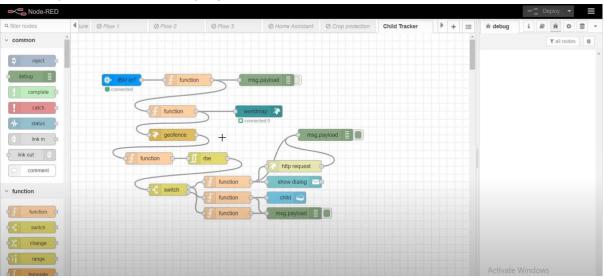
Develop The Web Application Using Node-RED

Aim:

Develop the web application using Node-RED.

Steps Followed:

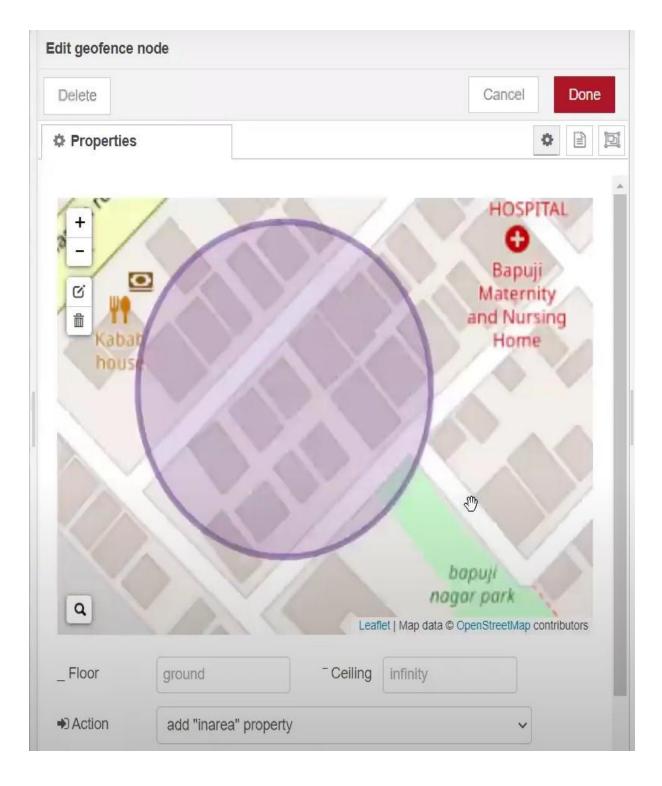
1. Opened a Node-RED project



2. Added code to get child location in python

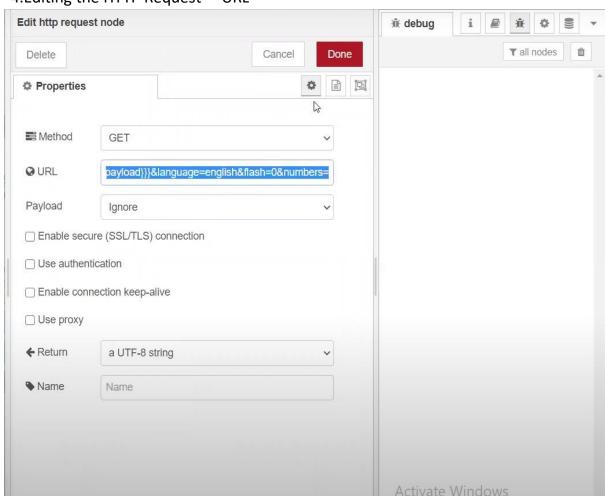
```
import json
import wiotp.sdk.device
import time
myConfig = {
    "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
        "deviceId": "12345"
    "auth": {
         "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
Thile True:
        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()
```

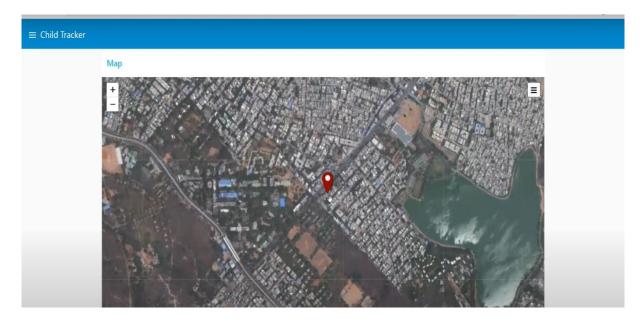
3.created the geofence



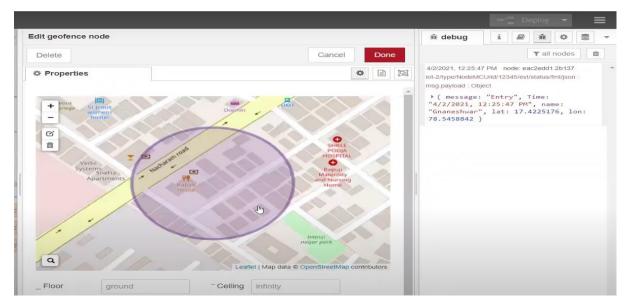
•

4.Editing the HTTP Request URL





5.Located the child and Created the geofence node



6. Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                  ₽ × 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:
   5 myConfig = {
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
  10
                                                                                                       Data published to IBM IoT platfrom:
          auth": {
  11
                                                                                                       Data published to IBM IoT platfrom:
              "token": "12345678"
  12
                                                                                                       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:
  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:
  25
         #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,
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                       Data published to IBM IoT platfrom:
  30
                                                                                                       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:
```

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



Result:

Successfully developed the web application using Node-RED

TEAM ID:PNT2022TMID41116

PROJECT : IOT Based Safety Gadgets For Child Safety

Monitoring& Notification