Develop The Web Application Using Node-RED

Date	15 November 2022
Team ID	PNT2022TMID19355
Project Name	Project-IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

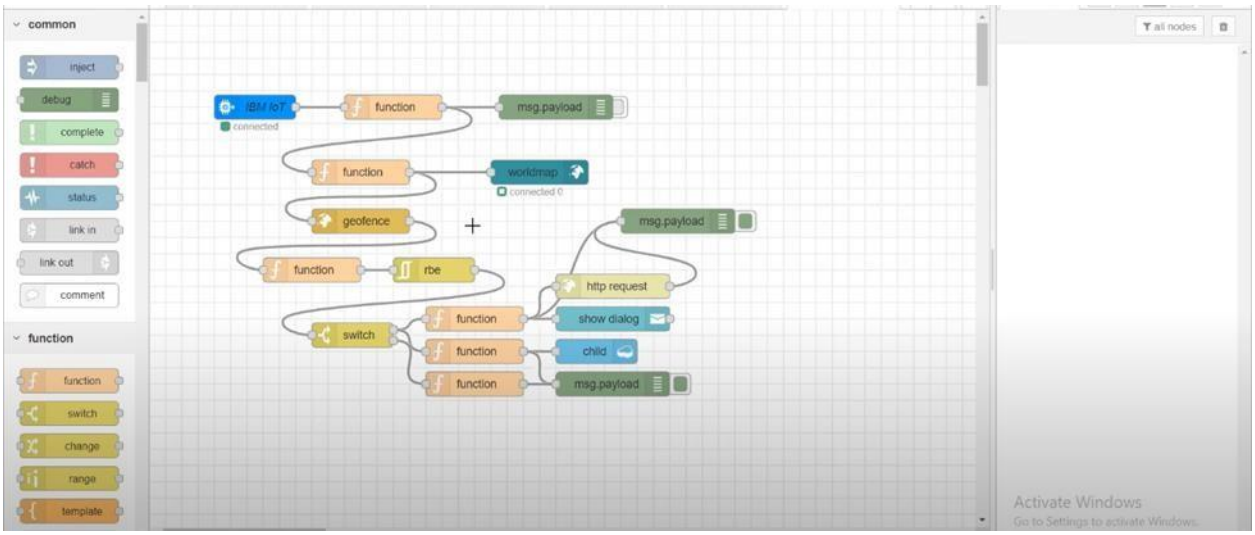
Develop the web application using Node-RED
The web application should have the following features:

- Connect to the IBM IoT platform and get the location data
- Display the location on a Google map
- Check whether the child is inside the geofence or not
- Send the notification if the child goes out of the geofence
- Store all the location data in the cloudant DB

Connect to IBM IoT platform and get the location, store the data in cloudant DB.
Integrate the geofence to check if the child is inside or outside the geofence and display the location in Google Maps.

Send the notification if the child is out of geofence.

