

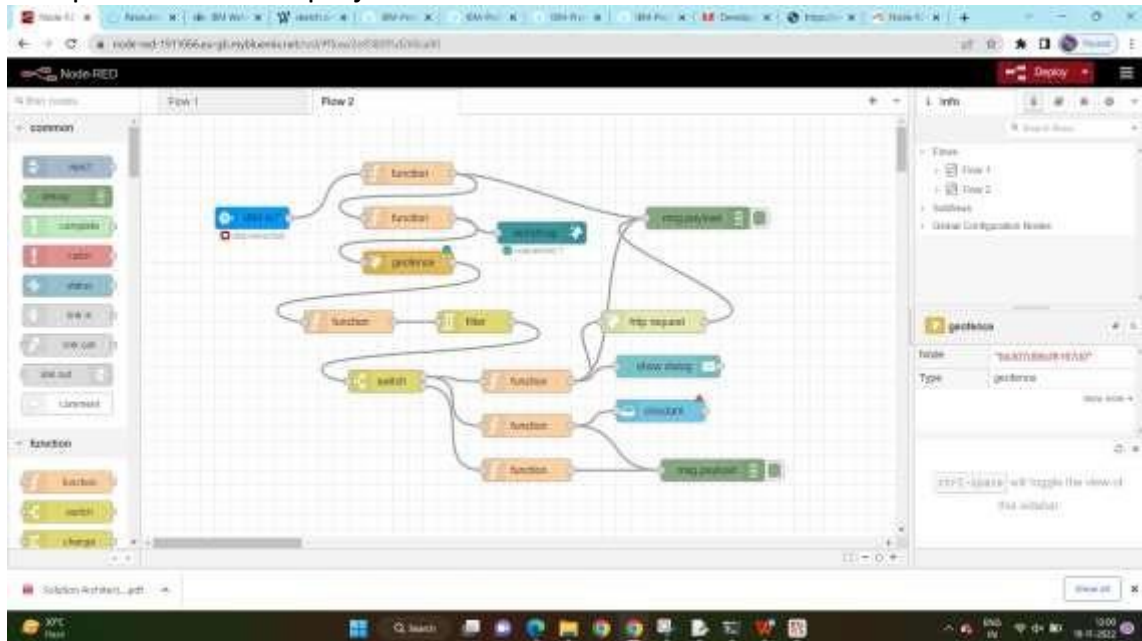
Develop The Web Application Using Node-RED

PNT2022TMID20307

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 json
import wiotp.sdk.device
import time

myConfig = {
    "identity": {
        "orgId": "yw4h61",
        "typeId": "IOT_CHILD",
        "deviceId": "16022002"
    },
    "auth": {
        "token": "1911066abedcfeqh"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name= "Child"
    #in area location

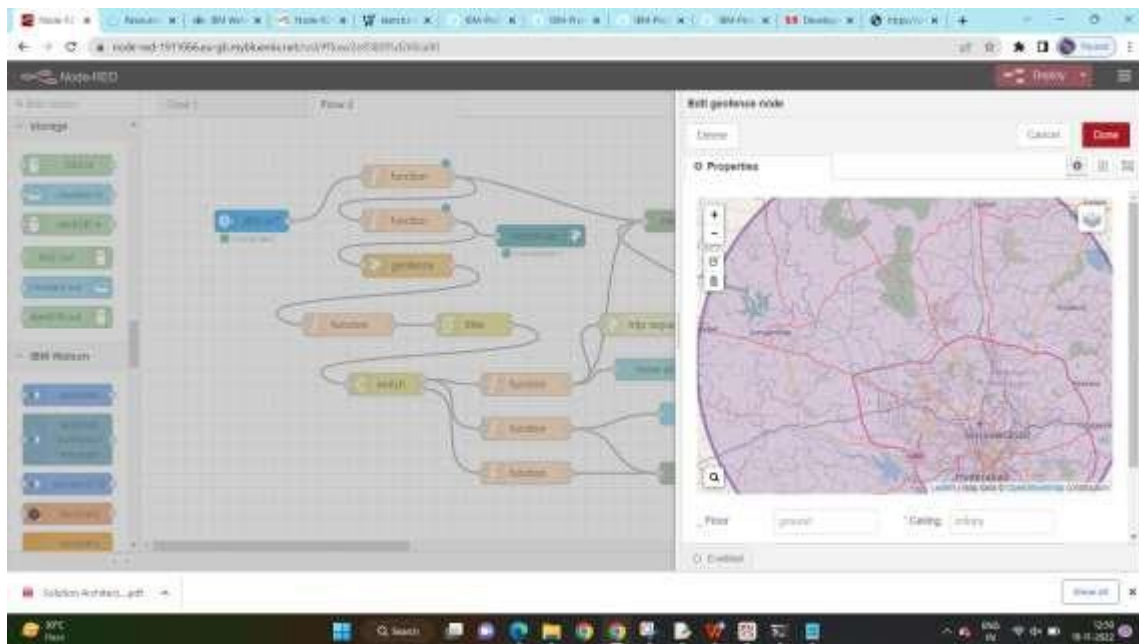
    #latitude=17.4225176
    #longitude=78.5458842

