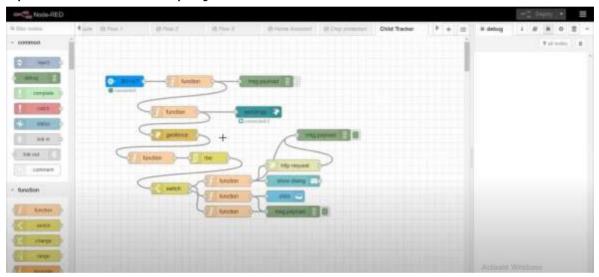
DEVELOP THE WEB APPLICATION USING NODE-RED

Aim: Develop the web application using Node-RED

Steps Followed:

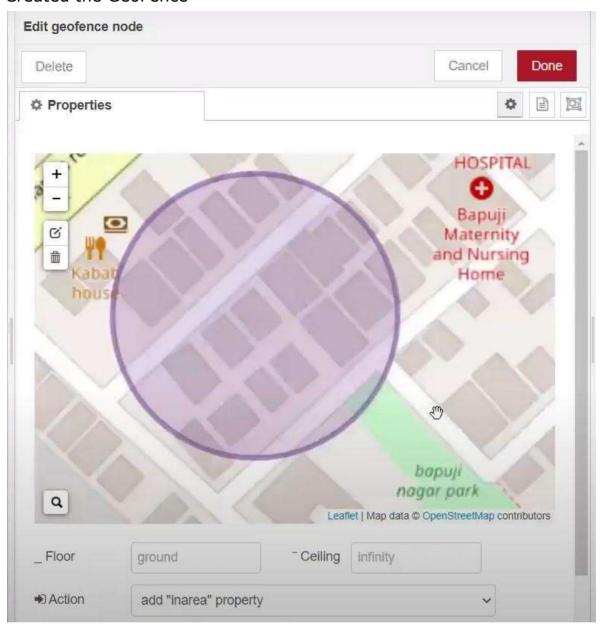
• Opened a Node-RED project



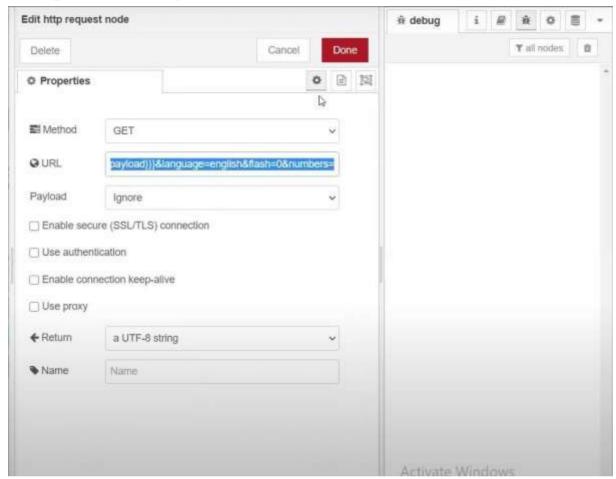
• Added code to get child location in python

```
import json
import wiotp.sdk.device
import time
myConfig = [
     "identity": {
    "orgld": "hj5fmy",
    "typeId": "NodeMCU",
           "deviceId": "12345"
     "auth": (
           "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
Inile True:
          name= "Smartbridge"
          #in area location
          latitude= 17.4225176
          longitude= 78.5458842
          #out area location
          #latitude= 17.4219272
          #longitude= 78.5498763
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()
```

• Created the GeoFence



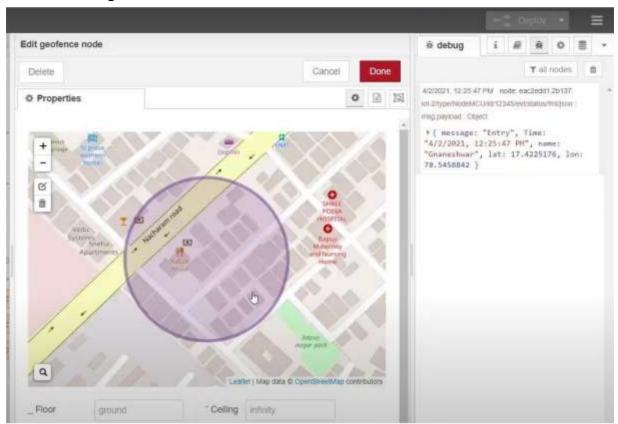
• Editing the HTTP Request URL



Located the child



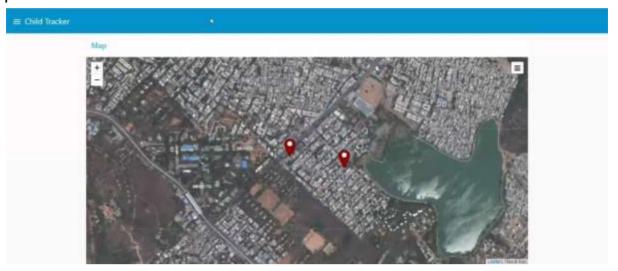
• Created the geofence node



Python script sending requests to IBM Cloud

```
C) drift py ()
                                                                                                           Canadle 2/A D
                                                                                                            Data published to IBR IoT platfrom:
  limport ison
                                                                                                            Data published to IBM IoT platfrom:
   2 import wiotp.sdk.device
                                                                                                            Data published to IBM IoT platfrom:
   import time
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
   5 myConfig = {
                                                                                                            Data published to IBM IoT platfrom:
         "identity": (
    "orgld": "hj5fey",
    "typeId": "NodePCU"
                                                                                                            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:
                                                                                                            Data published to IBM IoT platfrom:
          auth": (
                                                                                                            Data published to IBM IoT platfrom:
               "token": "12345678"
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM loT 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:
  18 while True:
19 name= "Smartbridge"
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
         #in ores totalion
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         Mintitude= 27,4225176
Minglibde= 78,5458842
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         Anat wen location
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         latitude= 17.4219272
                                                                                                            Data published to IBM IoT platfrom:
 28
         Iongitude= 78,5488783
                                                                                                            Data published to IBM IoT platfrom:
         myData={ name : name, "lat':latitude, 'lon':longitude}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                            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:
Data published to IBM IoT platfrom:
  14 client.disconnect()
                                                                                                            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"



Result: Successfully developed the web application using Node-RED