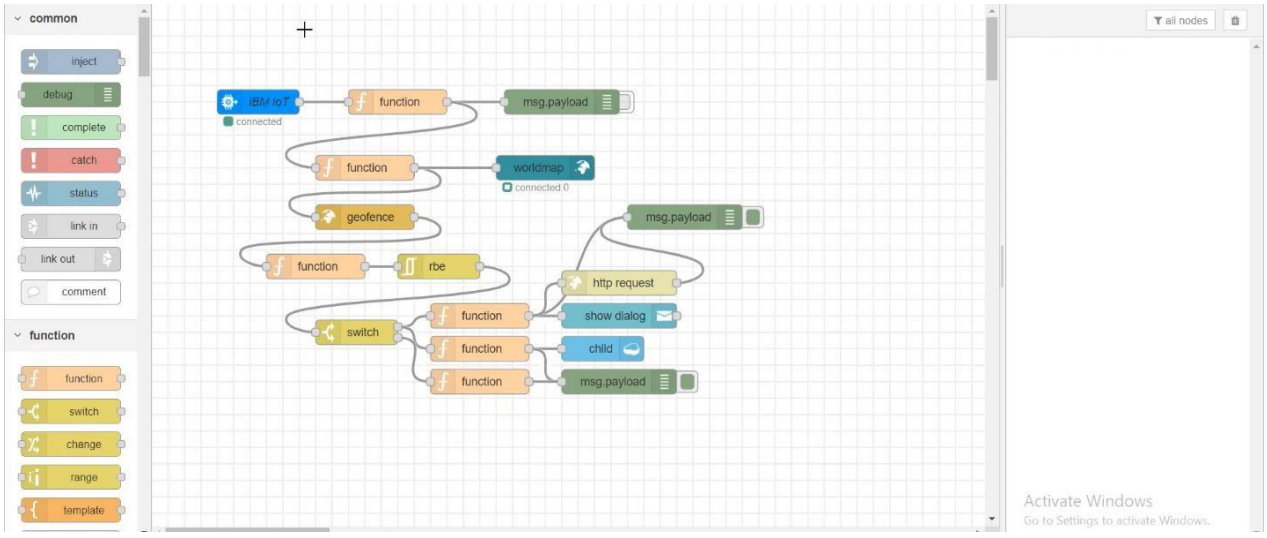
Step 1: Connect the blocks



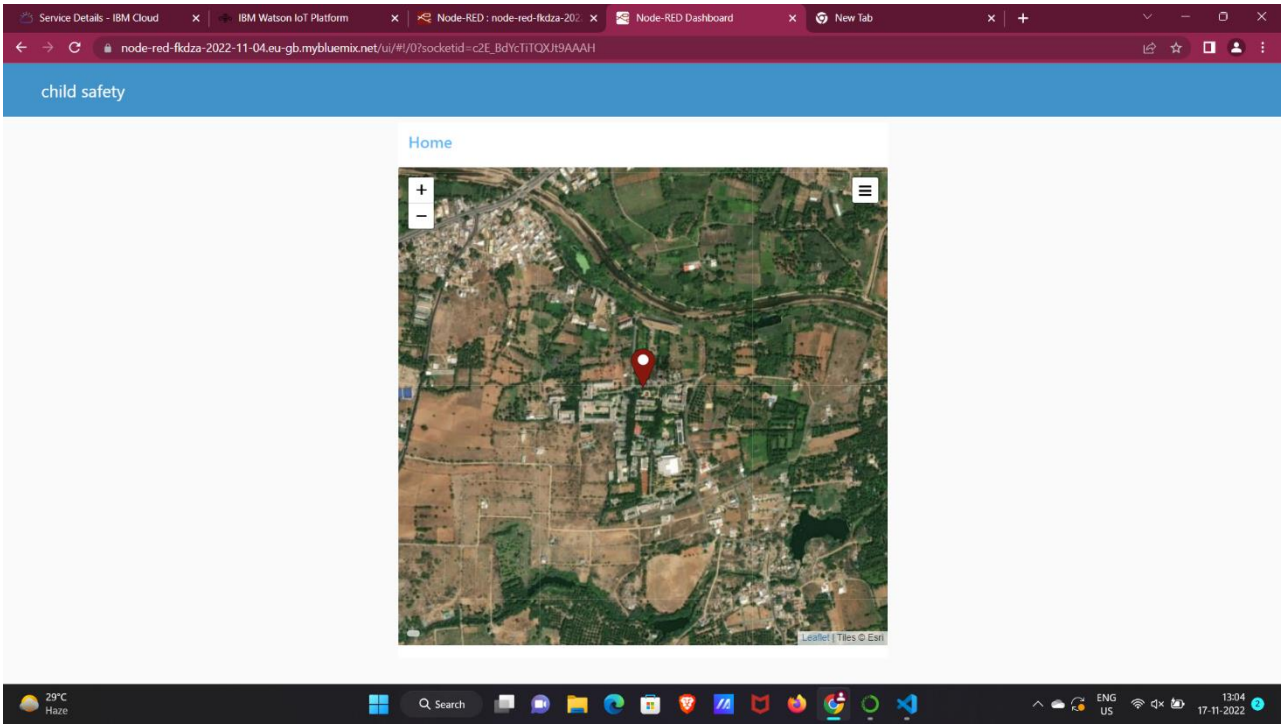
Step 2:Create python code

```
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= 78.5498783
        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()
```

