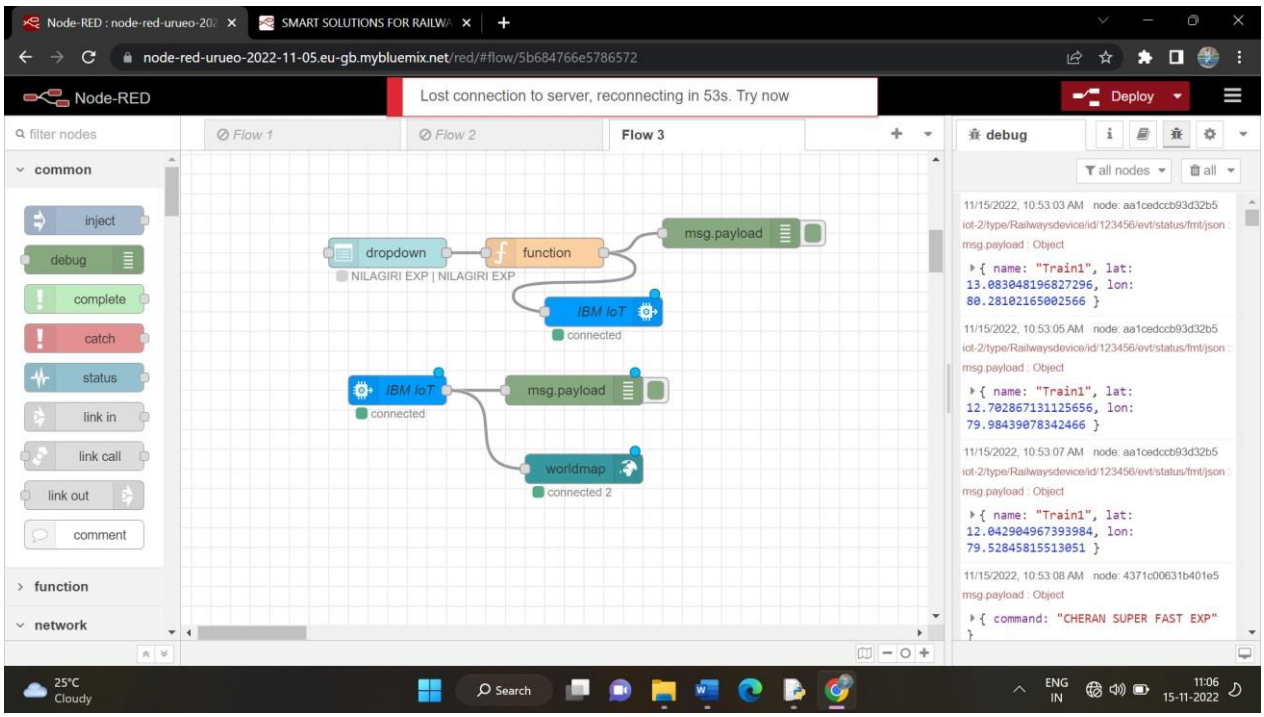
PROJECT DEVELOPMENT PHASE - SPRINT 3

Date	12 November 2022
Team ID	PNT2022TMID26493
Project Name	Smart Solutions for Railways

SPRINT 3– Train Tracking

At the time of the journey, the user could able to track their train location by selecting the particular train. Once the train is selected ,the live location of the train can easily be tracked by the user.

NODE-RED FLOW FOR TRAIN TRACKING:

