SOURCE CODE

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QR SCAN CODE:

```
from http import client
import cv2
import pyzbar
from pyzbar.pyzbar import decode
import time

from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant import CouchDbSessionAuthenticator
from ibm_cloud_sdk_core.authenticators import BasicAuthenticator

authenticator = BasicAuthenticator('apikey-v2-geQfaxIw_D2ghKgN2jjxMsM99iOzQd8yuULxxA4pRH7B', 'daf3c00c2cc182af425a5691a07f7b93')
service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey-v2-geQfaxIw_D2ghKgN2jjxMsM99iOzQd8yuULxxA4pRH7B:daf3c00c2cc182af425a5691a07f7b93@932393aa-9f82-4144-9251-2c519fb30962-bluemix.cloudantnosqldb.appdomain.cloud')

cap= cv2.VideoCapture(0)
font = cv2.FONT_HERSHEY_PLAIN

while True:
    _, frame = cap.read()
    decodedObjects = 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='IBM_railways',
               doc_id = a
               ).get_result()
               print (response)
               time.sleep(5)
            except Exception as e:
               print(a)
               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()
```

LOCATION CODE

```
import wiotp.sdk.device
import time
import random

myConfig = {
  "identity": {
    "orgId": "g20wc1",
```

```
    "typeId": "h2",
    "deviceId": "h2"
  },
  "auth": {
    "token": "12345678"
  }
}

def myCommandCallback(cmd):
  print("The Message received from IBM IoT Platform is : %s" % cmd.data['command'])
  m=cmd.data['command']

def pub(data):
  client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
  print("Data is published Successfully:%s",myData)

client = wiotp.sdk.device.DeviceClient(config=myConfig)
client.connect()

while True:
  myData={'name':'Train1','lat':10.184363,'lon': 77.922702}
  pub(myData)
  time.sleep(3)
  myData={'name':'Train1','lat':10.213225,'lon': 77.898765}
  pub(myData)
  time.sleep(3)
  myData={'name':'Train1','lat':10.285035,'lon': 77.921569}
  pub(myData)
  time.sleep(3)
  myData={'name':'Train1','lat':10.343369,'lon': 77.958056}
  pub(myData)
```

```
  time.sleep(3)
  myData={'name':'Train1','lat':10.356829,'lon': 77.980861}
  pub(myData)
  time.sleep(3)
  client.commandCallback = myCommandCallback
client.disconnect()
```

Github and Project Demo Link

https://github.com/IBM-EPBL/IBM-Project-31080-1660196047