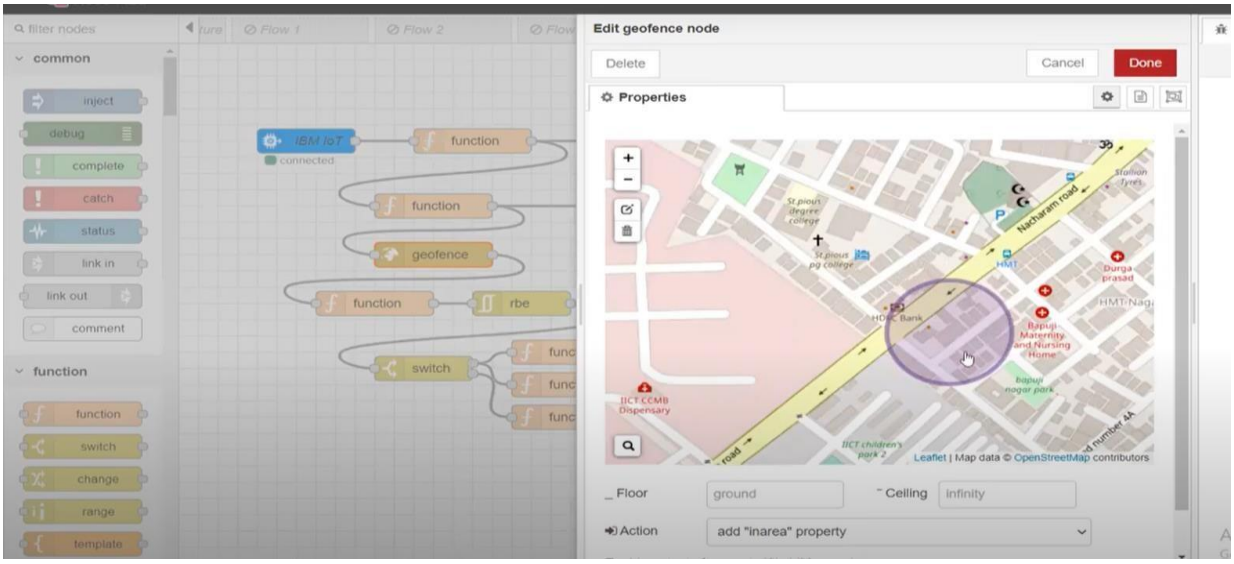

Step 3 : click the geofence no



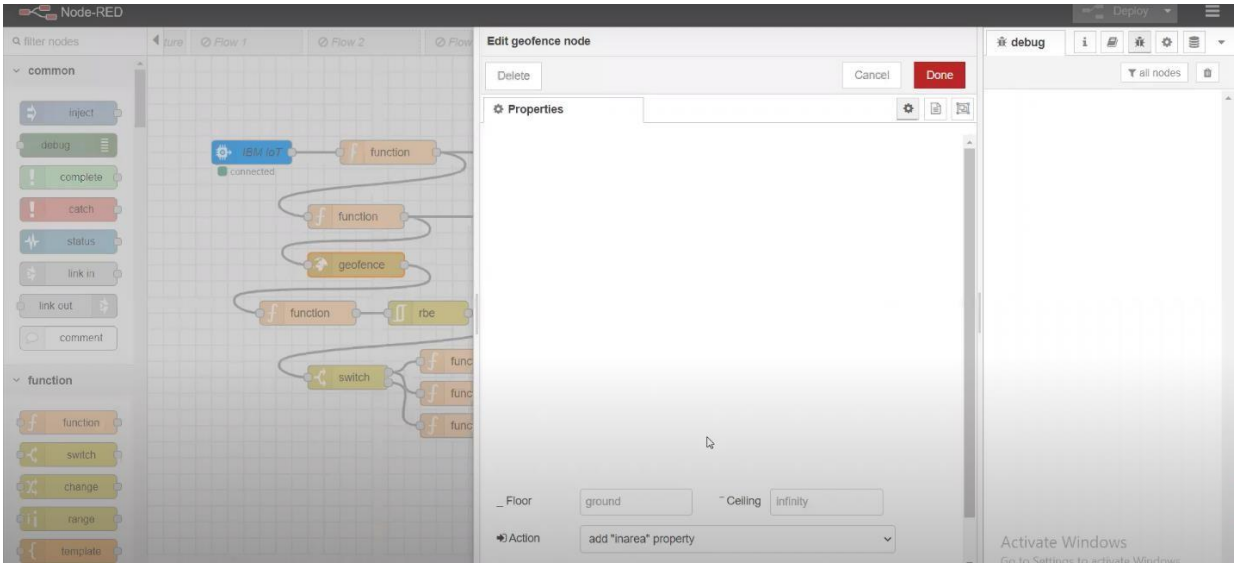
Step 4:Create the geofence area in the map



