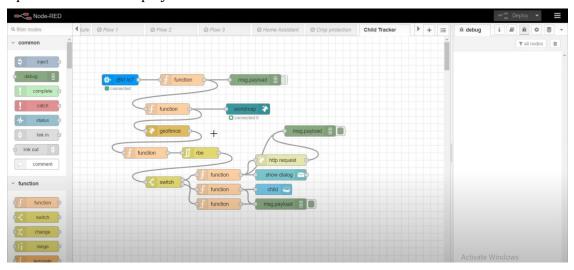
# Develop A Web Application Using Node-RED

Date	26 October 2022
Team ID	PNT2022TMID05117
Project Name	Project – IoT Based Safety Gadget For Child
	Safety Monitoring & Notification
Maximum Marks	2 Marks

#### Steps Followed:

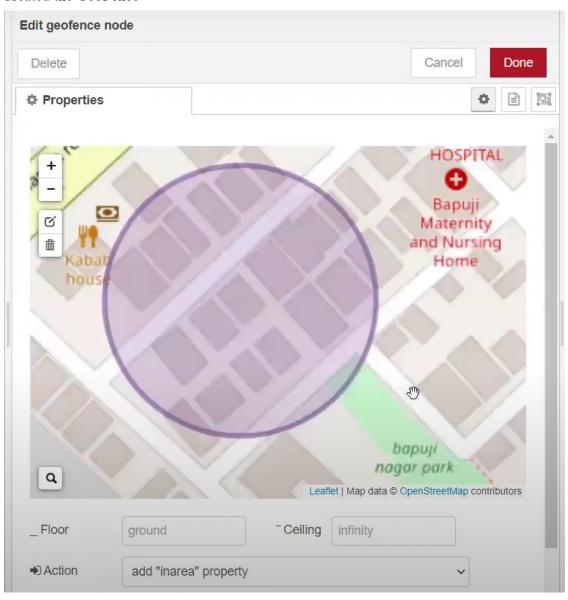
• Opened a Node-RED project



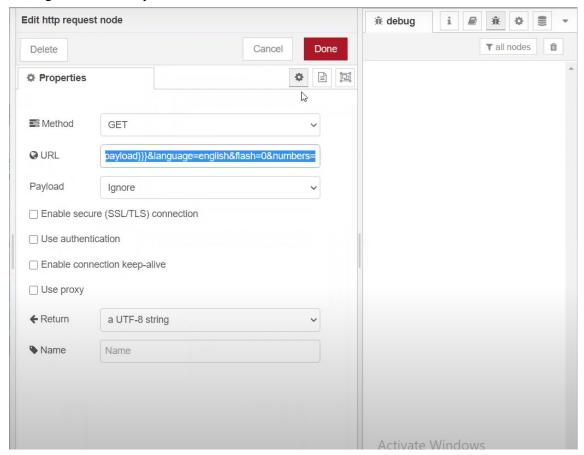
Added code to get child location in python

```
import json
import wiotp.sdk.device
import time
myConfig = {
    mid = {
  "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()
```

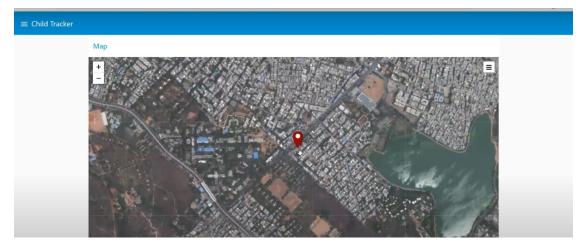
### • Created the GeoFence



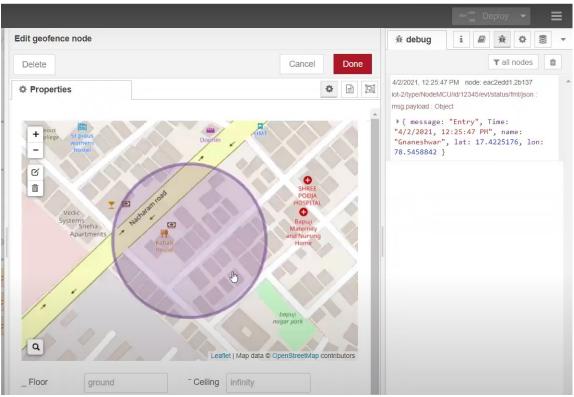
### • Editing the HTTP Request URL



#### • Located the child



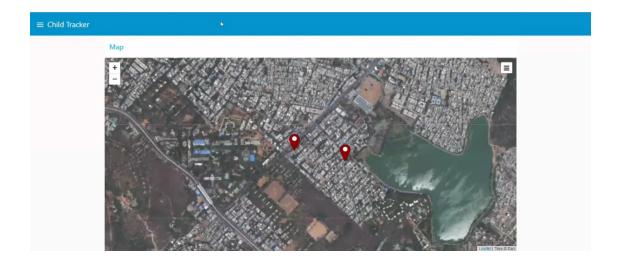
• Created the GeoFence node



• Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                       5 × IPython console
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:
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:
Data published to IBM IoT platfrom:
              "deviceId": "12345"
 10
                                                                                                            Data published to IBM IoT platfrom:
          'auth": {
                                                                                                            Data published to IBM IoT platfrom:
              "token": "12345678"
                                                                                                            Data published to IBM IoT platfrom:
 13
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            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:
19 name= "Smartbridge"
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         #in area location
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
 22
         #latitude= 17.4225176
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
 24
                                                                                                            Data published to IBM IoT platfrom:
         #out area location
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         latitude= 17.4219272
                                                                                                            Data published to IBM IoT platfrom:
        Inditude 78.5488783
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)
 28
                                                                                                            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:
  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"



## **Result:**

Successfully developed a web application using Node-RED.