

DEVELOPING PYTHON SCRIPT

IOT BASED CROP PROTECTION AGRICULTURE SYSTEM

TEAM ID	PNT2022TMID30091
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-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3
ubz: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()
```