

## DEVELOPING PYTHON SCRIPT

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<b>Project Name</b>	<b>IoT based smart crop protection system for agriculture</b>

## 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:bab119
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()
```