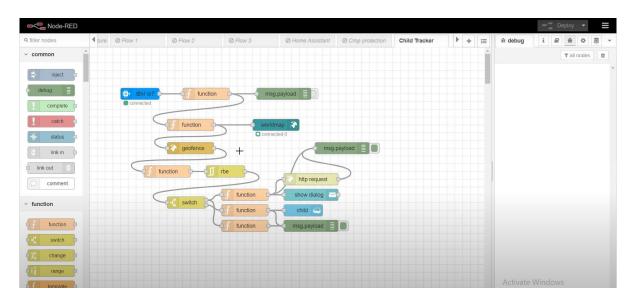
DEVELOP A WEB APPLICATION USING NODE-RED SERVICE DEVELOP THE WEB APPLICATION USING NODE-RED

DATE	29 OCTOBER 2022
TEAM ID	PNT2022TMID20466
PROJECT NAME	IOT BASED SAFETY GADGET FOR
	CHILD SAFETY MONITORING AND
	NOTIFICATION
TEAM LEADER	MONALISA M
TEAM MEMBERS	KIRUTHIKA D
	MADHUSRI J
	RAHAMATH SHIHANA S

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": "hjSfmy",
        "typeId": "NodeMCU",
        "deviceId": "12345"
},
    "auth": {
        "token": "12345678"
}
} client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

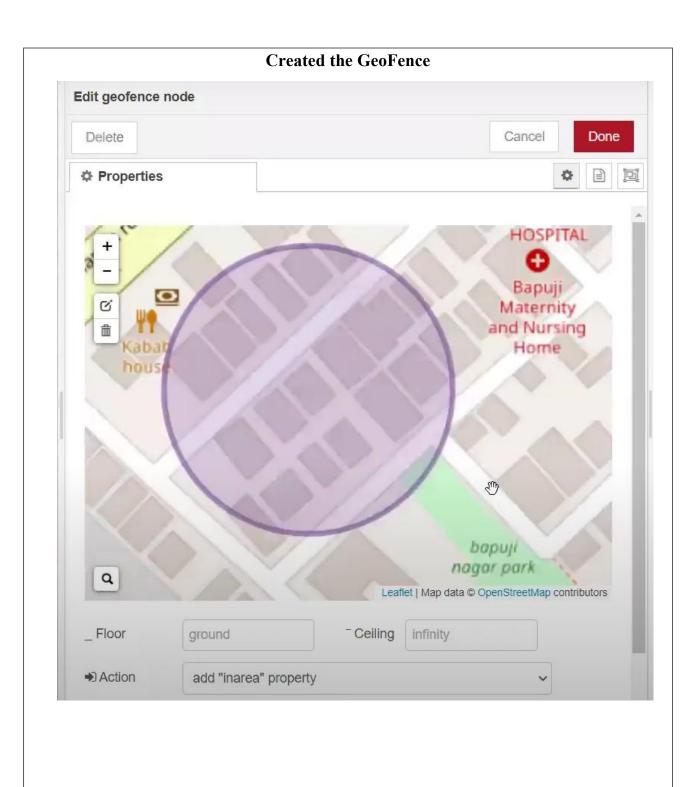
Phile True:
    name= "Smartbridge"
    #in area location

    latitude= 17.4225176
    longitude= 78.548842

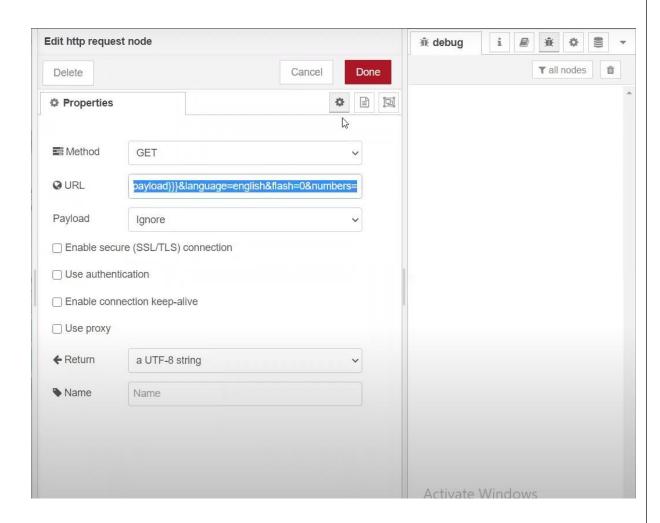
    #out area location

    #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)

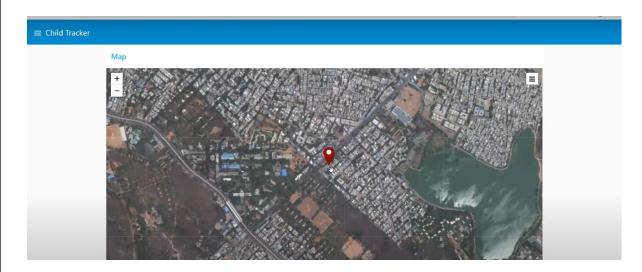
client.disconnect()
```



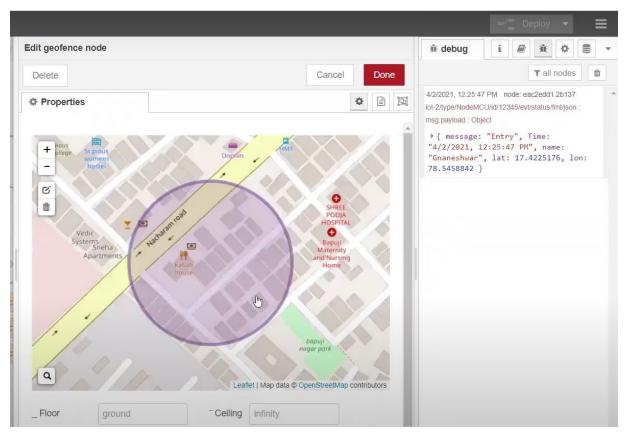
Editing the HTTP Request URL



Located the child



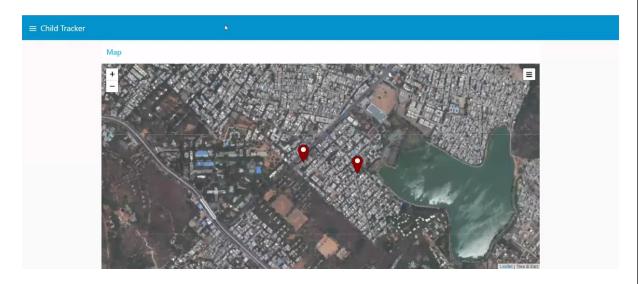
Created the geofence node



Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                  ₽ × IPython console
                                                                                                   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": {
    "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:
  10
                                                                                                       Data published to IBM IoT platfrom:
          auth": {
                                                                                                        Data published to IBM IoT platfrom:
  12
              "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:
19 name= "Smartbridge"
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
         #in area location
                                                                                                       Data published to IBM IoT platfrom:
 21
                                                                                                       Data published to IBM IoT platfrom:
         #Latitude= 17.4225176
 22
                                                                                                        Data published to IBM IoT platfrom:
  23
         #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:
                                                                                                        Data published to IBM IoT platfrom:
 28
         longitude= 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)
                                                                                                        Data published to IBM IoT platfrom:
 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:
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