

## DEVELOPING PYTHON SCRIPT

TEAM ID	PNT2022TMID16395
PROJECT NAME	IOT Based Smart Crop Protection System for Agriculture

### **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-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
'b0ab119f45d3e6255eabb978
service Cloudant V1 (authenticator-authenticator)
service.set_service_url('https://apikey-v2-
```

16u3crmdpkgghxefdikvpssoh5fwezrmuup5fv5g3ubz: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()
```