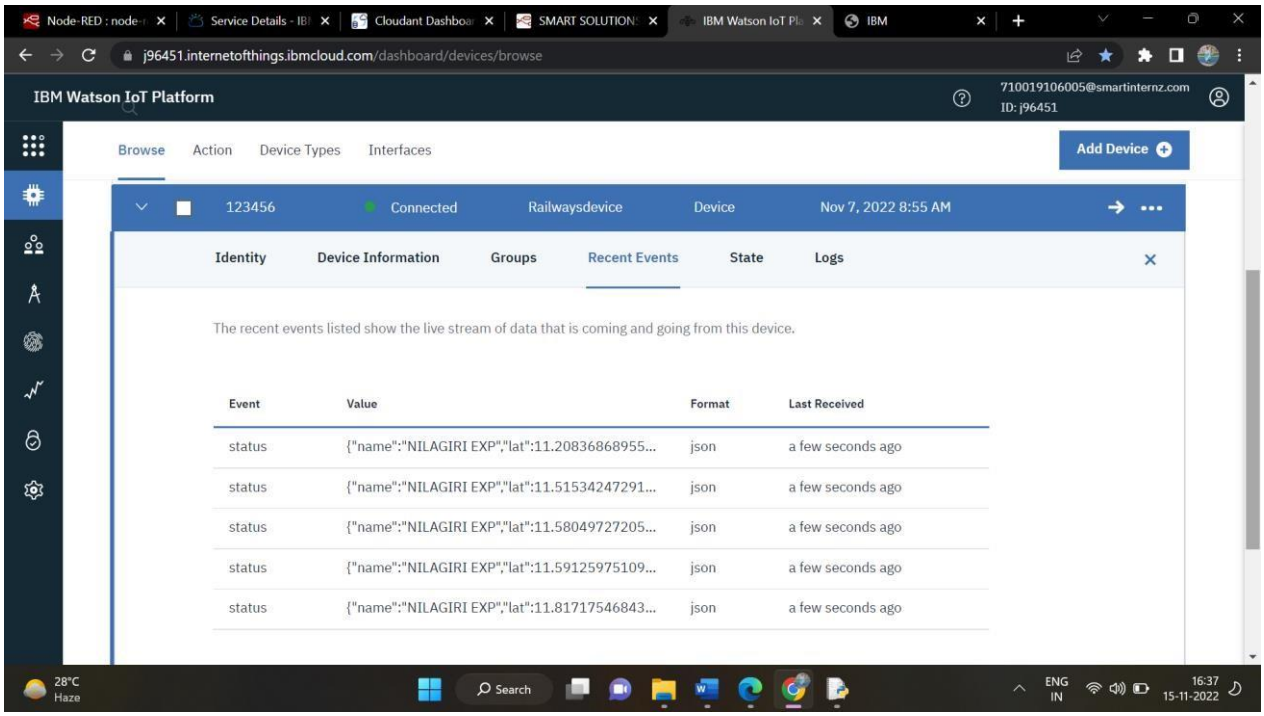


CODE:

```
import wiotp.sdk.device
import time import
random myConfig = {
 "identity": {
 "orgId": "j96451",
 "typeId": "Railwaysdevice",
 "deviceId":"123456"
 },
 "auth": {
 "token": " Hariharasusdhan@707"
 }
}

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': 'CHERAN SUPER FAST EXP', 'lat': 13.083048196827296, 'lon':
80.28102165002566}
    pub (myData)       time.sleep (2)       myData={'name':
'CHERAN SUPER FAST EXP', 'lat': 12.702867131125656,
'lon':79.98439078342466}
    pub (myData)       time.sleep (2)       myData={'name':
'CHERAN SUPER FAST EXP', 'lat': 12.042904967393984,
```

'lon':79.52845815513051} pub(myData) time.sleep(2)
myData={'name': 'CHERAN SUPER FAST EXP', 'lat':
11.81717546843628,
'lon':79.38563588602632} pub (myData) time.sleep (2)
myData={'name': 'CHERAN SUPER FAST EXP', 'lat':
11.591259751090618,
'lon':78.73194934666482} pub (myData) time.sleep (2)
myData={'name': ''‘CHERAN SUPER FAST EXP', 'lat':
11.580497272057597,
'lon':78.75392200345009} pub (myData) time.sleep (2)
myData={'name': ''‘CHERAN SUPER FAST EXP', 'lat':
11.51534247291403,
'lon':77.94873197618158} pub (myData) time.sleep (2)
myData={'name': 'CHERAN SUPER FAST EXP', 'lat':
11.208368689552955, 'lon':
77.53125149726162} pub (myData) time.sleep (5)
myData={'name': 'CHERAN SUPER FAST EXP', 'lat':
11.035888995239656,
'lon':76.94348292825593} pub (myData)
client.commandCallback = myCommandCallback
client.disconnect ()

WATSON IBM CLOUD:



USER INTERFACE FOR TRAIN TRACKING: