

Python Script

Problem Solution: Smart railway solutions

1) For QR Scanner:

```
import cv2
import numpy as np
import time
import puybar.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=16u3crmdpkghxhxfdikvpssoh5fwezmuup5fv5g3ubz','b0ab119f45d3
e6255eabb978e7e2f0')

service = CloudantV1(authenticator=authenticator)

service.set_service_url('https://apikey=v2=16u3crmdpkghxhxfdikvpssoh5fwezmuup5fv5g3ubz:b0a
b119f45d3e6255eabb978e7e2f0')

cap = cv2.VideoCapture(0)
font = cv2.FONT_HERSHEY_PLAIN
while True:
    __,frame = cap.read()
    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()

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2) CODE:

```

import wiotp.ndk.device
import time
import random
myonfig={
    "identify":{
        "origid":"gagtey",
        "typeid":"GPS",
        "deviceid":"12345"
    },
    "auth":{
        "token":"12345678"
    }
}

```

```

def myCommandCallback(cmd):
    print("Message recived from IBM Platform: is"% cmd.data{'command'})
    m=cmd.data{'command'}

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandelers=None)
client.connect()

def pub(data):
    client.publishEvent(eventId="status", nsgFormat="json", data=myData, qos=0,
    print("Published data Sucessfully: is",myData)

while True:
    ={'name':'Train1','lat':17.6387448,'lon':78.47543361}
    pub(myData)
    time.sleep(3)
    #myData={'name':'Train2','lat':17.6387448,'lon':78.47554336}
    #pub(myData)
    #time.sleep(3)
    myData={'name':'Train1','lat':17.06341908,'lon': 78.04744722}
    pub(myData)
    time.sleep(3)
    myData={'name':'Train1','lat':17.06341908,'lon':78.04744722}
    pub(myData)
    time.sleep(3)
    myData={'name':'Train1','lat':17.06341908,'lon': 78.04744722}
    pub(myData)
    time.sleep(3)
    myData={'name':'Train1','lat':17.06341908,'lon':78.04744722}
    pub(myData)
    time.sleep(3)
    myData={'name':'Train1','lat':17.06341908,'lon':78.04744722}
    pub(myData)
    time.sleep(3)
    client.CommandCallback = myCommandCallback
    client.disconnect()

```

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