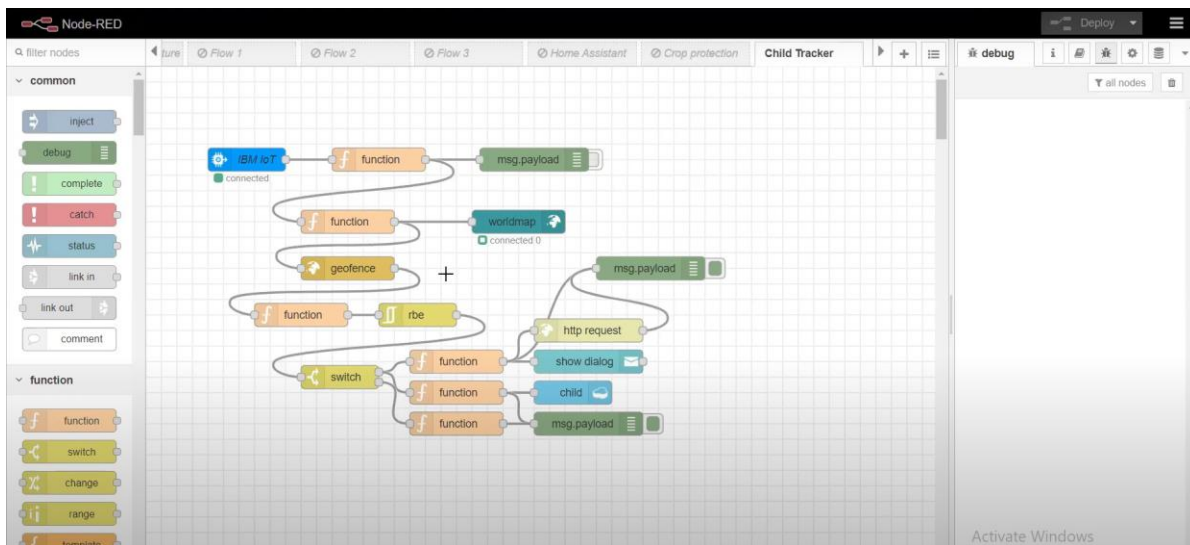


Develop The Web Application Using Node-RED

Develop The Web Application Using Node-RED	14 November 2022
Project name	IoT Based Safety Gadget for Child Safety Monitoring and Notification
Team Id	PNT2022TMID33419

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 platform: ",myData)
    time.sleep(5)

