# **Develop The Web Application Using Node-RED**

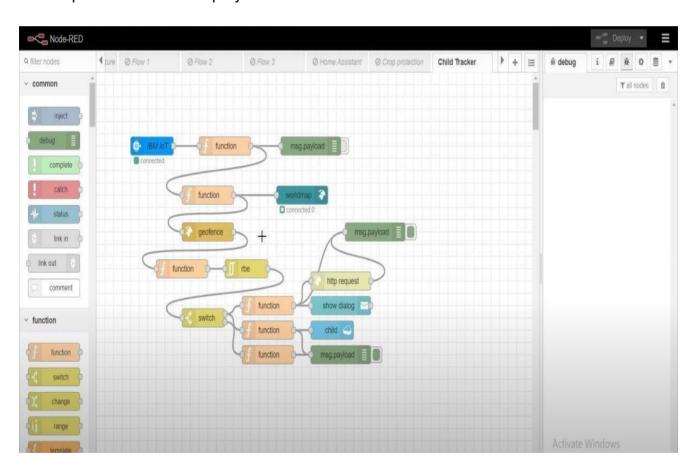
TEAM ID	PNT2022TMID18932
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION

#### Aim:

Develop the web application using Node-RED Steps

### Followed:

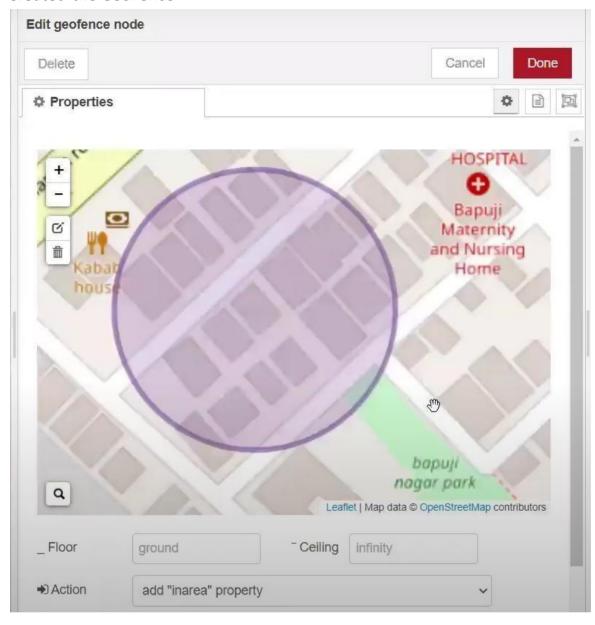
• Opened a Node-RED project



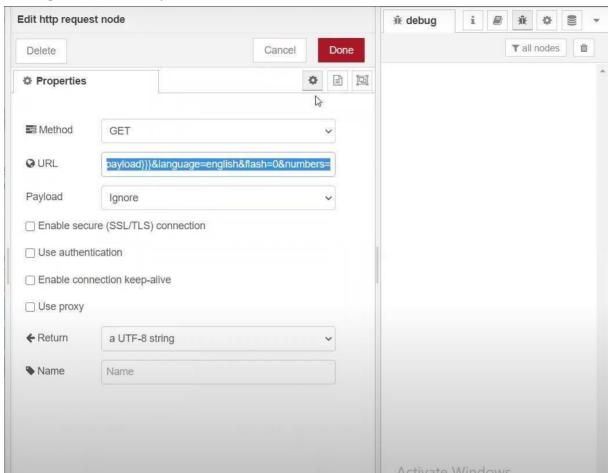
• Added code to get child location in python

```
import ison
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()
```

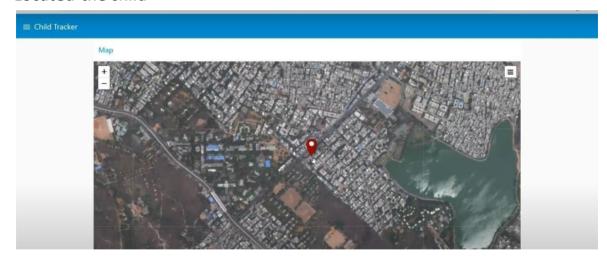
### • Created the GeoFence



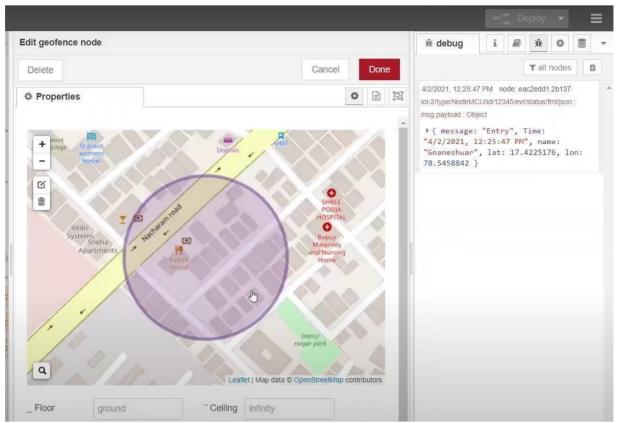
• Editing the HTTP Request URL



• Located the child



• Created the geofence node



• Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                            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",
"typeId": "NodeMCU",
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
             "deviceId": "12345"
  9
                                                                                                Data published to IBM IoT platfrom:
  10
                                                                                                Data published to IBM IoT platfrom:
         "auth": {
  11
                                                                                                Data published to IBM IoT platfrom:
             "token": "12345678"
                                                                                                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:
  20
        #in area location
                                                                                                Data published to IBM IoT platfrom:
  21
                                                                                                Data published to IBM IoT platfrom:
  22
        #Latitude= 17.4225176
                                                                                                Data published to IBM IoT platfrom:
        #longitude= 78.5458842
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
  25
        #out area Location
                                                                                                Data published to IBM IoT platfrom:
  26
                                                                                                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:
        myData={'name': name, 'lat':latitude,'lon':longitude}
  29
        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:
  30
                                                                                                Data published to IBM IoT platfrom:
  31
                                                                                                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 the web application using Node-RED.