DEVELOPING PYTHON SCRIPT

TEAM ID: PNT2022TMID18899

PROJECT NAME : IoT based smart crop protection
system for Agriculture

LOCATION DATA:

```python
import wiotp.sdk.device

import time

import random

myConfig={

"identity": (

"orgId": "gagtey",

"typeId": "GPS",

"deviceId":"1206"},

"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):
```

```python
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-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',
'b0ab119f45d3e6255eabb978

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

16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119f45d3e6255eabb978e7e2f0

```python
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)
```

```python
if cv2.waitKey(1) & 0xFF==ord('q'):

break

cap.release()

cv2.destroyAllWindows ()

client.disconnect()

16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119
f45d3e6255eabb978e7e2f0

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```python
    time.sleep (5)
    cv2.imshow("Frame", frame)
if cv2.waitKey(1) & 0xFF==ord('q'):
break
    cap.release()
    cv2.destroyAllWindows ()
    client.disconnect()
```