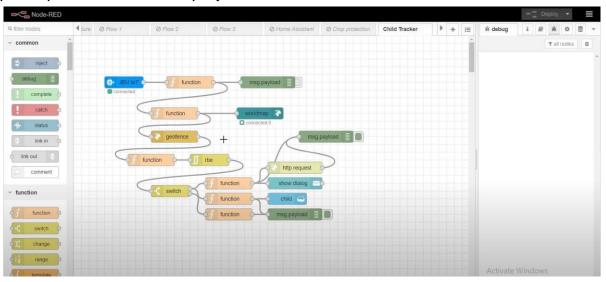
Develop The Web Application Using Node-RED

Aim:

Develop the web application using Node-RED.

Steps Followed:

Step 1: Opened Node-RED project

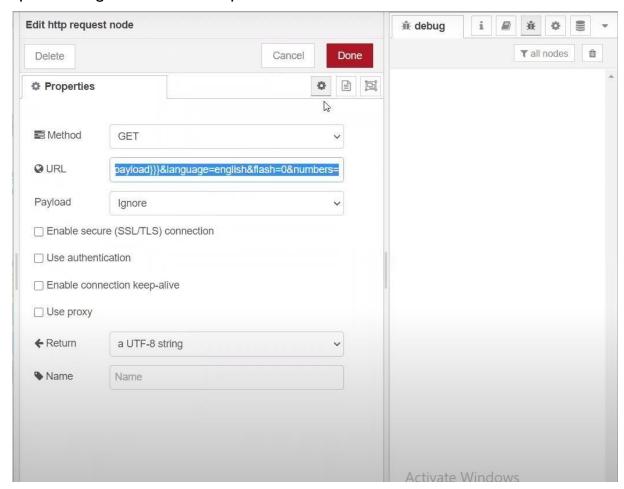


Step 2:Added code to get child location in python

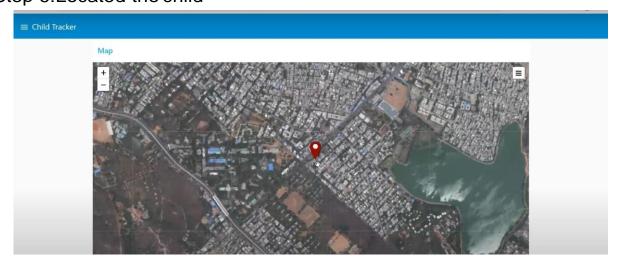
```
import json
import wiotp.sdk.device
import time
myConfig = {
    "identity": {
        "orgId": "hj5fmy",
"typeId": "NodeMCU",
        "deviceId": "12345"
    "auth": {
        "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
While True:
        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()
```

Step 3:Created the GeoFence

Step 4:Editing the HTTP Request URL



Step 6:Located the child

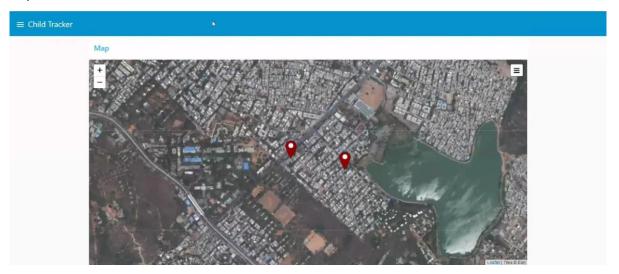


Step 7:Created the geofence node

Step 8:Python script sending requests to IBM Cloud

```
child.py 🖸
                                                                                               Console 2/A 🗵
                                                                                                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": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
            "deviceId": "12345"
                                                                                                Data published to IBM IoT platfrom:
         'auth": {
"token": "12345678"
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                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:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
 18 while True:
19 name= "Smartbridge"
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
 20
        #in area locatio
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
        #Latitude= 17.4225176
                                                                                                Data published to IBM IoT platfrom:
 23
        #longitude= 78.5458842
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
        #out area location
                                                                                                Data published to IBM IoT platfrom:
 26
27
                                                                                                Data published to IBM IoT platfrom:
        latitude= 17.4219272
                                                                                                Data published to IBM IoT platfrom:
 28
        longitude= 78.5488783
        Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
        time.sleep(5)
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
  34 client.disconnect()
                                                                                                Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
```

Step 9: After running the script, the web UI shows "Person is not in theparticular area"



Result:

Successfully developed the web application using Node-RED