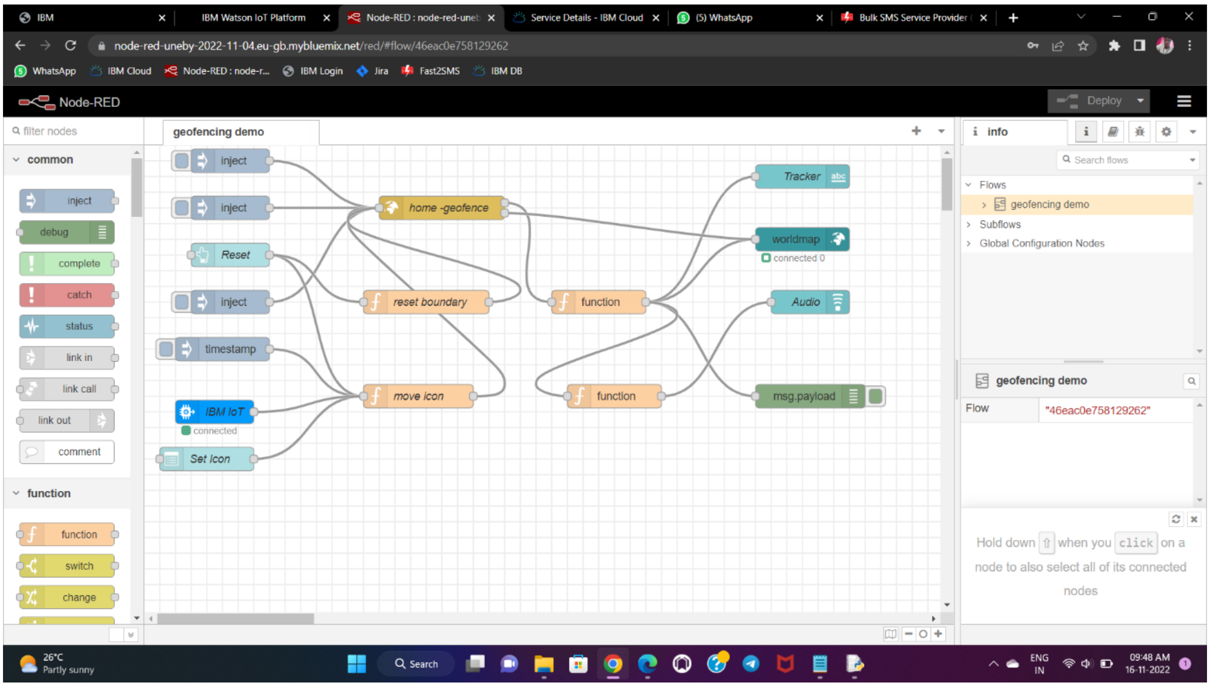
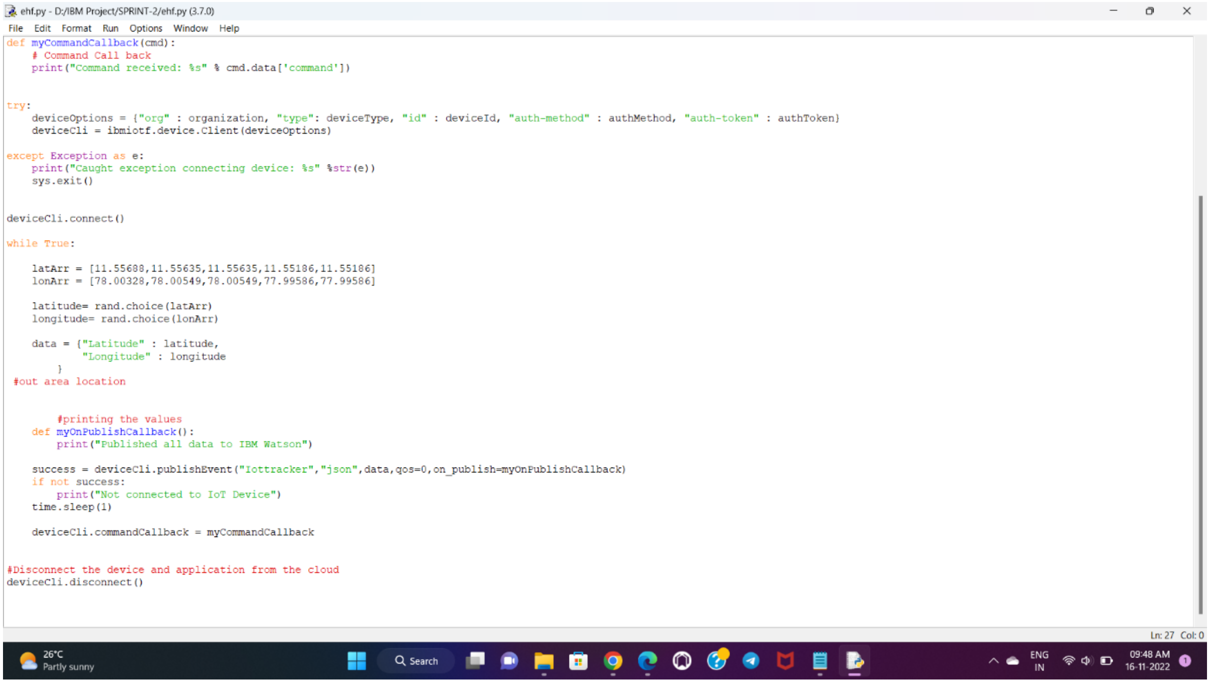
Develop A WebApplication Using Node-RED

