

## DEVELOPING PYTHON SCRIPT

<b>Team ID</b>	PNT2022TMID31175
<b>Project Name</b>	Smart Solutions for Railways

### LOCATION DATA:

```
import wiotp.sdk.device
import time
import random
myConfig={
    "identity": (
        "orgId": "gagtey",
        "typeId": "GPS",
        "deviceId": "12345"),
    "auth": {
        "token": "12345678"
    }
}
def myCommandCallback (cmd):
    print ("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    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,
    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()
```

### **QR SCANNER CODE:**

```
Import cv2
import numpy as np
import time

Import pyzbar.pyzbar as pyzbar
from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant import CouchDbSessionAuthenticator
from ibm_cloud_sdk_core.authenticators import BasicAuthenticator
authenticator= BasicAuthenticator ('apikey-v2-
16u3crmdpkghxefdikvpssoh5fwezrmuup5fv5g3ubz', 'b0ab119f45d3e6255eabb978
service Cloudant V1 (authenticator-authenticator) service.set_service_url('https://apikey-v2-
16u3crmdpkghxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119f45d3e6255eabb978e7e2f0
```

```
cap= cv2.VideoCapture (0)
font cv2.FONT_HERSHEY_PLAIN
while True:
frame cap.read()
decodedobjects pyzbar.decode (frame)
for obj in decodedObjects:
#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 a Valid Ticket")
time.sleep (5)
cv2.imshow("Frame", frame)
if cv2.waitKey(1) & 0xFF==ord('q'):
break
cap.release()
cv2.destroyAllWindows ()
client.disconnect()
```