DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

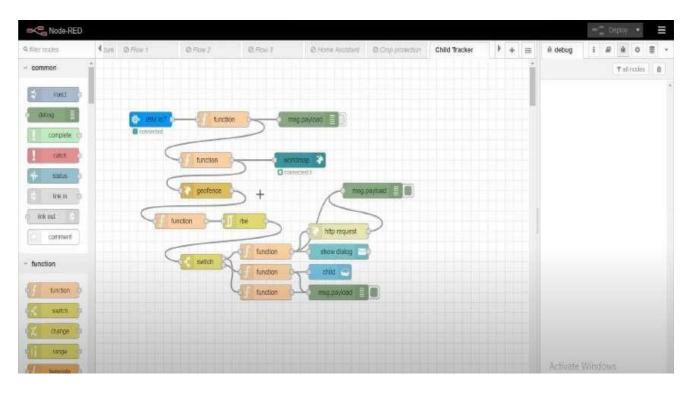
DEVELOP THE WEB APPLICATION USING NODE-RED SERVICE

Date	06 November 2022
Team ID	PNT2022TMID13566
Project Name	Industry-specific intelligent fire management system
Maximum Marks	8 Marks

1. To Develop the web application using Node-RED

Steps:

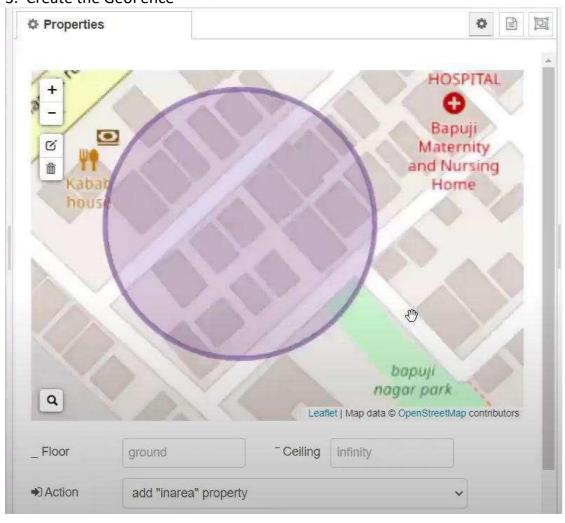
1. Open a Node-RED project



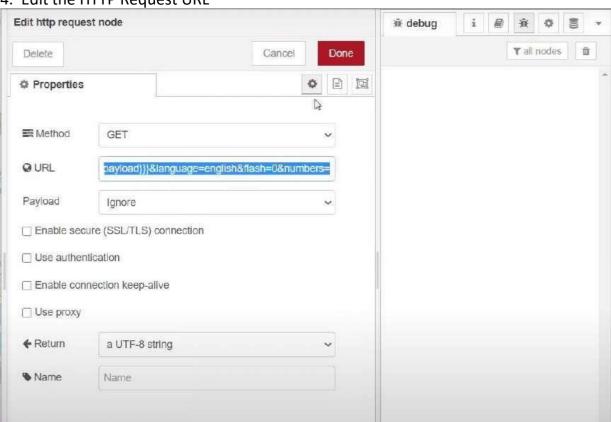
2. Add code to get child location in python

```
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)
client.disconnect()
```

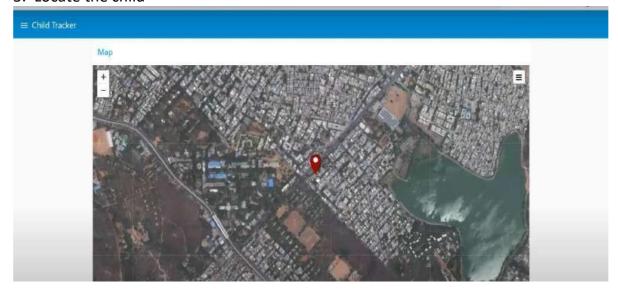
3. Create the GeoFence



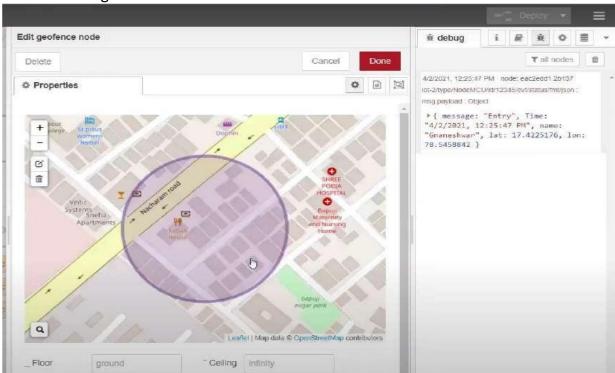
4. Edit the HTTP Request URL



5. Locate the child



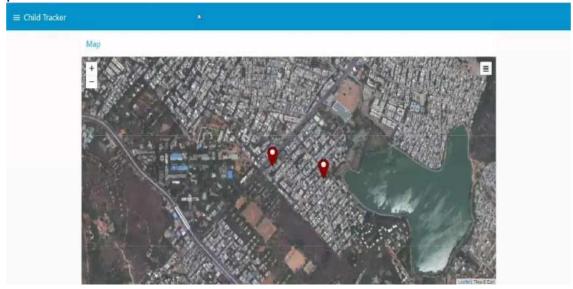
6. Create the geofence node



7. Python script send requests to IBM Cloud

```
# X IPython console
                                                                                                                                                             Carconsole 2/A 
Data published to IBM IoT platfrom:
1 import json
2 import wiotp.sdk.device
                                                                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
    3 import time
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
    5 myConfig = {
               nig = {
   "identity": {
        "orgId": "hj5fmy",
        "typeId": "NodeMCU",
        "deviceId": "12345"
                                                                                                                                                                   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:
                auth": {
    "token": "12345678"
  11
  12
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
  16 client.connect()
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  18 while True:
19 name= "Smartbridge"
20 #(n area Location
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  21
22
23
24
25
26
27
              #Latitude= 17.4225176
#Langitude= 78.5458842
                                                                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                                                                    Data published to IBM IoT platfrom:
              Hout area Location
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
              latitude= 17.4219272
             longitude= 78.5488783
myData={'name': name, 'lat':latitude, 'lon':longitude}
client.publishEvent(eventId="status", msgFormat="json'
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                                                                                   Data published to IBM IoT platfrom:
  28
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                               , data=myData, qos=0, onPub
              print("Data p
time.sleep(5)
                                                                                                                                                                   Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                                                                                   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:
```

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



Conclusion:

Developed the web application using Node-RED Successfully