

DEVELOPED PYTHON SCRIPT

Date	24 September 2022
Team ID	PNT2022TMID41917
Title	SMART SOLUTION FOR RAILWAYS

IBM:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {

        "orgId": "w8dpyu",
        "typeId": "device",
        "deviceId": "123456"
    },
    "auth": {
        "token": "1234567890"
    }
}

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':10.8160024,'lon':78.6066253}
    pub(myData)
    time.sleep(2)
    #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(2)
    myData={'name':'Train1','lat':17.6340889,'lon':78.4745052}
    pub(myData)
```

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time.sleep(2)
myData={'name':'Train1','lat':17.6248626,'lon':78.4720259}
pub(myData)
time.sleep(2)
myData={'name':'Train1','lat':17.6188577,'lon':78.4698726}
pub(myData)
time.sleep(2)
myData={'name':'Train1','lat':17.6132382,'lon':78.4707318}
pub(myData)
time.sleep(2)
client.commandCallback = myCommandCallback
client.disconnect()
#dc0(g18y?U0aAG66wS

```

QR CODE:

```

import cv2
import numpy as np
import time
import pyzbar.pyzbar as pyzbar
from ibmcloudant.cloudant_v1 import cloudant_v1
from ibmcloudant import couchDbSessionAuthenticator
from ibm_cloud_sdk_core.Authenticators import BasicAuthenticator

authenticator=BasicAuthenticator('apikey-v2-
16u3crmdpkghxefdikvpssoh5fwezrmuup5fv5g3ubz','b0ab119f45d3e6255eabb978')
service =cloudantv1(authenticator=authenticator)
service.set_service_url('https://apikey-v2-
16u3crmdpkghxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119f45d3e6255eabb978')

cap = cv2.VideoCapture(0)
font = cv2.FONT_HERSHEY_PLAIN

while True:
    __, frame = cap.read(0)
    decodeObjects = pyzbar.decode(frame)
    for obj in decodeObjects:
        #print("Data",obj.data)
        a=obj.data.decode('UTF-8')
        cv2.putText(frame,"Ticket",(50, 50),font, 2,(255,0, 0),3)
        #print(a)
    try:
        response = service.get_document(
            db='booking',
            doc_id = a
        ).get_result()
        print(response)
        time.sleep(5)
    except Exception as e:
        print ("Not valid Ticket")
        time.sleep(5)

```

```
    CV2.imshow("Frame", frame)
if cv2.waitKey[1] & 0XFF == ord('q'):
    break

cap.release()
cv2.destroyAllWindows()
client.disconnect()
```

```
C:\Windows\py.exe
Published data Successfully: %s {'name': 'Train1', 'lat': 10.7941859, 'lon': 78.6750478}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.9657263, 'lon': 78.0749855}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.225983, 'lon': 78.1686166}
2022-12-01 12:11:08,349 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:11:18,450 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 11.2260097, 'lon': 78.1691214}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.6654805, 'lon': 78.0556973}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.23, 'lon': 78.879997}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.7941859, 'lon': 78.6750478}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.9657263, 'lon': 78.0749855}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.225983, 'lon': 78.1686166}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.2260097, 'lon': 78.1691214}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.6654805, 'lon': 78.0556973}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.23, 'lon': 78.879997}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.7941859, 'lon': 78.6750478}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.9657263, 'lon': 78.0749855}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.225983, 'lon': 78.1686166}
2022-12-01 12:11:52,449 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:12:00,002 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 11.2260097, 'lon': 78.1691214}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.6654805, 'lon': 78.0556973}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.23, 'lon': 78.879997}
2022-12-01 12:12:07,271 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:12:14,443 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 10.7941859, 'lon': 78.6750478}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.9657263, 'lon': 78.0749855}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.225983, 'lon': 78.1686166}
2022-12-01 12:12:21,518 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:12:28,650 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 11.2260097, 'lon': 78.1691214}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.6654805, 'lon': 78.0556973}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.23, 'lon': 78.879997}
2022-12-01 12:12:35,588 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:12:42,504 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 10.7941859, 'lon': 78.6750478}
Published data Successfully: %s {'name': 'Train1', 'lat': 10.9657263, 'lon': 78.0749855}
Published data Successfully: %s {'name': 'Train1', 'lat': 11.225983, 'lon': 78.1686166}
2022-12-01 12:12:49,540 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-12-01 12:12:56,725 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:w8dpyu:device:123456
Published data Successfully: %s {'name': 'Train1', 'lat': 11.2260097, 'lon': 78.1691214}
```

Activate Windows
Go to Settings to activate Windows.

