SPRINT-4

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID36291
Project Name	SMART SOLUTIONS FOR RAILWAYS

PROCEDURE:

Step1: Develop a node red application for GPS

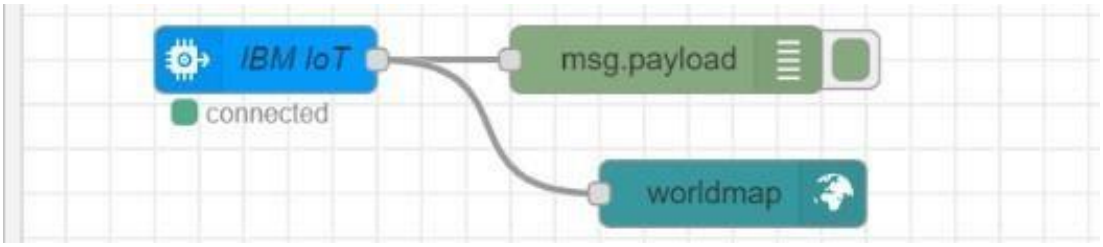
Step2: Develop a python code for GPS

Step3: Run the program

Step4: Train location will be displayed

Step5:Create a node red for wakeup call and E-catering serice

NODE RED FLOW:



PYTHON CODE FOR GPS:

```
import wiotp.sdk.device

import time import random

myConfig = {

        "identity": {

                "orgId": "dks66l",

                "typeId": "Sudha",

                "deviceId":"45"

        },

        "auth": {

                "token": "sudha2002@"

        }
```

```
 }
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, onPublish=None)
          print ("Published data Successfully: %s", myData)

 while True:
          myData={'name': 'Train1', 'lat':13.08363 , 'lon': 80.27080}
          pub (myData)              time.sleep (2)
            myData={'name': 'Train2', 'lat': 12.40797, 'lon': 79.81410}
          pub (myData)              time.sleep (2)
myData={'name': 'Train1', 'lat': 11.83331, 'lon': 79.37465}
          pub(myData)
          time.sleep(6)
            myData={'name': 'Train1', 'lat': 11.59664, 'lon': 78.69899}
          pub (myData)              time.sleep (6)
myData={'name': 'Train1', 'lat': 11.63431, 'lon': 78.11122}
          pub (myData)
time.sleep (6)
myData={'name': 'Train1', 'lat':
11.32207, 'lon': 77.61684}
```

pub (myData) time.sleep (6)

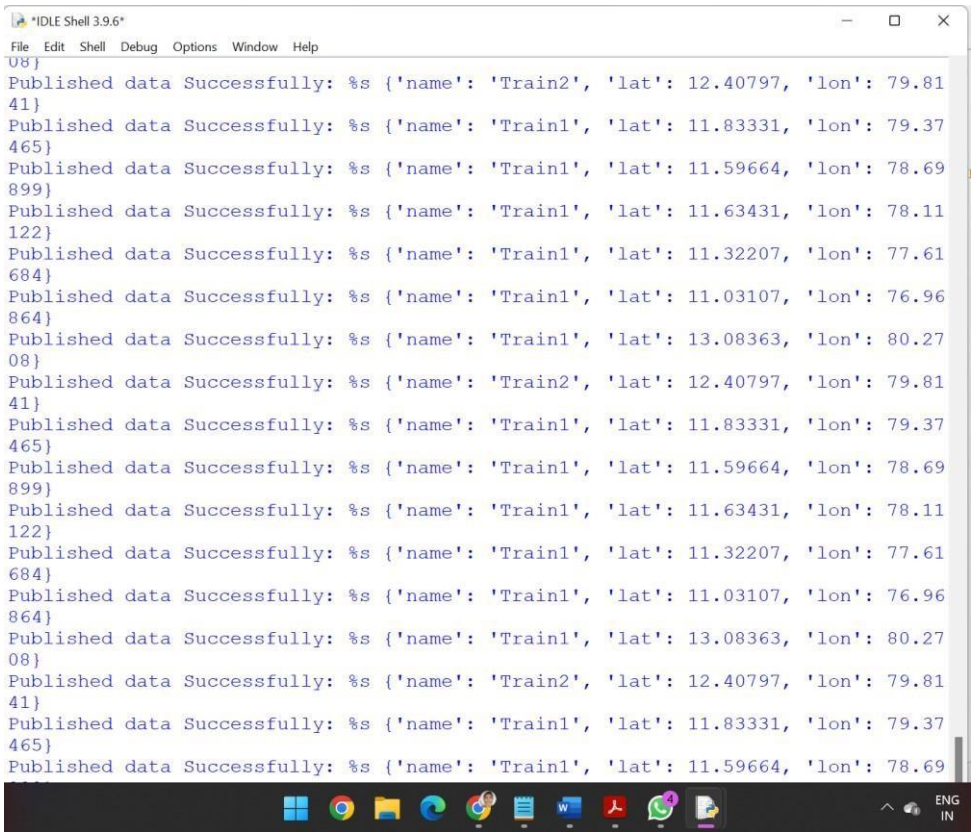
myData={'name': 'Train1', 'lat': 11.03107, 'lon': 76.96864}