StepsFollowed:

- OpenedaNode-REDproject



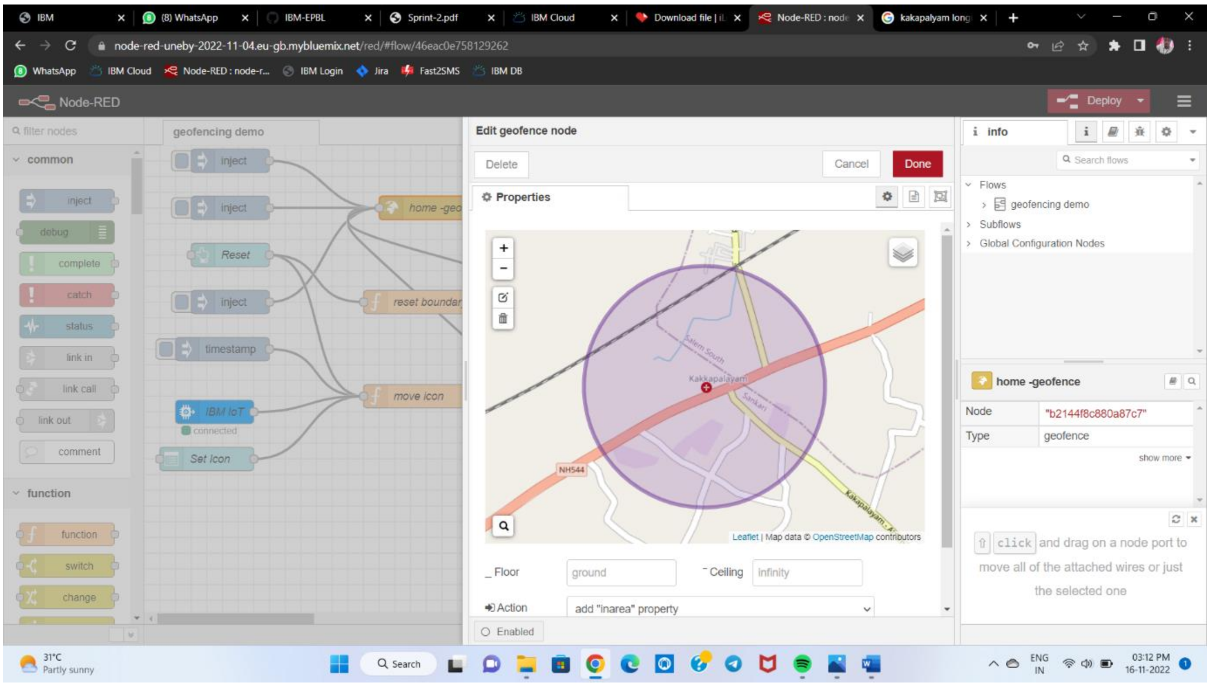
- Added code to get child location in python



