

Delivery of Sprint – 2

Date	05 November 2022
Team ID	PNT2022TMID49521
Project Name	IOT – Smart Waste Management Systems for Metropolitan Cities
Story Points	20

1. Functional Requirements: Program for harmful setup

User story: USN-3.

Solution:

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

#Provide your IBM Watson Device Credentials
organization = "sfouh6"
deviceType = "Python"
deviceId = "9238"
authMethod = "token"
authToken = "vishnuprabhu923819106057"

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
deviceCli.connect()

while True:
    print("\nDon't use any capital letters to given an input \nSenosr sensing gas is") #Unavailable of sensors in the wokwi
    and tinkercad, we give inputs manually

    detect = input()

    Sensing = ()

    if detect == "ammonia": #Harmful material sensing by MQ-137 gas sensor
        Sensing = "Harmful Waste is detected"

    elif detect == "hydrogen sulfide": #Harmful material sensing by MQ-136 gas sensor
        Sensing = "Harmful Waste is detected"

    elif detect == "methane": #Harmful material sensing by TGS-2611 gas sensor
        Sensing = "Harmful Waste is detected"

    else:
        Sensing = "Harmful Waste is not detected"

    data = { 'Sensing' : Sensing }

    #print data

    def myOnPublishCallback():
        print ("Published Sensing data is %s " % Sensing, "to IBM Watson")

    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)

    if not success:
        print("Not connected to IoT")

    time.sleep(1)

# Disconnect the device and application from the cloud

```

deviceCli.disconnect()

```
sprint 2.py - C:\Users\ELCOT\Desktop\sprint 2.py (3.7.0)
File Edit Format Run Options Window Help

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sprint 2.py - C:\Users\ELCOT\Desktop\sprint 2.py (3.7.0)
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        print("Not connected to IoT")
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# Disconnect the device and application from the cloud
deviceCli.disconnect()
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```
*Python 3.7.0 Shell*
File Edit Shell Debug Options Window Help

4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\ELCOT\Desktop\sprint 2.py =====
2022-11-05 10:59:31,471 ibmiotf.device.Client INFO Connected successfully: d:sfouh6:Python:9238

Don't use any capital letters to given an input
Senosr sensing gas is
ammonia
Published Sensing data is Harmful Waste is detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
hydrogen sulphide
Published Sensing data is Harmful Waste is not detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
methane
Published Sensing data is Harmful Waste is detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
chlorine
Published Sensing data is Harmful Waste is not detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
hydrogen sulfide
Published Sensing data is Harmful Waste is detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
ethane
Published Sensing data is Harmful Waste is not detected to IBM Watson

Don't use any capital letters to given an input
Senosr sensing gas is
|
```

IBM Watson IoT Platform

923819106057@smartinternz.com
ID: sfouh6

Browse

Action

Device Types

Interfaces

Add Device +

9238

Disconnected

Python

Device

Nov 5, 2022 10:10 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	{"Sensing":"Harmful Waste is detected"}	json	a few seconds ago
IoTSensor	{"Sensing":"Harmful Waste is not detected"}	json	a few seconds ago
IoTSensor	{"Sensing":"Harmful Waste is detected"}	json	a few seconds ago
IoTSensor	{"Sensing":"Harmful Waste is not detected"}	json	a few seconds ago
IoTSensor	{"Sensing":"Harmful Waste is detect		

0 Simulations running