Develop The Web Application Using Node-RED

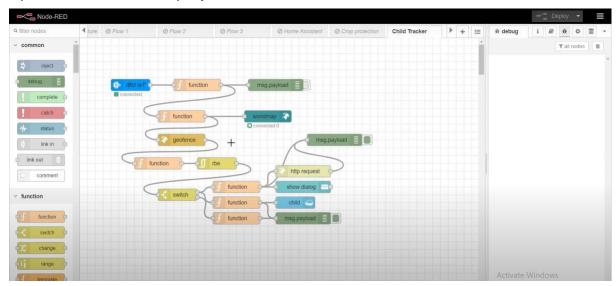
TEAM ID:PNT2022TMID44171

Aim:

Develop the web application using Node-RED.

Steps Followed:

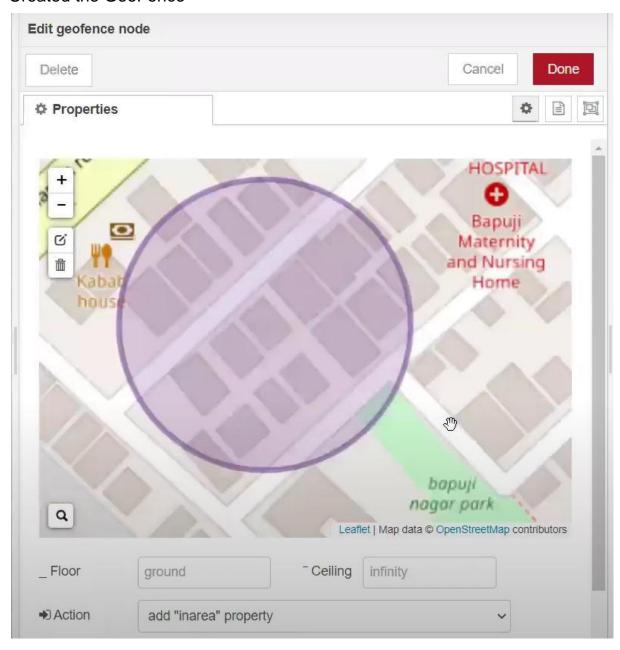
Opened a Node-RED project



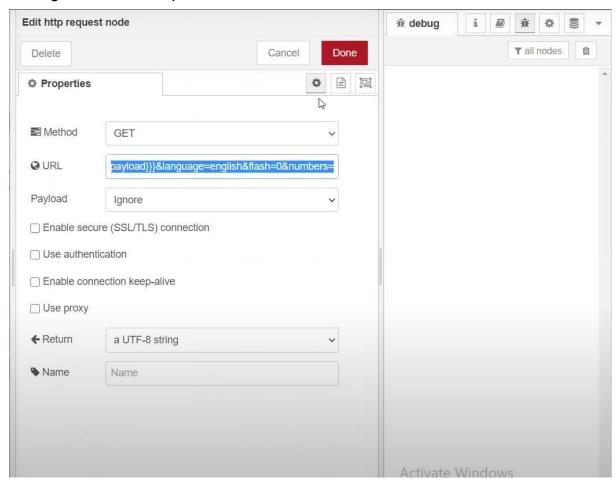
Added code to get child location in python

```
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()
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)
```

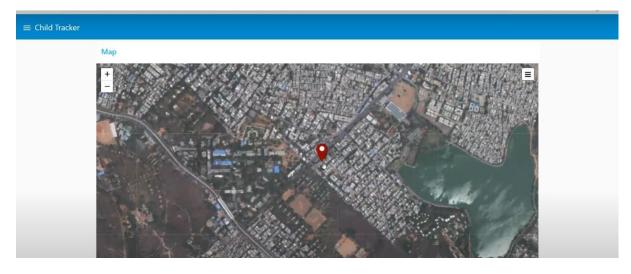
• Created the GeoFence



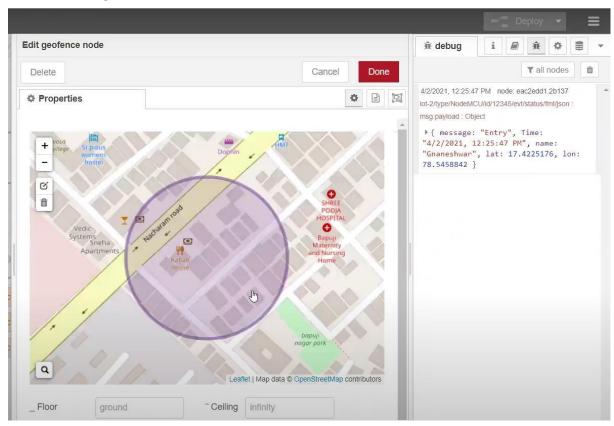
• Editing the HTTP Request URL



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:
Data published to IBM IoT platfrom:
   2 import wiotp.sdk.device
   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:
        },
"auth": {
"+ake
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       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:
                                                                                                       Data published to IBM IoT platfrom:
         name= "Smartbridge"
                                                                                                       Data published to IBM IoT platfrom:
  20
         #in area location
                                                                                                       Data published to IBM IoT platfrom:
  21
22
                                                                                                       Data published to IBM IoT platfrom:
         #Latitude= 17.4225176
                                                                                                       Data published to IBM IoT platfrom:
         #longitude= 78.5458842
  23
                                                                                                       Data published to IBM IoT platfrom:
  24
                                                                                                       Data published to IBM IoT platfrom:
         #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}
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:
                                                                                                       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