

DEVELOPING PYTHON SCRIPT

TEAM ID	PNT2022TMID20430
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.connec  
t()  
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
npimport time
Import pyzbar.pyzbar as pyzbar
from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant import CouchDbSessionAuthenticator
from ibm_cloud_sdk_core.authenticators
importBasicAuthenticator
```

```
authenticator= BasicAuthenticator ('apikey-v2-  
16u3crmdpkgghxefdikvpssoh5fwezrmuup5fv5g3ub  
z','b0ab119f45d3e6255eabb978
```

```
service Cloudant V1 (authenticator-  
authenticator)
```

```
service.set_service_url('https://apikey-v2-
```

16u3crmdpghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab1
19f45d3e6255eabb978e7e2f0

```
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  
ws  
)client.disconnect()
```