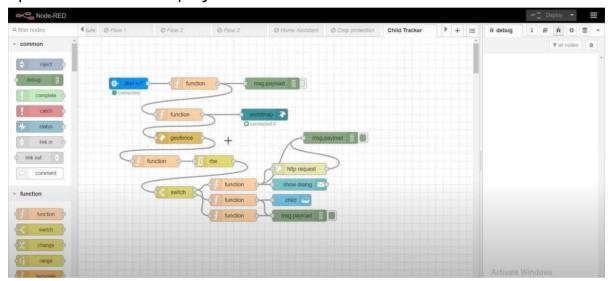
Develop The Web Application Using Node-RED

TEAM ID: PNT2022TMID26604

Project Name: Smart Waste Management For Metropolitan Cities

Aim: Develop the web application using Node-RED Steps Followed:

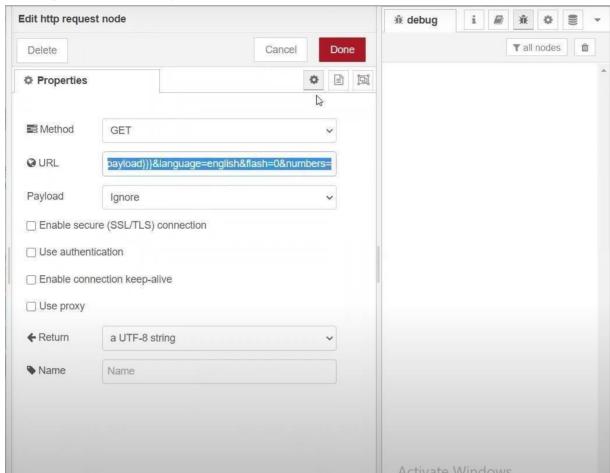
• Opened a Node-RED project



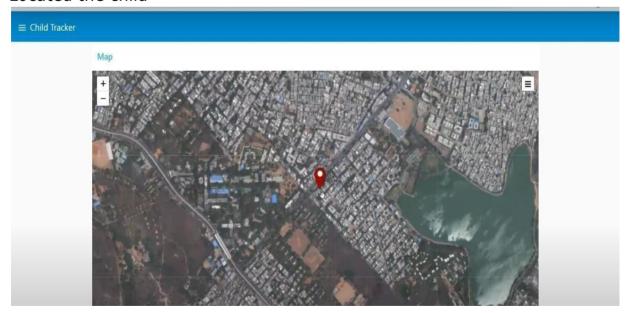
Added code to get child location in python

```
import json
import wiotp.sdk.device
import time
myConfig = {
     "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
          "deviceId": "12345"
          "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
While True:
          name= "Smartbridge"
          #in area location
          latitude= 17.4225176
          longitude= 78.5458842
          #out area location
          #latitude= 17.4219272
         #longitude= 78.5488783
myData={'name': name, 'lat':latitude, 'lon':longitude}
          client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None) print("Data published to IBM IoT platfrom: ",myData)
          time.sleep(5)
client.disconnect()
```

• Editing the HTTP Request URL



Located the child



Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                        ₽ × IPython console
                                                                                         Console 2/A 🗵
Child.py
                                                                                             Data published to IBM IoT platfrom:
△ 1 import json
                                                                                             Data published to IBM IoT platfrom:
  2 import wiotp.sdk.device
                                                                                             Data published to IBM IoT platfrom:
  3 import time
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
  5 myConfig = {
                                                                                             Data published to IBM IoT platfrom:
        "identity": {
                                                                                             Data published to IBM IoT platfrom:
            "orgId": "hj5fmy",
                                                                                             Data published to IBM IoT platfrom:
            "typeId": "NodeMCU",
                                                                                             Data published to IBM IoT platfrom:
            "deviceId": "12345"
  9
                                                                                             Data published to IBM IoT platfrom:
 10
                                                                                             Data published to IBM IoT platfrom:
 11
        "auth": {
                                                                                             Data published to IBM IoT platfrom:
            "token": "12345678"
 12
                                                                                             Data published to IBM IoT platfrom:
 13
                                                                                             Data published to IBM IoT platfrom:
 14}
                                                                                             Data published to IBM IoT platfrom:
 15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
                                                                                             Data published to IBM IoT platfrom:
 16 client.connect()
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
 18 while True:
                                                                                             Data published to IBM IoT platfrom:
        name= "Smartbridge"
 19
                                                                                             Data published to IBM IoT platfrom:
        #in area location
 20
                                                                                             Data published to IBM IoT platfrom:
 21
                                                                                             Data published to IBM IoT platfrom:
 22
        #Latitude= 17.4225176
                                                                                             Data published to IBM IoT platfrom:
 23
        #longitude= 78.5458842
                                                                                             Data published to IBM IoT platfrom:
 24
                                                                                             Data published to IBM IoT platfrom:
 25
        #out area location
                                                                                             Data published to IBM IoT platfrom:
 26
                                                                                             Data published to IBM IoT platfrom:
 27
        latitude= 17.4219272
                                                                                             Data published to IBM IoT platfrom:
 28
        longitude= 78.5488783
                                                                                             Data published to IBM IoT platfrom:
 29
        myData={'name': name, 'lat':latitude,'lon':longitude}
                                                                                             Data published to IBM IoT platfrom:
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
                                                                                             Data published to IBM IoT platfrom:
 31
        print("Data published to IBM IoT platfrom: ",myData)
                                                                                             Data published to IBM IoT platfrom:
 32
        time.sleep(5)
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
 34 client.disconnect()
                                                                                             Data published to IBM IoT platfrom:
 35
                                                                                             Data published to IBM IoT platfrom:
  36
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
                                                                                             Data published to IBM IoT platfrom:
```

• After running the script, the web UI shows "Person is not in the particular area"

■ Child Tracker



Result: Successfully developed the web application using Node-RED