IOT Based Smart Crop Protection System for Agriculture .

Team ID - PNT2022TMID25272 .

DEVELOPING PYTHON SCRIPT

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-v2-16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz', 'b0ab119f45d3e6255eabb978

service Cloudant V1 (authenticator-authenticator)
service.set_service_url('https://apikey-v216u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz: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()
```