

DEVELOPING PYTHON SCRIPT

TEAM ID	PNT2022TMID44775
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 =
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:b0ab11
9 f45d3e6255eabb978e7e2f0
cap= cv2.VideoCapture (0)
```

```
font cv2.FONT_HERSHEY_PLAIN
while True:
    frame = cap.read()
    decoded_objects = pyzbar.decode(frame)
    for obj in decoded_objects:
        #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()
```