ehf.py - D:/IBM Project/SPRINT-2/ehf.py (3.7.0)

```python
def myCommandCallback(cmd):
    # Command Call back
    print("Command received: %s" % cmd.data['command'])


try:
    deviceOptions = {"org" : organization, "type": deviceType, "id" : deviceId, "auth-method" : authMethod, "auth-token" : authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)

except Exception as e:
    print("Caught exception connecting device: %s" %str(e))
    sys.exit()


deviceCli.connect()

while True:

    latArr = [11.55688,11.55635,11.55635,11.55186,11.55186]
    lonArr = [78.00328,78.00549,78.00549,77.99586,77.99586]

    latitude= rand.choice(latArr)
    longitude= rand.choice(lonArr)

    data = {"Latitude" : latitude,
            "Longitude" : longitude
        }
 #out area location


        #printing the values
    def myOnPublishCallback():
        print("Published all data to IBM Watson")

    success = deviceCli.publishEvent("Iottracker","json",data,qos=0,on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT Device")
    time.sleep(1)

    deviceCli.commandCallback = myCommandCallback


#Disconnect the device and application from the cloud
deviceCli.disconnect()
```

- Created the GeoFence



Edit geofence node

Delete Cancel Done

Properties

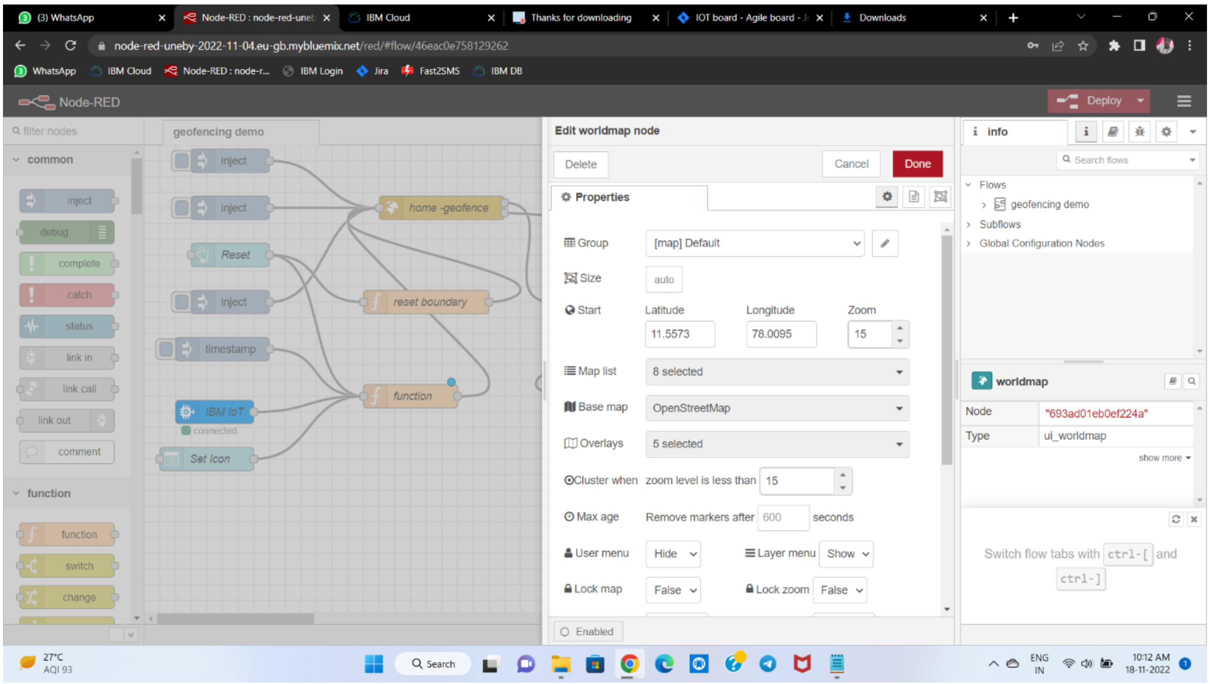
Floor: ground
Ceiling: infinity
Action: add "inarea" property

