

# DEVELOPING PYTHON SCRIPT

<b>Date:</b>	<b>12 November 2022</b>
<b>Team id:</b>	<b>PNT2022TMID52180</b>
<b>Project name:</b>	<b>IoT based smart crop protection system for agriculture</b>

## 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': 'TrainI', 'lat': 17.6340889, 'lon': 78.4745052)
pub (myData)
time.sleep(3)
myData={'name': 'TrainI', 'lat': 17.6248626, 'lon': 78.4720259)
pub (myData)
time.sleep (3)
myData={'name': 'TrainI', '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-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
'b0ab119f45d3e6255eabb978

service Cloudant V1 (authenticator-authenticator)
service.set_service_url('https://apikey-v2-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119
f45d3e6255eabb978e7e2f0

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()
```