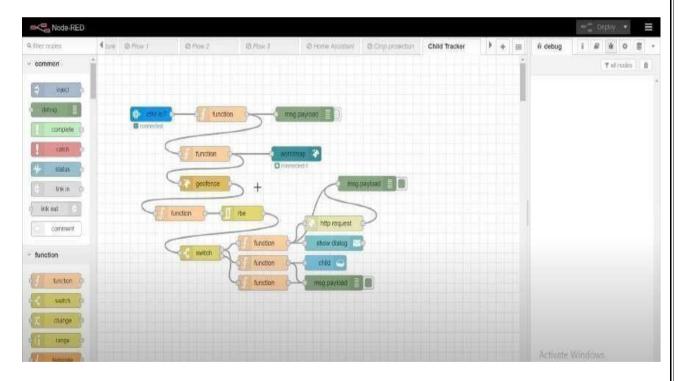
DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

Date	16 November 2022
Team ID	PNT2022TMID13985
Project Name	Industry-Specific Intelligent Fire Management System
Maximum Marks	8 Marks

1. To Develop the web application using Node-RED

Steps:

• Open a Node-RED project



• Add code to get child location in python

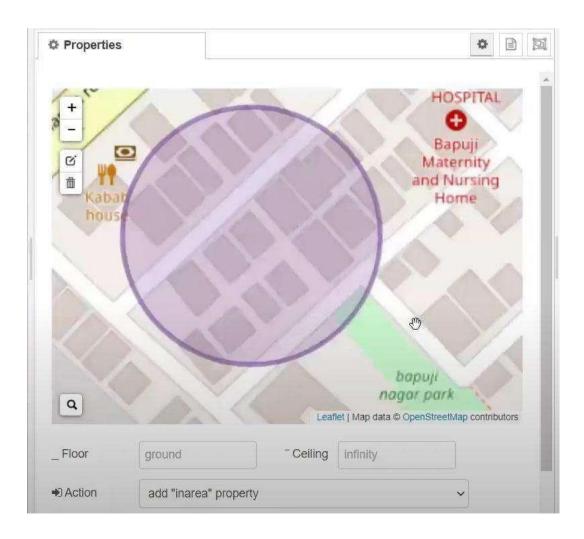
```
Node red app.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/Node red app.py (3.7.0)
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time

myConfig = {
    "identity":{
        "oxgId": "88653s",
        "typeid": "iot device",
        "deviceId": "wokwi_us"
    }
    "auth": {
        "token":")1(u!YYO)NmKrbsk(k"
    }
} client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
client.connect()

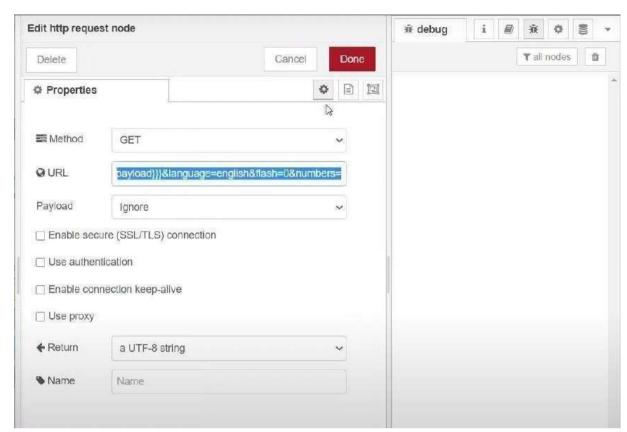
While True:
    name="Smartbridge"
    #in area location
    latitude 17.4225176
    longitude 78.5458842

#out area location
    #latitude 17.4225176
    longitude 78-5488783

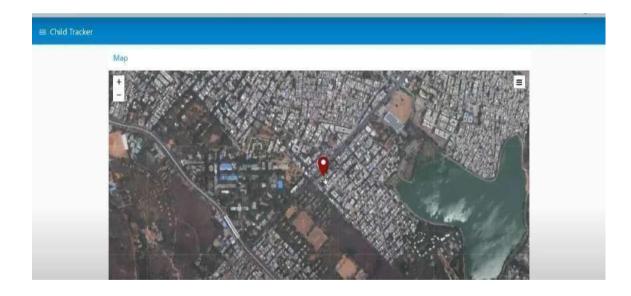
myData=('name': name, 'lat': latitude, 'len': longitude)
    client.publishFvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None)
    print("Data published to IBM IOT platfrom: ", myData)
    time.sleep (5)
    |client.disconnect()
```



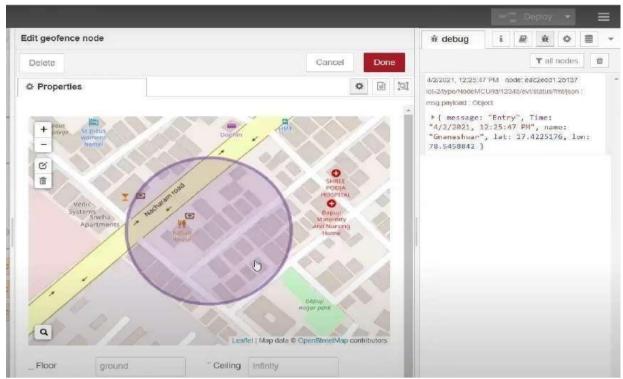
• Edit the HTTP Request URL



• Locate the child



• Create the geofence node



Python script send requests to IBM Cloud

```
IPython console
Node red app.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/Node red app.py (3.7.0)
File Edit Format Run Options Window Help
                                                                                                        Console 2/A 🔯
import json
                                                                                                       Data published to IBM IoT platfrom:
import wiotp.sdk.device
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
myConfig = {
     nfig = {
"identity":{
   "orgId": "88653s",
   "typeid": "iot_device",
   "deviceId": "wokwi_us"
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
          ...
token":")l(u!YYO)NmKr9sk(k"
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
                                                                                                        Data published to IBM IoT platfrom:
client.connect()
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
While True:
    name="Smartbridge"
                                                                                                        Data published to IBM IoT platfrom:
    #in area location
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
    latitude 17.4225176
longitude 78.5458842
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
    #out area location
#latitude= 17.4219272
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
    #longitude 78-5488783
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
    myData={'name': name, 'lat': latitude, 'len': longitude}
    client.publishEvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None} print("Data published to IBM IOT platfrom: ", myData)
                                                                                                        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:
    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:
```

• After running the script, the web UI shows "Personis not in the particular area".



Conclusion:

Development of the web application using Node-RED Successfully.