pub (myData) time.sleep (6) client.commandCallback =

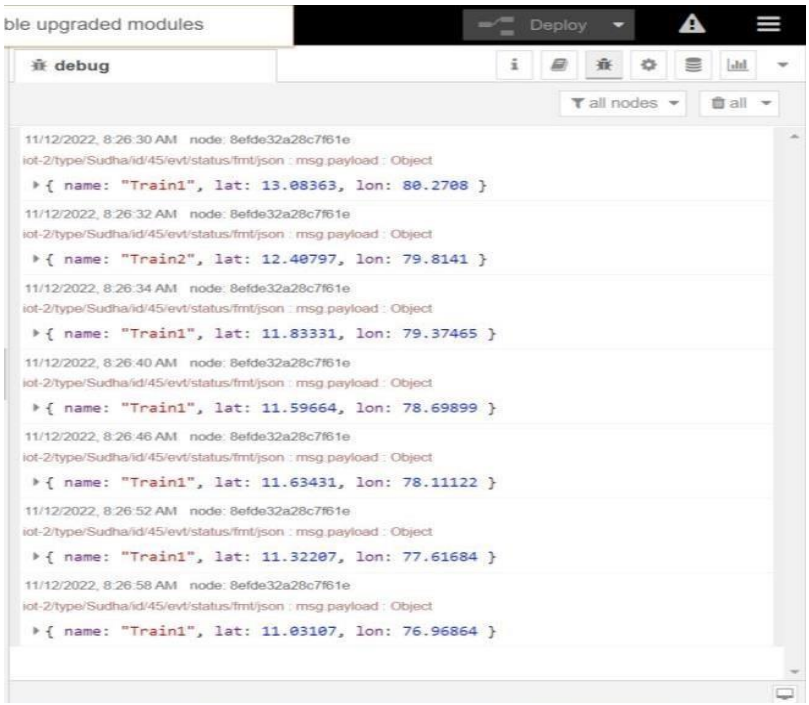
myCommandCallback

client.disconnect ()

