

# DEVELOPING PYTHON SCRIPT

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Project	IoT Based Smart Crop Protection System for Agriculture
Date	Nov 7

## 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': '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 = 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-v2-16u3crmdpkghxefdikvpssoh5fwezrmuup5fv5g3ubz',z:b0ab119
f45d3e6255eabb978e7e2f0 cap= cv2.VideoCapture (0)

font cv2.FONT_HERSHEY_PLAIN

```

```
while True:

    frame = cap.read()

    decoded_objects = pyzbar.decode(frame)

    for obj in decoded_objects:

        # 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()
```