

## Create And Configure IBM Cloud Services

### Developing Python Script

Team ID	PNT2022TMID46939
Project Name	<b>IoT Based Smart Crop Protection System For Agriculture</b>

#### 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': 'Trainl', '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-
16u3crmdpkghhxfdikvpssoh5fwezrmuup5fv5g3ubz',
'b0ab119f45d3e6255eabb978
service Cloudant V1 (authenticator-authenticator)
service.set_service_url('https://apikey
v216u3crmdpkghhxfdikvpssoh5fwezrmuup5fv5g3ubz:b0ab
119 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()
```