○ Enabled

home -geofence

Node	"b2144f8c880a87c7"
Type	geofence

- Created a World Map



Edit worldmap node

Delete Cancel Done

Properties

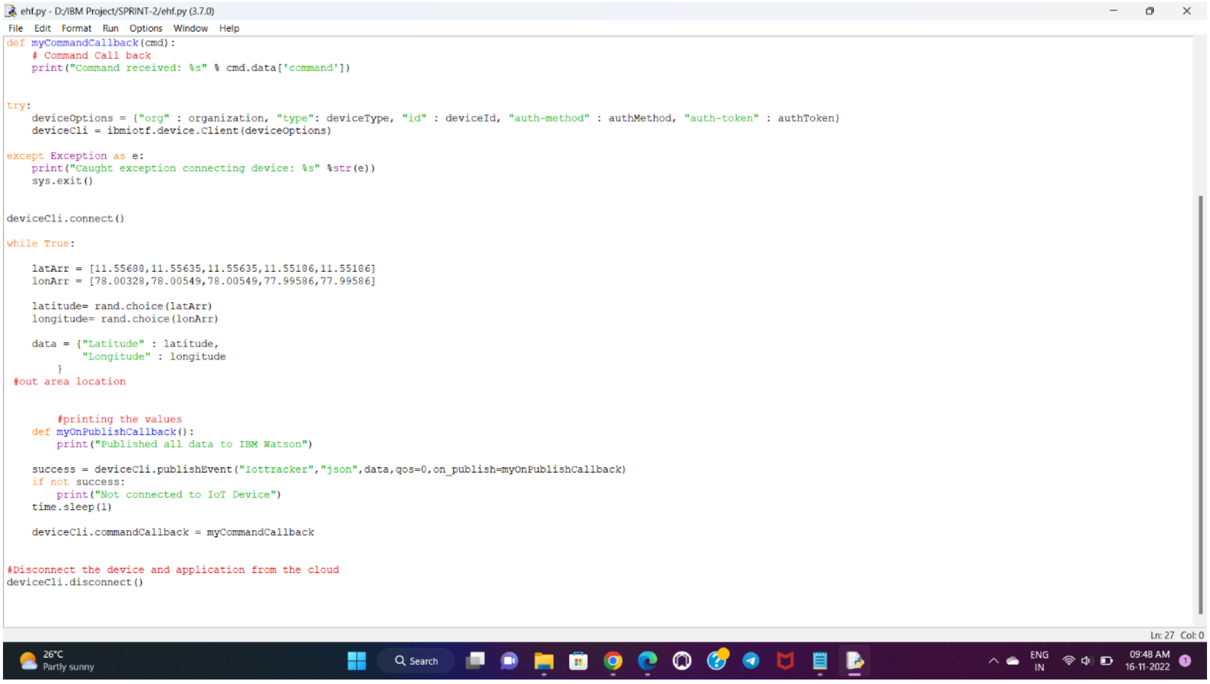
Group: [map] Default
Size: auto
Start: Latitude 11.5573, Longitude 78.0095, Zoom 15
Map list: 8 selected
Base map: OpenStreetMap
Overlays: 5 selected
Cluster when zoom level is less than 15
Max age: Remove markers after 600 seconds
User menu: Hide
Layer menu: Show
Lock map: False
Lock zoom: False

○ Enabled

worldmap

Node	"693ad01eb0ef224a"
Type	ui_worldmap

- Python script sending requests to IBMCloud


ehf.py - D:/IBM Project/SPRINT-2/ehf.py (3.7.0)
File Edit Format Run Options Window Help
Ln: 27 Col: 0
26°C
Partly sunny
Search
ENG
IN
09:48 AM
16-11-2022

