

DEVELOPING PYTHON SCRIPT

TEAM ID PROJECT	PNT2022TMID34075
TITLE	IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

PYTHON SCRIPT

```
import wiotp.sdk.device

import time

import random

myConfig=
{ "identity":
( "orgId": "1be6ey",
"typeId": "b11m3e-device",
"deviceId":"b11m3edeviceid1"},
"auth": {
"token": "SJmK4i0jsT67bZb)P@" }}

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-v2-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
'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()
```