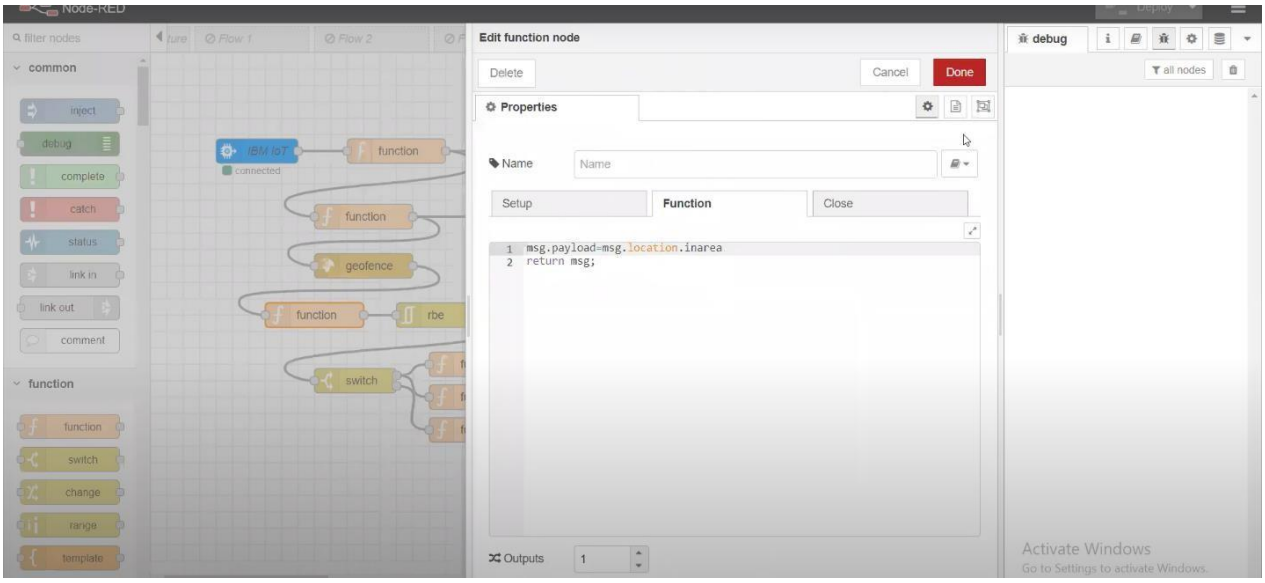
Step 5:Create geofence in a particular area