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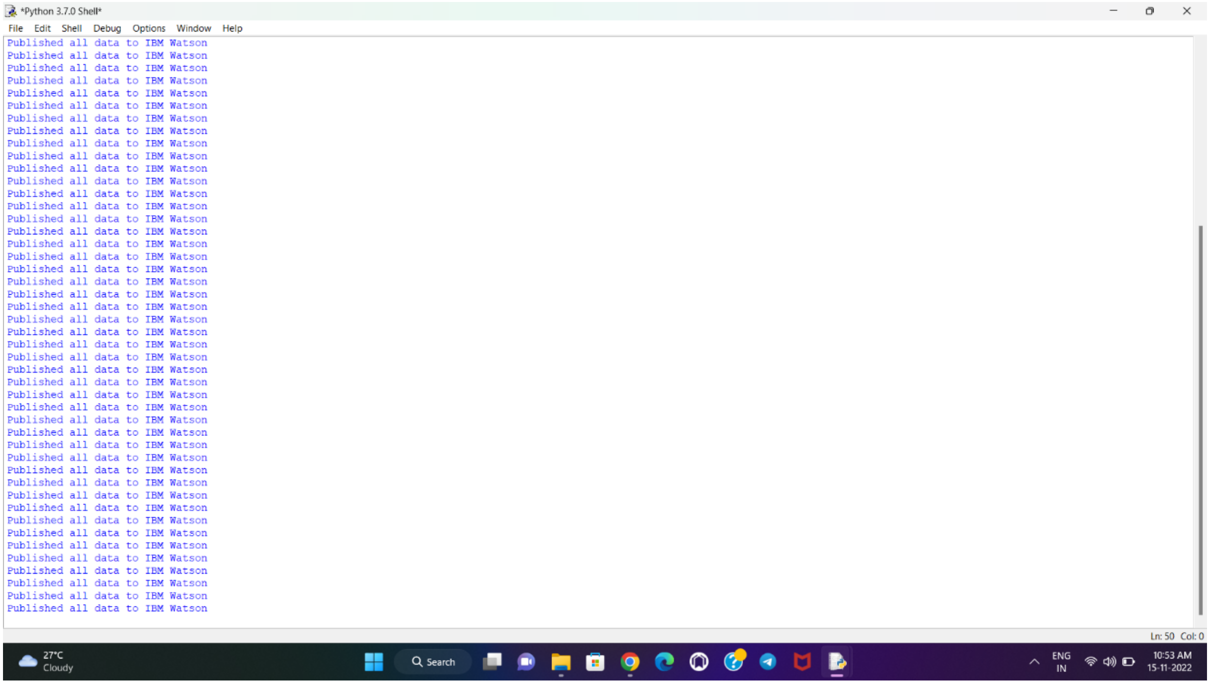

```
Published all data to IBM Watson
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```
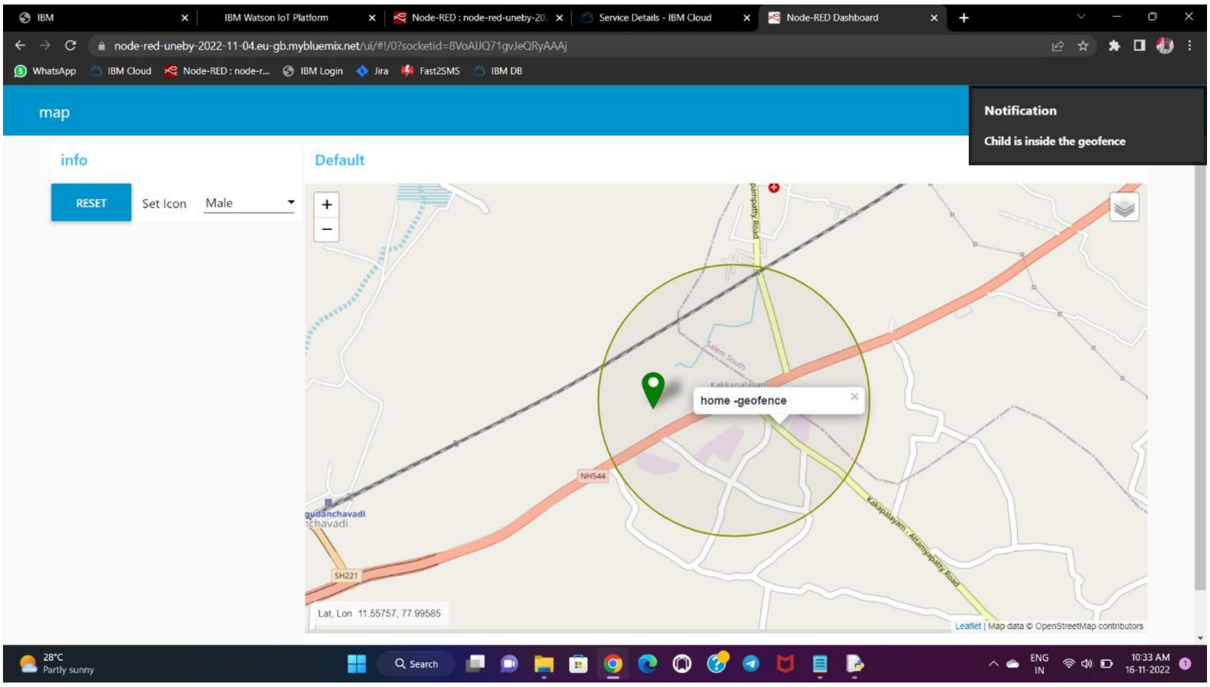

- After running the script,the webUI shows Child is safe or not in the particular area”

