

IOT Based Smart Crop Protection System for Agriculture .

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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': '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  
v216u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab  
119 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()
```