

DEVELOPING PYTHON SCRIPT

Date	02 OCTOBER 2022
Team ID	PNT2022TMID47521
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 = myCommandCallback
client.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-
v216u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
'b0ab119f45d3e6255eabb978

service Cloudant V1 (authenticator-authenticator)
service.set_service_url('https://apikey-v2

16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz: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()
```