DEVELOPING PYTHON SCRIPT

Date	**12 November 2022**
Team ID	**PNT2022TMID51489**
Project Name	**IoT based smart solution for railways**

LOCATION DATA:

```
import wiotp.sdk.device

import time

import random

myConfig={ "ident

ity": ( "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-v2-

16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119f45d3e6255eabb978e7e2f0

```
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()
```