client.disconnect()
```

- Created the Geo Fence

Edit geofence node

Delete

Cancel

Done

⚙ Properties



_ Floor

ground

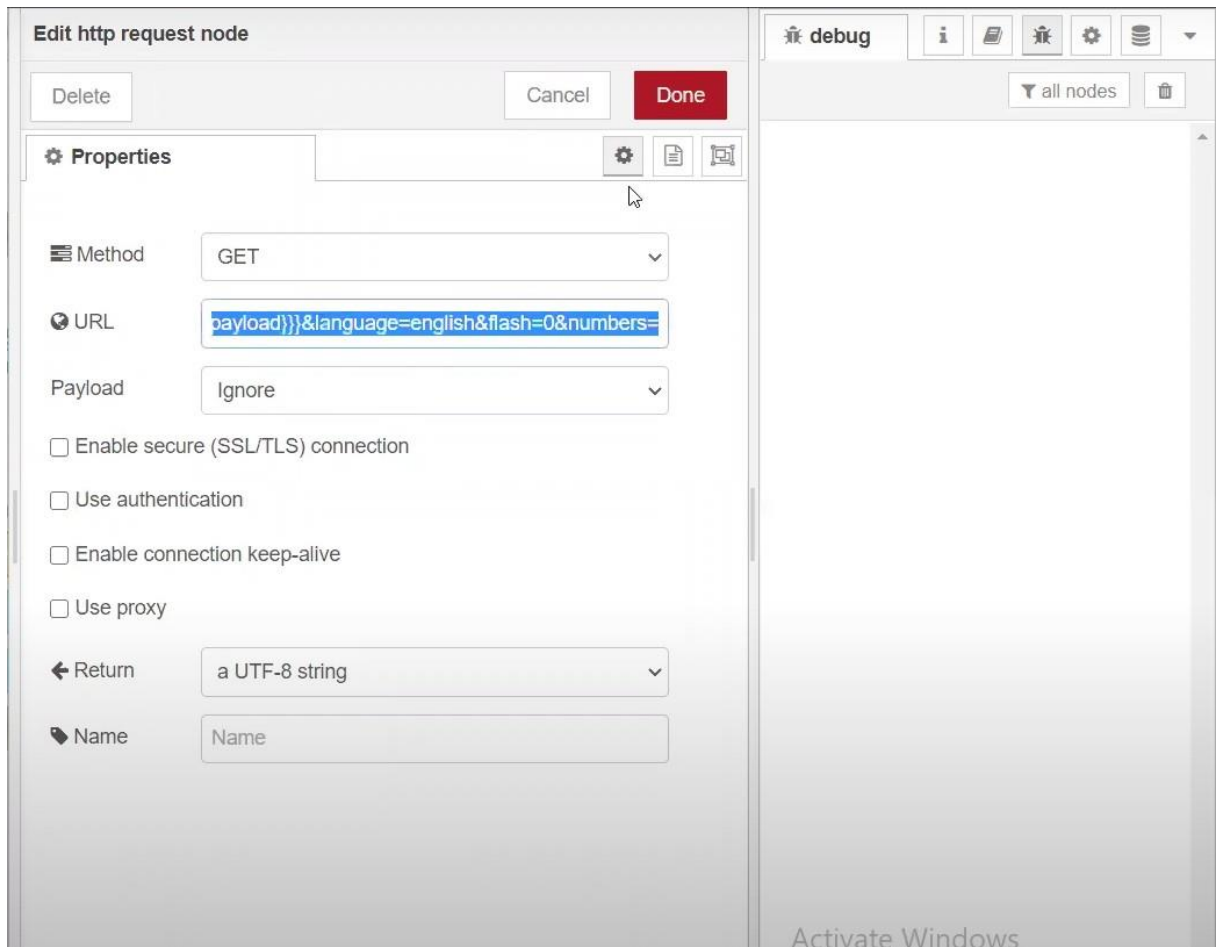
~ Ceiling

infinity

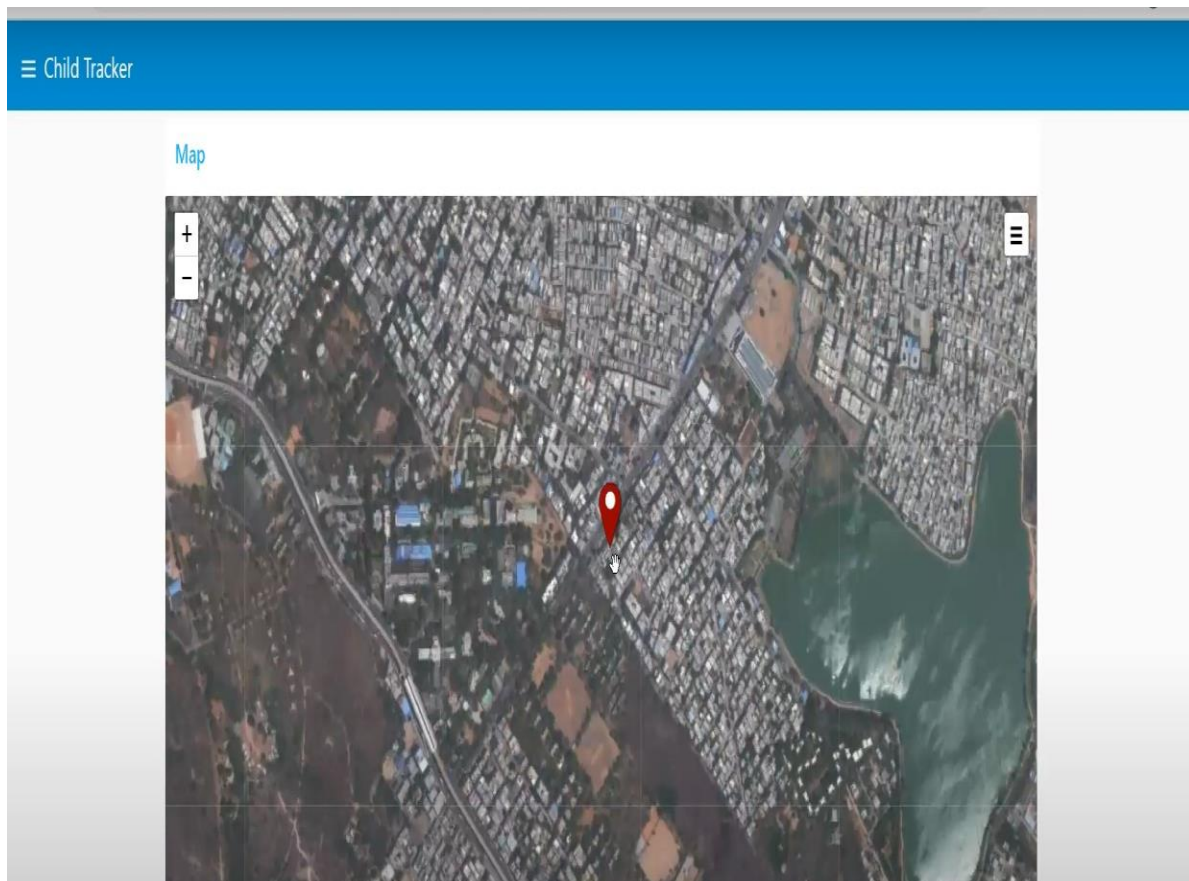
➡ Action

add "inarea" property

- Editing the HTTP Request URL



- Located the child



- ### Edit geofence node

Delete Cancel Done

⚙️ Properties

Leaflet | Map data © OpenStreetMap contributors

_ Floor
ground
- Ceiling
infinity

🔍 debug
ℹ️
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⚙️
🗺️
▼

🔼 all nodes
🗑️

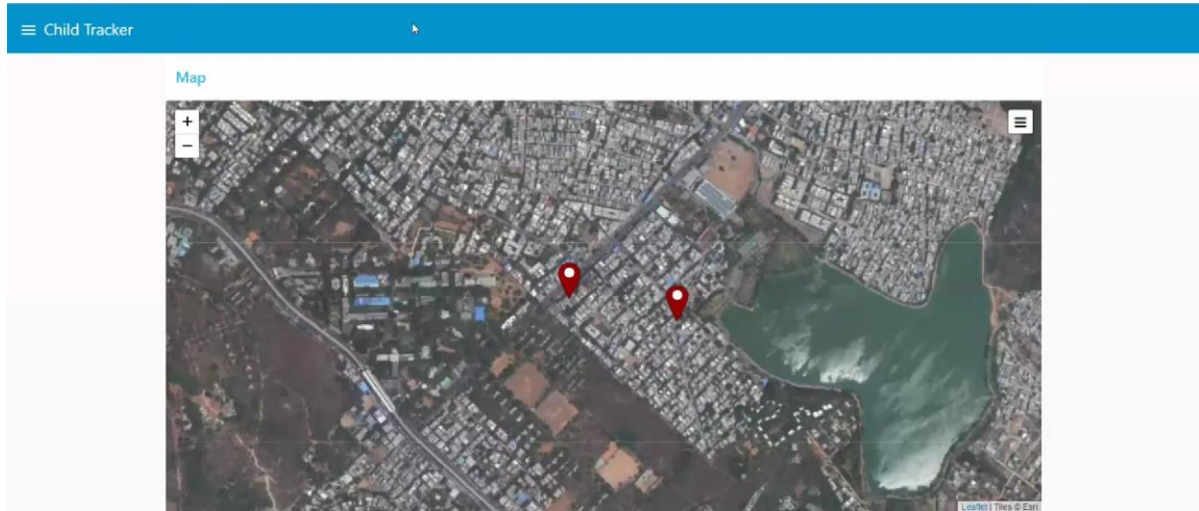
```

4/2/2021, 12:25:47 PM   node: eac2edd1.2b137
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json :
msg.payload : Object

▶ { message: "Entry", Time:
  "4/2/2021, 12:25:47 PM", name:
    "Gnaneshwar", lat: 17.4225176, lon:
      78.5458842 }
          
```

- ```
Editor - C:\Users\HP\Desktop\child.py Python console
child.py
1 import json
2 import wiotp.sdk.device
3 import time
4
5 myConfig = {
6 "identity": {
7 "orgId": "hj5fmy",
8 "typeId": "NodeMCU",
9 "deviceId": "12345"
10 },
11 "auth": {
12 "token": "12345678"
13 }
14 }
15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
16 client.connect()
17
18 while True:
19 name= "Smartbridge"
20 #in area location
21
22 #latitude= 17.4225176
23 #longitude= 78.5458842
24 #out area location
25
26
27 latitude= 17.4219272
28 longitude= 78.5488783
29 myData={'name': name, 'lat':latitude,'lon':longitude}
30 client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
31 print("Data published to IBM IoT platform: ",myData)
32 time.sleep(5)
33
34 client.disconnect()
35
36
```

- After running the script, the web UI shows “Person is not in the particular area”



Result: Successfully developed the web application using Node-RED