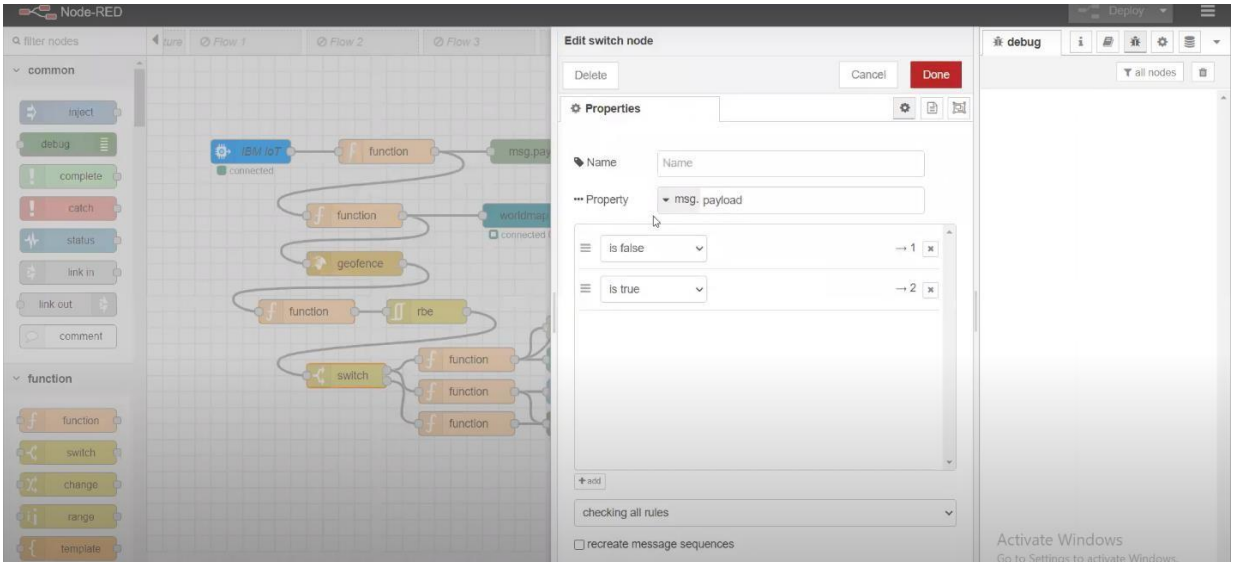
Step 6: Select the function block



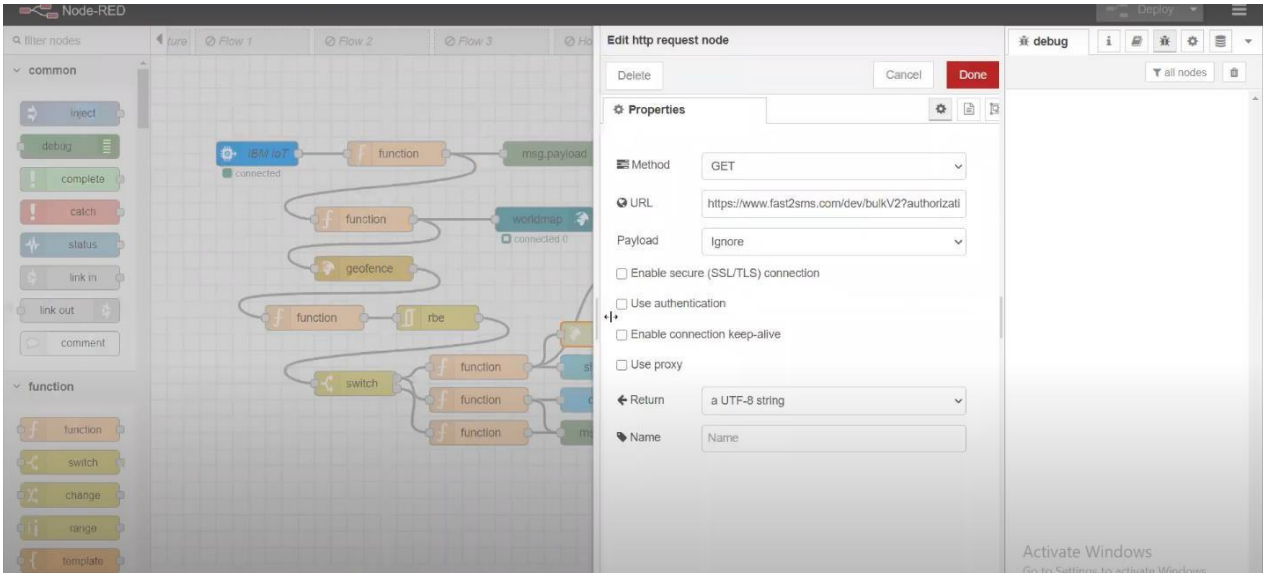
Step 7:Select the msg payload



