PROJECT NAME	IOT based Smart Waste Management System in metropolitan cities

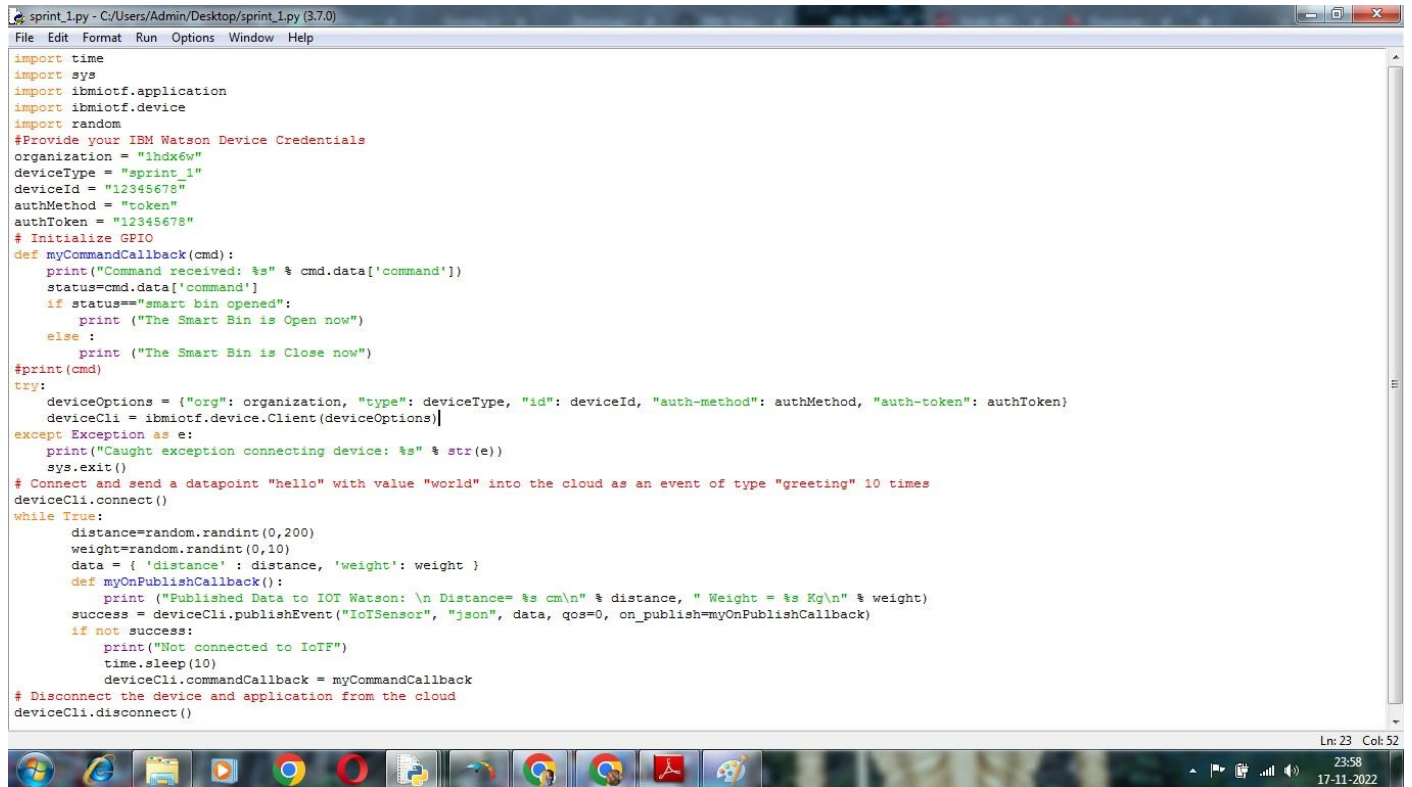
Sprint 1

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "1hdx6w"
deviceType = "sprint_1"
deviceId = "12345678"
authMethod = "token"
authToken = "12345678"
# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="smart bin opened":
        print ("The Smart Bin is Open now")
    else :
        print ("The Smart Bin is Close now")
#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()
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10
times
deviceCli.connect()
while True:
    distance=random.randint(0,200)
    weight=random.randint(0,10)
    data = { 'distance' : distance, 'weight': weight }
    def myOnPublishCallback():
        print ("Published Data to IOT Watson: \n Distance= %s cm\n" % distance, " Weight = %s Kg\n" %
weight)
    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()

```



```

sprint_1.py - C:/Users/Admin/Desktop/sprint_1.py (3.7.0)
File Edit Format Run Options Window Help

