

## **DEVELOPING PYTHON SCRIPT**

TEAM ID	PNT2022TMID10184
PROJECT NAME	IOT Based Smart Crop ProtectionSystem 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 = myCommandCallbackclient.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_HERSHEYPLAIN

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()

```