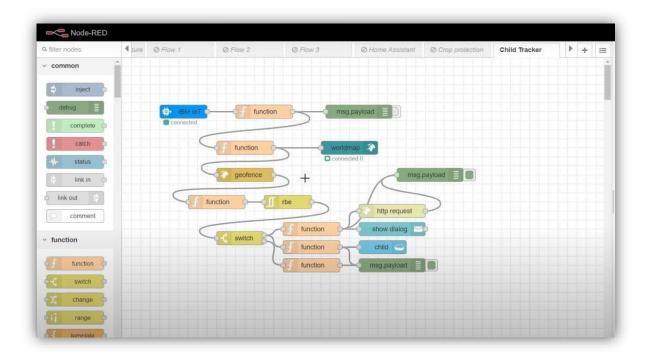
Develop The Web Application Using Node-RED

Date	17/11/2022
Team ID	PNT2022TMID48980
Project Name	Project-IoT Based Safety Gadget For
	Child
	Safety Monitoring & Notification
MaximumMarks	2 Marks

Aim:

To Develop the web application using Node-RED platform

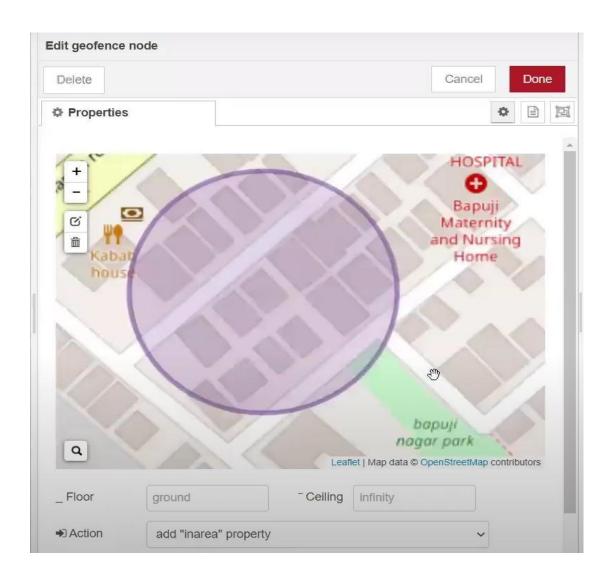


Steps to be Followed:

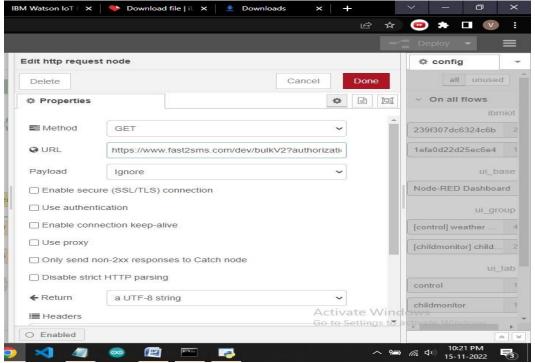
- Open a Node-RED project
- Add source code to get child location in python

```
script.py - C:\Users\McVin\script.py (3.7.9)
File Edit Format Run Options Window Help
 import json
import time
 import wiotp.sdk.device
myconfig = {
    "identity": {
    "orgId": "af19wm",
    "typeId": "12345678",
    "deviceId": "12345678"
 },
"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 platform :",myData)
 time.sleep(3)
 client.disconnect()
Type here to search
                                                                O # 🔚 📅 🚺 🥥 💆 🗸 🔞 🖼 🖺
```

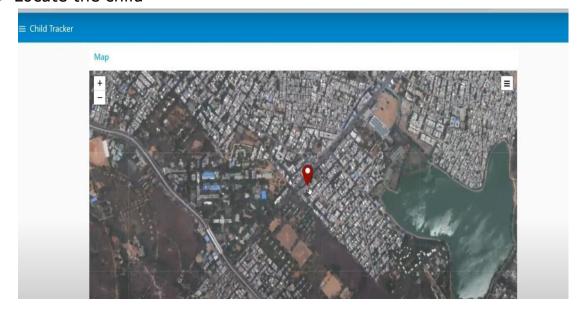
Created the GeoFence



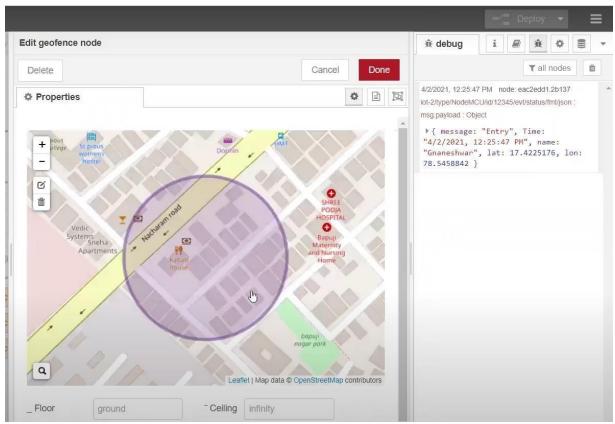
• Edit the HTTP Request URL



• Locate the child



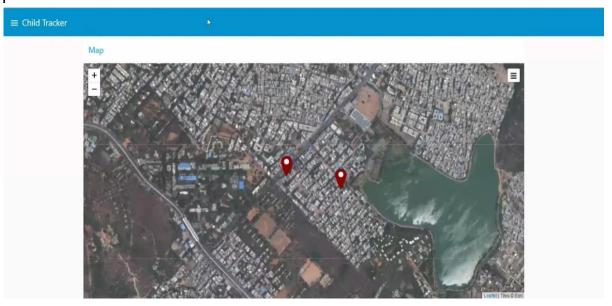
Create the geofence node



Python script sending requests to IBM Cloud

```
# x Python console
Child.py 🖸
                                                                                                                                    Console 2/A [3]
                                                                                                                                         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:
Data published to IBM IoT platfrom:
    5 myConfig = {
           "identity": {
"orgId": "af19wm",
"typeId": "12345678",
                                                                                                                                         Data published to IBM IoT platfrom:
                                                                                                                                         Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
            "deviceId": "12345678"
                                                                                                                                         Data published to IBM IoT platfrom:
                                                                                                                                         Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
           "token": "12345678"
                                                                                                                                         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)
                                                                                                                                         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:
Data published to IBM IoT platfrom:
            #in area Locatio
                                                                                                                                         Data published to IBM IoT platfrom:
            #latitude= 17.4225176
                                                                                                                                         Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
            #longitude= 78.5458842
                                                                                                                                         Data published to IBM IoT platfrom:
            #out area Location
                                                                                                                                         Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
            latitude= 17.4219272
           latitude= 17.4219272
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: ",myOata)
                                                                                                                                         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:
                                                                                                                                         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:

Thus to develop a web application using Node-RED to find the location of the child has been created successfully.