DEVELOPING PYTHON SCRIPT

Team ID : PNT2022TMID12758

Project Name: IoT Based Smart Crop Protection System for Agriculture

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Location Data

```python
import wiotp.sdk.deviceimport 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': 'Trainl', 'lat': 17.6340889, lon': 78.4745052)pub (myData) time.sleep(3)
```

```
myData={'name': 'Trainl', 'lat': 17.6248626, 'lon': 78.4720259)pub (myData) time.sleep (3)
myData={'name': 'Trainl', '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 importtime
```

```
Import pyzbar.pyzbar as pyzbar
```

```
from ibmcloudant.cloudant_v1 import CloudantV1 fromibmcloudant 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-
v216u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz: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) exceptException 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()
```