SOURCE CODE

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PROJECT : SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY .

#OPENWEATHER MAP(SPRINT 2)-{REQUIREMENT 1 OF THE PROJECT TO GET WEATHER DATA} #TRAFFIC AND FATAL SITUATION ALERT BY ROADSAFETY CONTROL OFFICE(SPRINT 3) -

{REQUIREMENT 2 OF THE PROJECT TO DISPLAY THE ALERT AND DIVERSION MESSAGE THAT WAS FROM ROAD SAFETY OFFICE

#HOSPITAL,SCHOOL AND PEOPLE CROWDED AREA LIKE RESTAURANT SIGNS DISPLAYED SPEED RECOMMENDATION ARE PROVIDED(SPRINT 4) - {REQUIREMENT 3 0F THE PROJECT TO DISPLAY HOSPITAL AND SCHOOL REGION BY THE ROAD SAFETY CONTROL OFFICE}

import wiotp.sdk.device import time

import random import requests, json

myConfig = { "identity": {

"orgId": "kjbrqi",

"typeId": "temp", "deviceId":"89032"

},

"auth": {

"token": "WjW4q@Kc(QVhH(GjZN"

}

}

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()

BASE\_URL = "https://api.openweathermap.org/data/2.5/weather?" CITY = "Coimbatore"

URL = BASE\_URL + "q=" + "Coimbatore" + "&appid=" + "fbcb52a2a6c7bbea1396de2b6b17ea8a"

while True:

response = requests.get(URL) if response.status\_code == 200:

data = response.json() main = data['main']

temperature = main['temp'] humidity = main['humidity'] pressure = main['pressure'] report = data['visibility'] repo=random.randint(0,5)

if repo==1:

prt="SLOW DOWN , SCHOOL IS NEAR"

elif repo==3:

prt="SLOW DOWN , HOSPITAL NEARBY"

elif repo==5:

prt="NEED HELP, POLICE STATION NEARBY"

else:

prt="" speed=random.randint(0,150) if speed>=100:

prt3="SLOW DOWN , Speed Limit Exceeded" elif speed>=60 and speed<100:

prt3="Moderate Speed" else:

prt3="Usual speed limit" sign=random.randint(0,5)

if sign==1:

prt2="Right Diversion ->" elif sign==3:

prt2="Left Diversion <-" elif sign==5:

prt2="U Turn" else:

prt2=""

if temperature<=50:

prt4="Fog Ahead, Drive Slow" else:

prt4="Clear Weather"

else:

print("Error in the HTTP request") myData={'Temperature':temperature,'Humidity':humidity,'Pressure':pressure,

'Message':prt, 'Sign':prt2, 'Speed':prt3, 'Visibility':prt4}

client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)

print("Published data Successfully: %s", myData) client.commandCallback = myCommandCallback time.sleep(5)

client.disconnect()