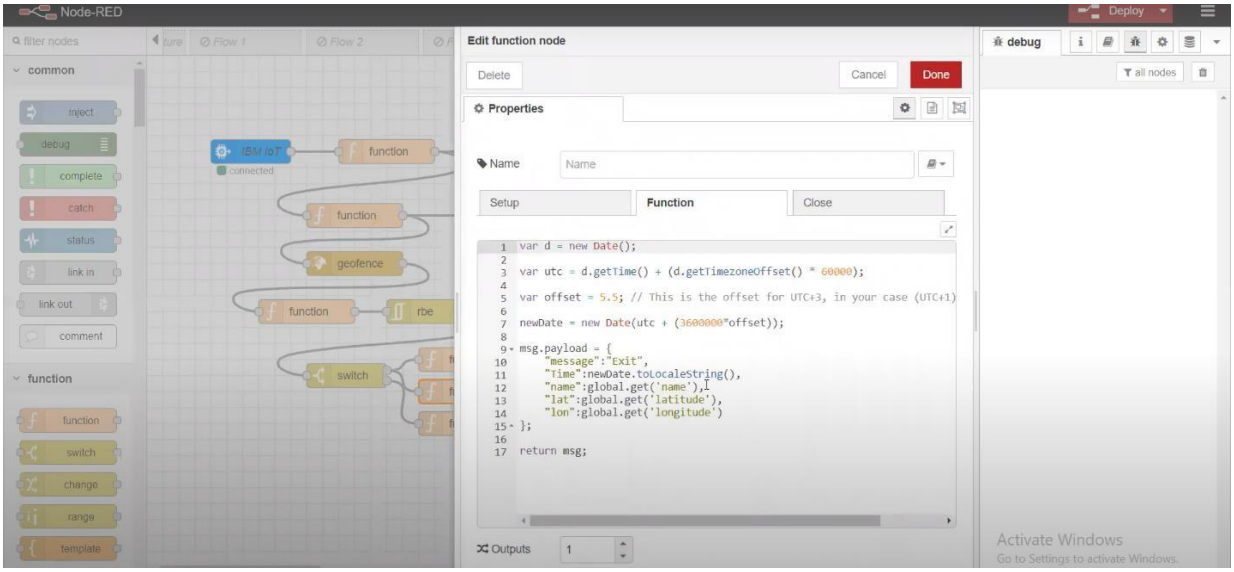
Step 8: To identify the person in area



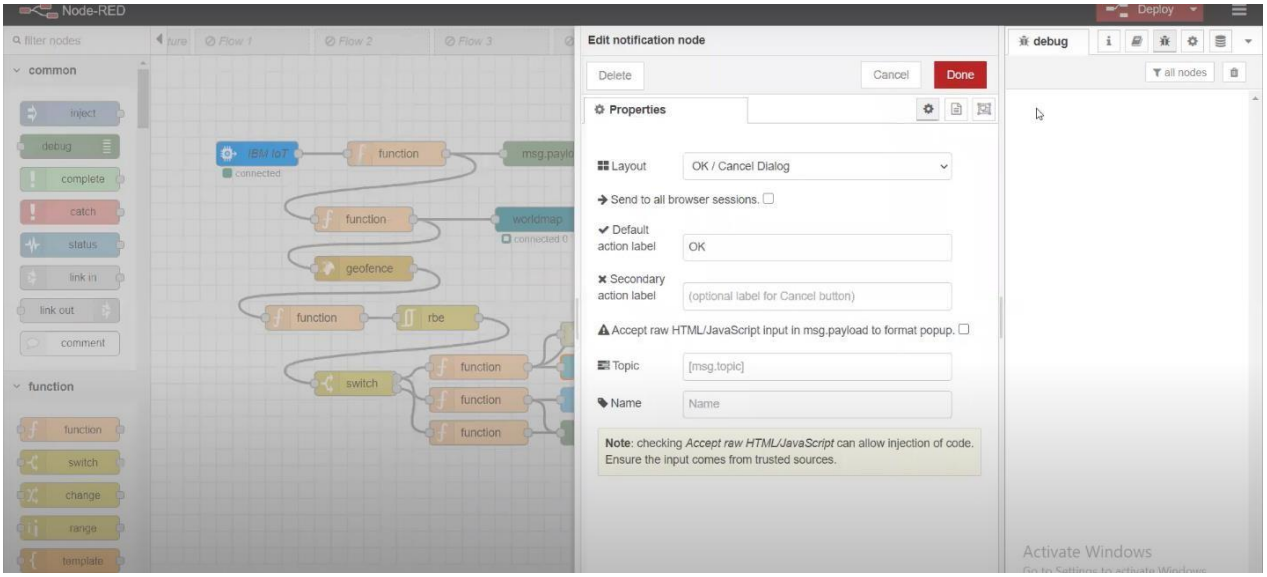
Step 9:Select the http request to send msg to parent or gaurdian