Child is Inside the Geofence



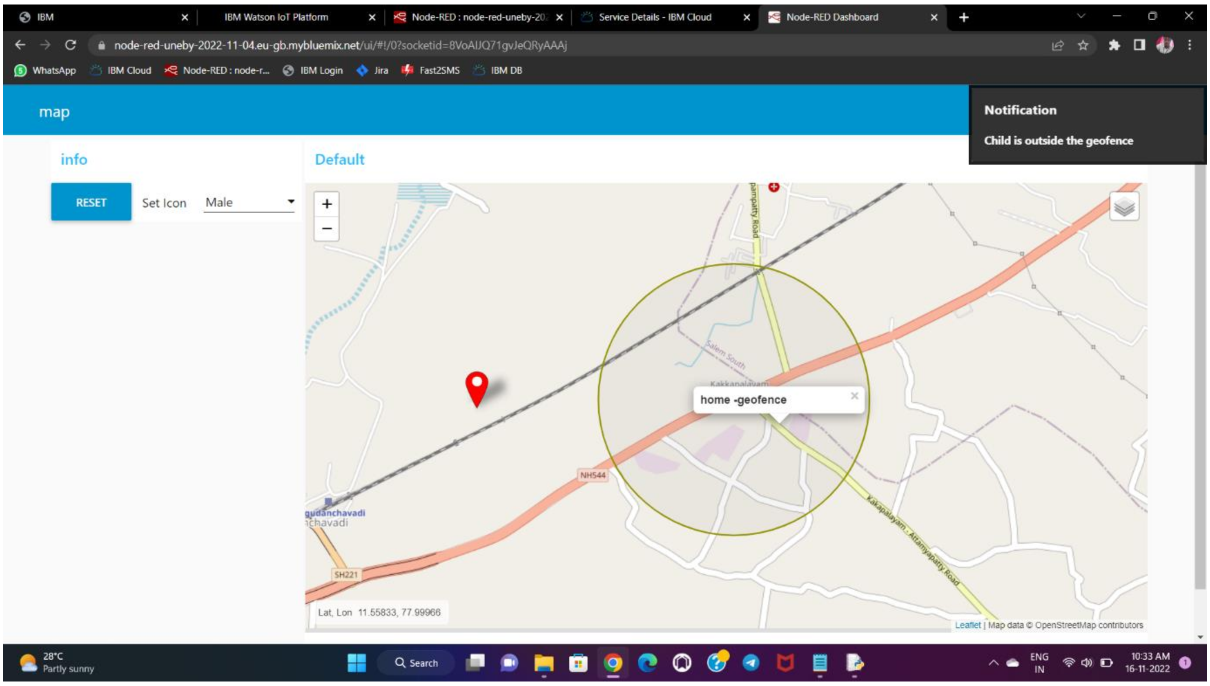
Notification

Child is inside the geofence

Set Icon: Male

Lat, Lon 11.55757, 77.99585

Child is Outside the Geofence



Notification

Child is outside the geofence

Set Icon: Male

Lat, Lon 11.55833, 77.99966