PROJECT DEVELOPMENT PHASE SPRINT 4

Project Title: Smart Solution for Railways **Team ID**: PNT2022TMID14632

Main:

```
importwiotp.sdk.device
importtime
importrandom
myConfig={
"identity":{
"orgId":"gagtey",
"typeId":"GPS",
"deviceId":"12345"
},
"auth":{
"token":"12345678"
}
}
defmyCommandcallback(cmd):
print("messagereceivedfromIBMIOTPlatform:%s"%cmd.data['command'])
m=cmd.data['command']
client=wiotp.sdk.device.deviceclient(config=myConfig,logHandlers=None)
client.connect()
defpub(data):
client.publishEvent(eventId="status",msgFormat="json",data=mydata,qos=0,
print("publishedatasuccessfully:%s",mydata)
whileTrue:
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=mycommanCallbak
client.disconnect()
```

Program:

```
importcv2
importnumpyasnp
importtime
importpyzbar.pyzbaraspuzbar
fromibmcloudant.cloudant_v1importcloudantv1
fromibmcloudantimportcouchDbsessionAuthenticator
fromibm_cloud_sdk_core.AuthenticatorsimportBasicAuhtenticator
authenticator=BasicAuthenticator('apikey-v2-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz','b0ab119f45d3e6255eabb978)
service=cloudantv1(authenticator=authenticator)
service.set_service_url('https://apikey-v2-
16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119f45d3e6255eabb978
cap=cv2.videoCapture(0)
font=cv2.FONT_HERSHEY_PLAIN
whileTrue:
_,frame=cap.read(0)
decodeObjects=pyzbar.decode(frame)
forobjindecodeObjects:
```

```
#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:
responce=service.get_document(db='booking',doc_id=a).get_result()
print(response)
time.sleep(5)
exceptExceptionase:
print("NotvalidTicket")
time.sleep(5)
cap.imshow("Frame",frame)
ifcv2.waitKey{1}&0XFF==ord('q'):
break
cap.release()
cv2.destroyAllWindows()
client.disconnect()
```