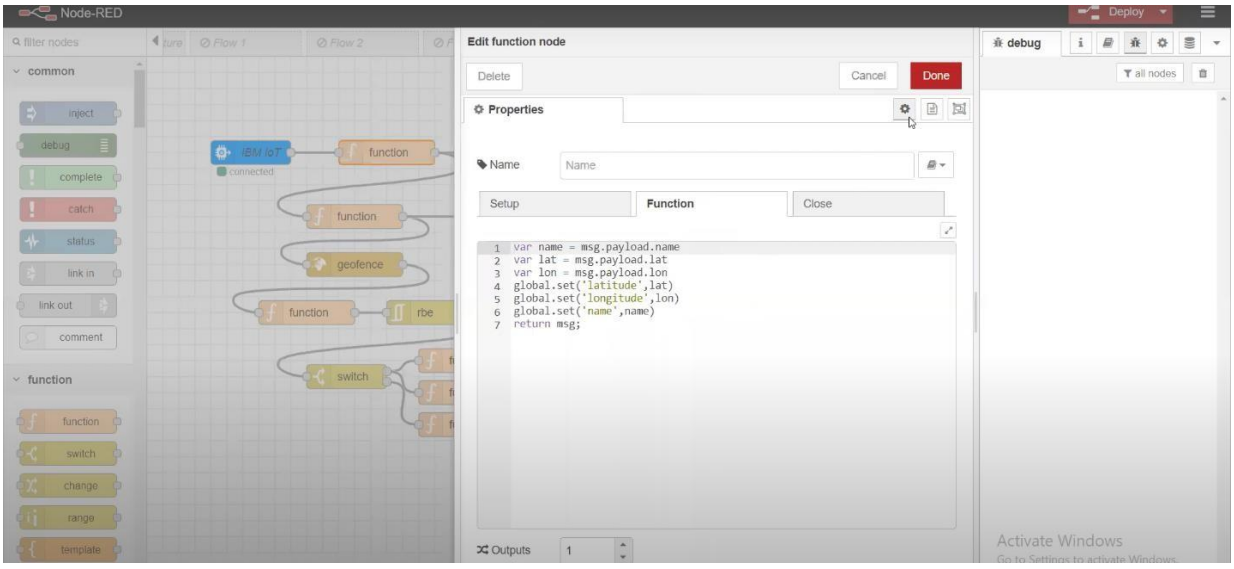
Step 10:For sending the msg with time



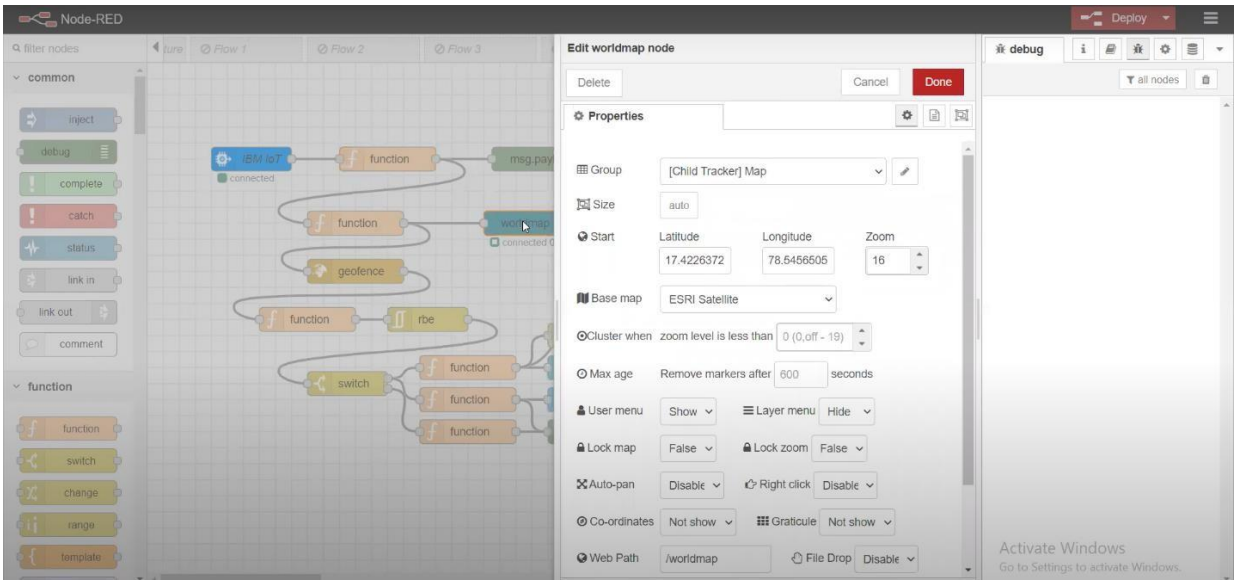
Step 10: Click show dialog for notifying the popup alert