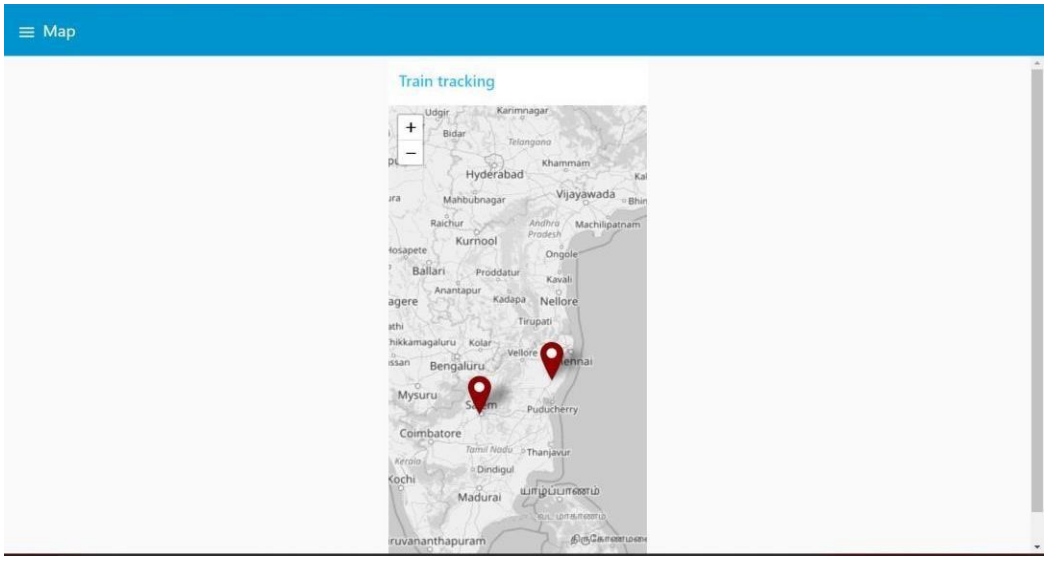
PYTHON CODE OUTPUT:



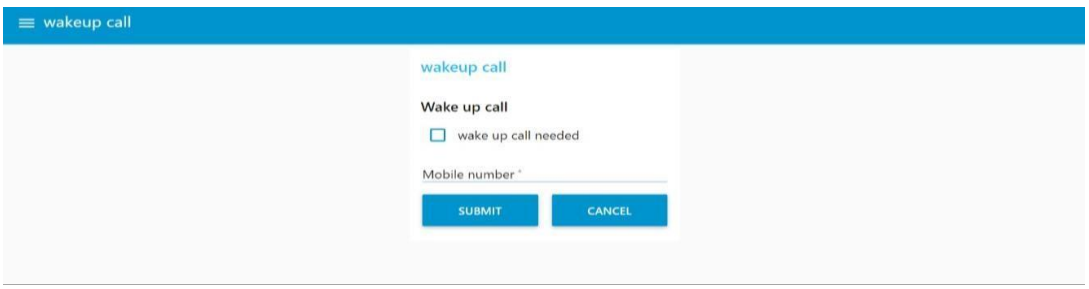
NODE RED OUTPUT:

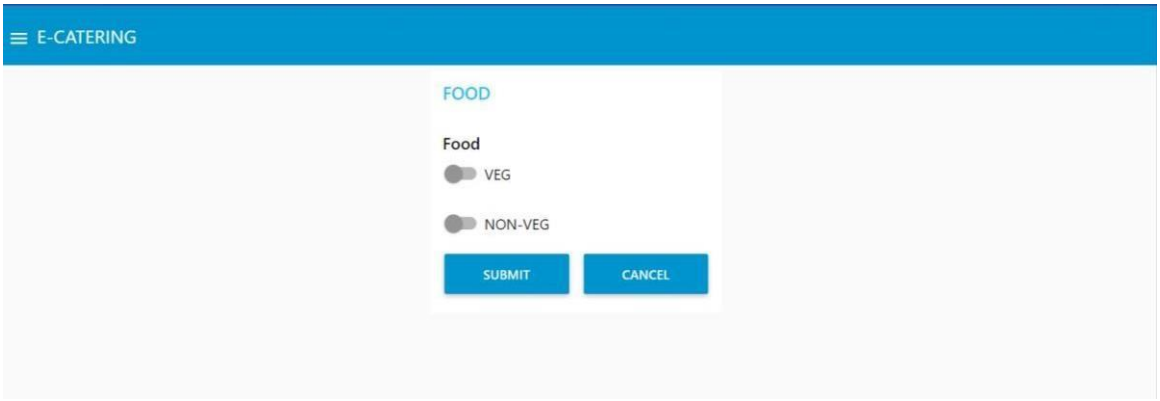


TRAIN TRACKING :



NODE RED CONNECTION FOR WAKEUP CALL AND E-CATERING SERVICE:




E-CATERING
FOOD
Food
VEG
NON-VEG
SUBMIT
CANCEL