Develop The Python Script

Date	03 October 2022
Team ID	PNT2022TMID25456
Project Name	Smart Solutions For Railways
Maximum Marks	2 Marks

Program:

```python
import wiotp.sdk.device

import time

import random

myConfig = {

    "identity": {

        "orgId": "rkm7j0",

        "typeId": "Type1",

        "deviceId":"121212"

    },

    "auth": {

        "token": "87654321"

    }

}

def myCommandCallback (cmd):

    print ("Message received from IBM IoT Platform: %s" % cmd.data['command'])

    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)

client.connect()

def pub (data):

    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)

    print ("Published data Successfully: %s", myData)

while True:

    myData={'name': 'Train1', 'lat': 17.6387448, 'lon': 78.4754336}

    pub (myData)

    time.sleep (3)

    #myData={'name': 'Train2', 'lat': 17.6387448, 'lon': 78.4754336)

    #pub (myData)

    #time.sleep (3)

    myData={'name': 'Train1', 'lat': 17.6341908, 'lon': 78.4744722}
```

```
    pub(myData)

    time.sleep(3)

    myData={'name': 'Train1', 'lat': 17.6340889, 'lon': 78.4745052}

    pub (myData)

    time.sleep (3)

    myData={'name': 'Train1', 'lat': 17.6248626, 'lon': 78.4720259}

    pub (myData)

    time.sleep (3)

    myData={'name': 'Train1', 'lat': 17.6188577, 'lon': 78.4698726}

    pub (myData)

    time.sleep (3)

    myData={'name': 'Train1', 'lat': 17.6132382, 'lon': 78.4707318}

    pub (myData)

    time.sleep (3)

    client.commandCallback = myCommandCallback

client.disconnect ()
```

OUTPUT:

chandraprabhu::Develop The Python Script 12:35:32$ python3 code.py
2022-11-19 12:37:37,781 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rkm7j0:Type1:121212
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6387448, 'lon': 78.4754336}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6341908, 'lon': 78.4744722}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6340889, 'lon': 78.4745052}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6248626, 'lon': 78.4720259}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6188577, 'lon': 78.4698726}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6132382, 'lon': 78.4707318}
Published data Successfully: %s {'name': 'Train1', 'lat': 17.6387448, 'lon': 78.4754336}

IBM Watson IoT Platform

sec19it087@sairamtap.edu.in
ID: rkm7j0

← Back

Device Drilldown - 121212

Connection Information
Recent Events
State
Device Information
Metadata
Diagnostics
Connection Logs
Device Actions

Connection Information
Basic connection information about this device.

Device ID	121212
Device Type	Type1
Date Added	Nov 19, 2022 11:58 AM
Added By	sec19it087@sairamtap.edu.in
Connection Status	**Disconnected**
	Last Connected: Nov 19, 2022 12:37 PM
	Client Address: 157.51.136.182 SecureToken
	Duration: a few seconds
	Data Transferred: 990 B

Recent Events
The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"name":"Train1","lat":17.6387448,"lon":78.475...	json	a few seconds ago
status	{"name":"Train1","lat":17.6132382,"lon":78.470...	json	a few seconds ago
status	{"name":"Train1","lat":17.6188577,"lon":78.469...	json	a few seconds ago

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← Back

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State

This table shows a list of data points that are reported by this device.

⎍⎍ **Showing Raw Data** | No Interfaces Available

Property	Value	Type	Event	Last Received
name	Train1	String	status	a few seconds ago
lat	17.6188577	Number	status	a few seconds ago
lon	78.4698726	Number	status	a few seconds ago

Device Information

View basic device information including location and manufacturer.

Edit Device Information ✎