

DEVELOPING PYTHON SCRIPT

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Project Name	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']) 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,  
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-
16u3crmdpkghhxfdikvpssoh5fwezrmuup5fv5g3ubz', 'b0ab119f45d3e6255eabb978
service Cloudant V1 (authenticator-authenticator) service.set_service_url('https://apikey-v2-
16u3crmdpkghhxfdikvpssoh5fwezrmuup5fv5g3ubz: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()

```