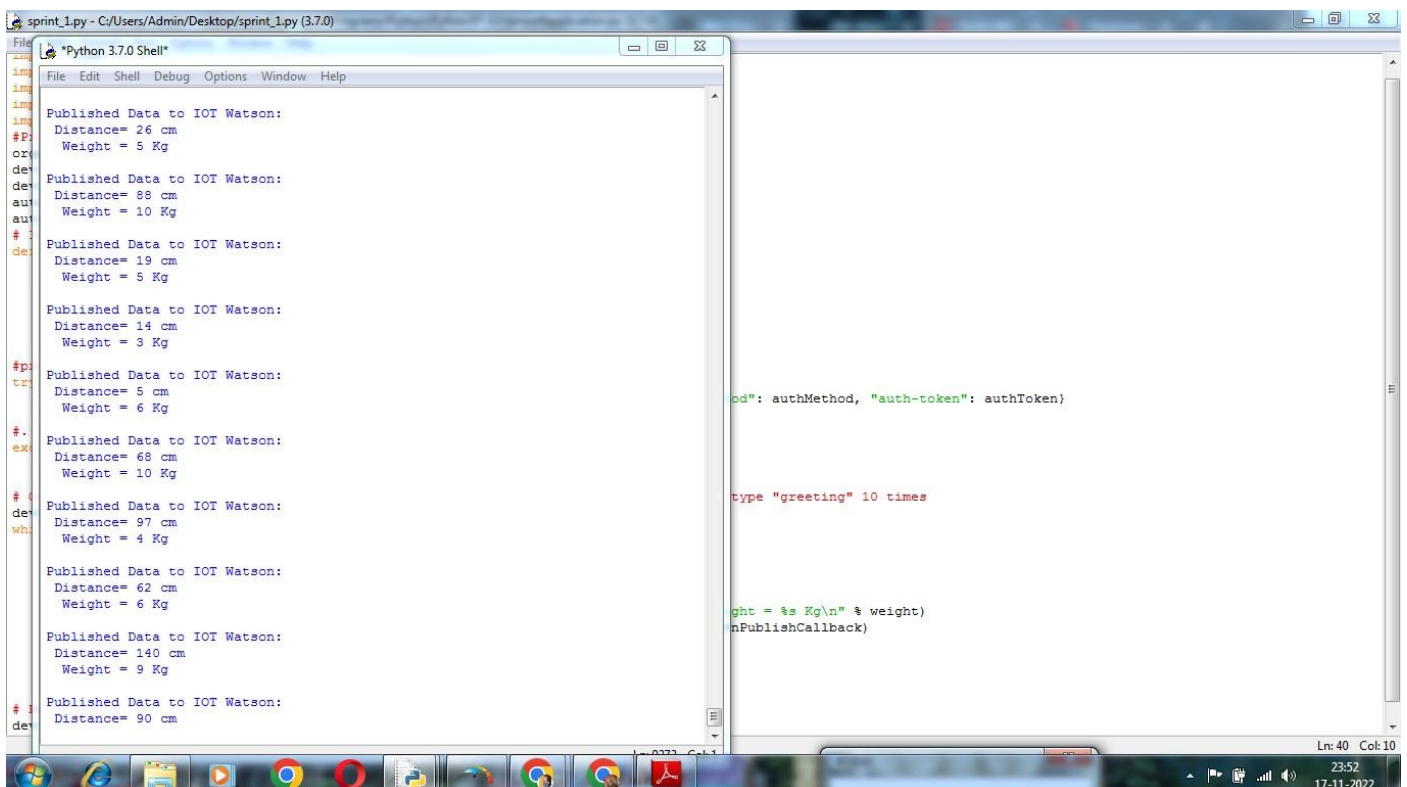
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import ibmiotf.application
import ibmiotf.device
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```

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```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Published Data to IOT Watson:
Distance= 26 cm
Weight = 5 Kg

Published Data to IOT Watson:
Distance= 88 cm
Weight = 10 Kg

Published Data to IOT Watson:
Distance= 19 cm
Weight = 5 Kg

Published Data to IOT Watson:
Distance= 14 cm
Weight = 3 Kg

Published Data to IOT Watson:
Distance= 5 cm
Weight = 6 Kg

Published Data to IOT Watson:
Distance= 68 cm
Weight = 10 Kg

Published Data to IOT Watson:
Distance= 97 cm
Weight = 4 Kg

Published Data to IOT Watson:
Distance= 62 cm
Weight = 6 Kg

Published Data to IOT Watson:
Distance= 140 cm
Weight = 9 Kg

Published Data to IOT Watson:
Distance= 90 cm

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IBM Watson IoT Platform

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Browse Action Device Types Interfaces

Add Device +

Device ID	Status	Device Type	Class ID	Date Added
1234	Disconnected	George	Device	5 Nov 2022 8:47 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
DATA	{"randomNumber":357,"distance":178,"alert":84}	json	a few seconds ago
DATA	{"randomNumber":21,"distance":211,"alert":69}	json	a few seconds ago
DATA	{"randomNumber":224,"distance":120,"alert":76}	json	a few seconds ago
DATA	{"randomNumber":248,"distance":266,"alert":10...	json	a few seconds ago
DATA	{"randomNumber":203,"distance":242,"alert":61}	json	a few seconds ago

1 Simulation running

Activate Windows
Go to Settings to activate Windows.

IBM Watson IoT Platform

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Browse Action Device Types Interfaces

1234 Disconnected George Device 5 Nov 2022 8:47 PM

12345 Disconnected George Device 13 Nov 2022 11:01 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
IOTsensor	{"distance":285,"weight":86}	json	a few seconds ago
IOTsensor	{"distance":206,"weight":91}	json	a few seconds ago
IOTsensor	{"distance":161,"weight":79}	json	a few seconds ago
IOTsensor	{"distance":187,"weight":22}	json	a few seconds ago
IOTsensor	{"distance":287,"weight":21}	json	a few seconds ago

2 Simulations running

Activate Windows
Go to Settings to activate Windows.