Develop The Web Application Using Node-RED

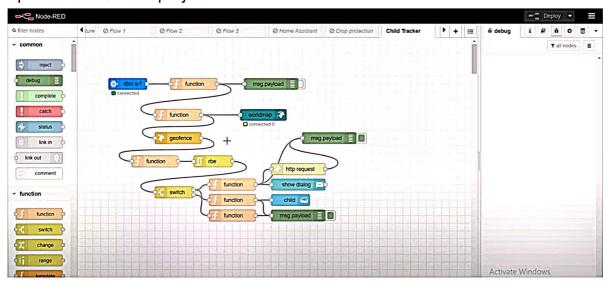
TEAM ID	PNT2O22TMID5O3OO
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY
	MONITORING AND NOTIFICATION

Aim:

Develop the web application using Node-RED Steps

Followed:

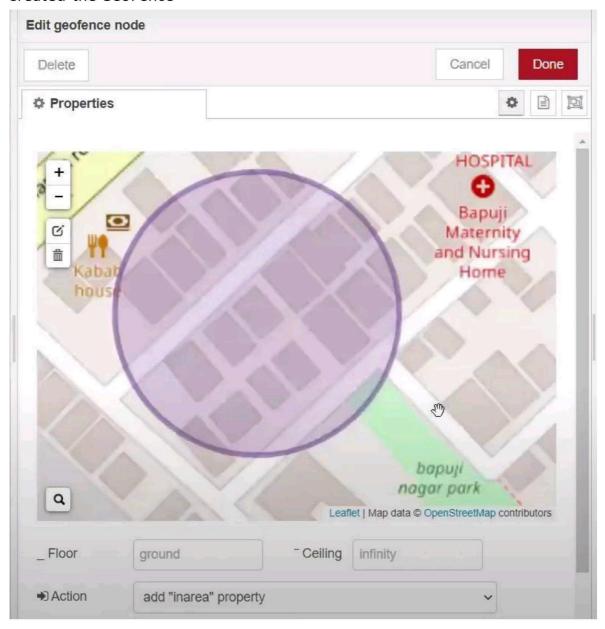
• Opened a Node-RED project



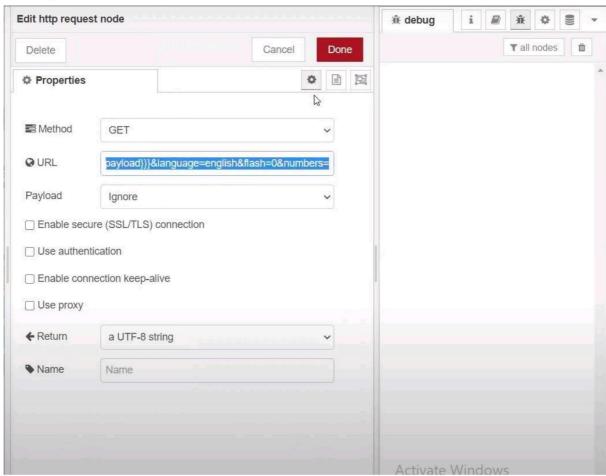
Added code to get child location in python

```
import 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()
Thile 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()
```

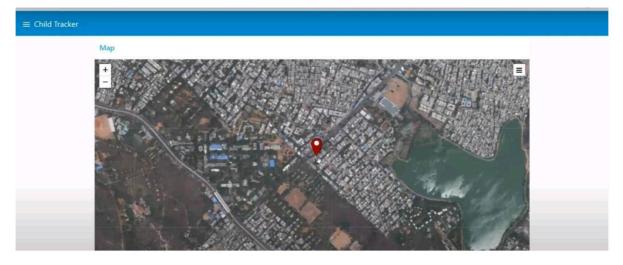
• Created the GeoFence



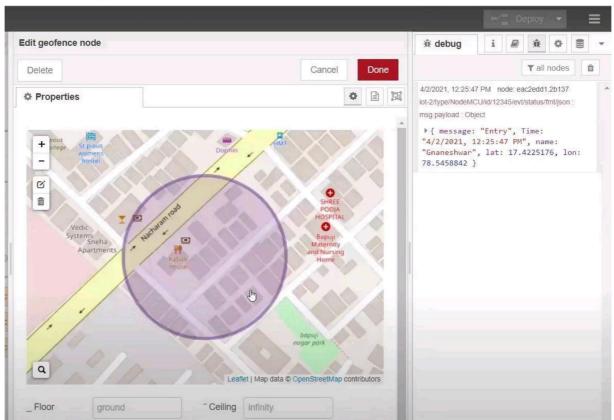
• Editing the HTTP Request URL



• Located the child



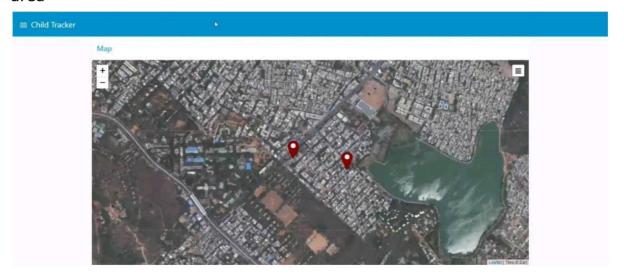
• Created the geofence node



Python script sending requests to IBM Cloud

```
₽ × IPython console
Editor - C:\Users\HP\Desktop\child.py
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:
                                                                                                        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:
  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"
                                                                                                        Data published to IBM IoT platfrom:
  20
         #in area Location
                                                                                                        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:
  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:
  28
         longitude= 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)
  29
30
                                                                                                        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:
```

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



Result:

Successfully developed the web application using Node-RED