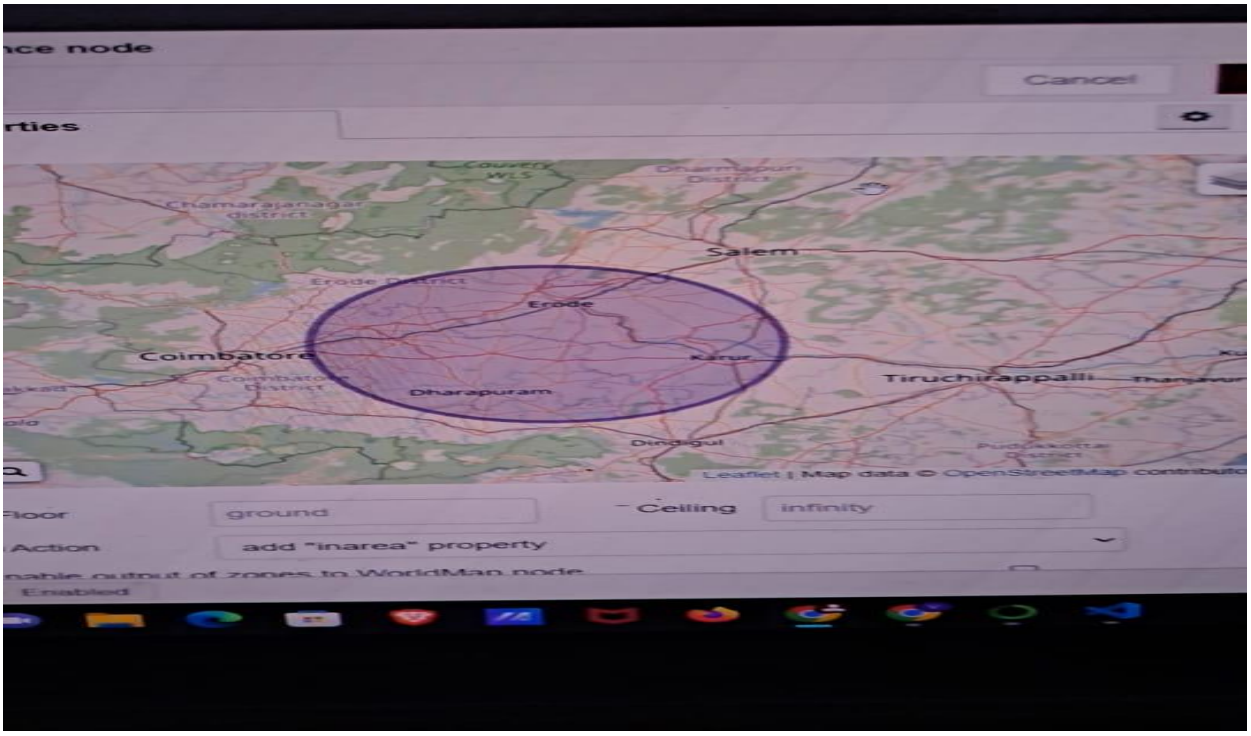
Step 11: Create another payload and to pass the data to geofence and worldmap



Step 12:Click the worldmap to see the location



Step 13 :Final output of the node web application



Result: Successfully developed a web application using Node-RED