    #out area location

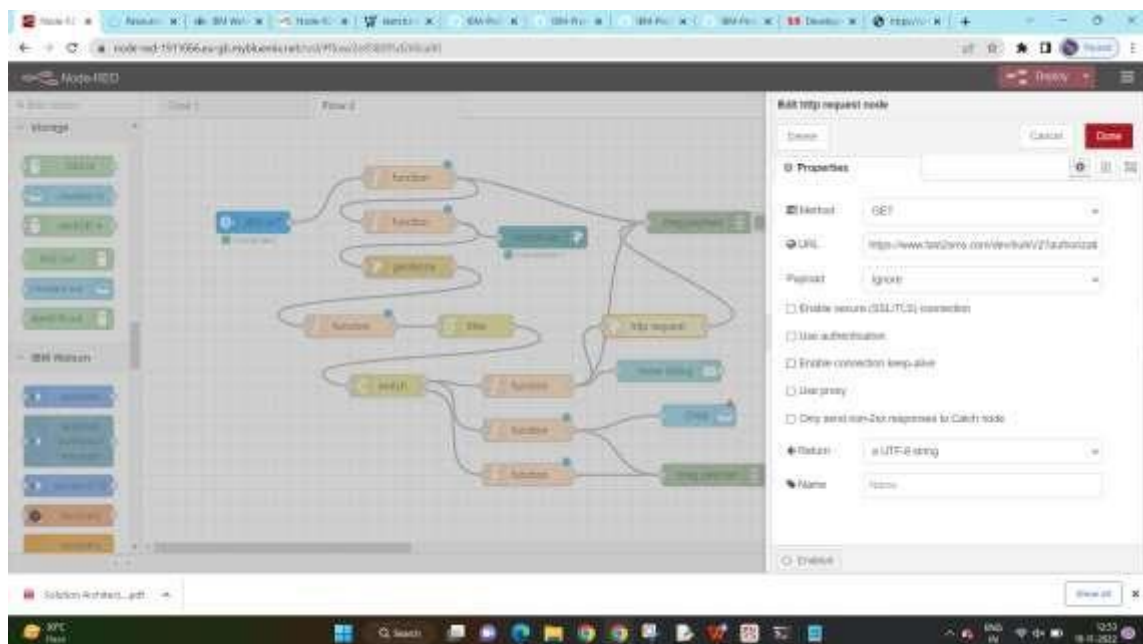
    latitude=17.4219272
    longitude=78.5488783
    myData={'name': name, 'lat': latitude, 'lon': longitude}
    client.publishEvent(eventId="status", msgformat="json", data=mydata, qos=0, onpublish=None)
    print("Data published to IBM IOT platform : ", myData)
    time.sleep(5)

client.disconnect()
```

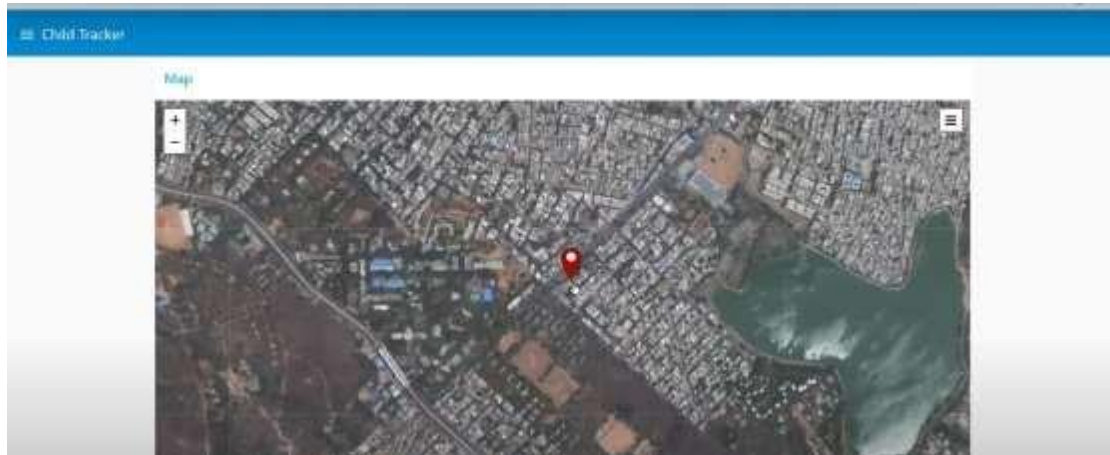
3. Create the GeoFence



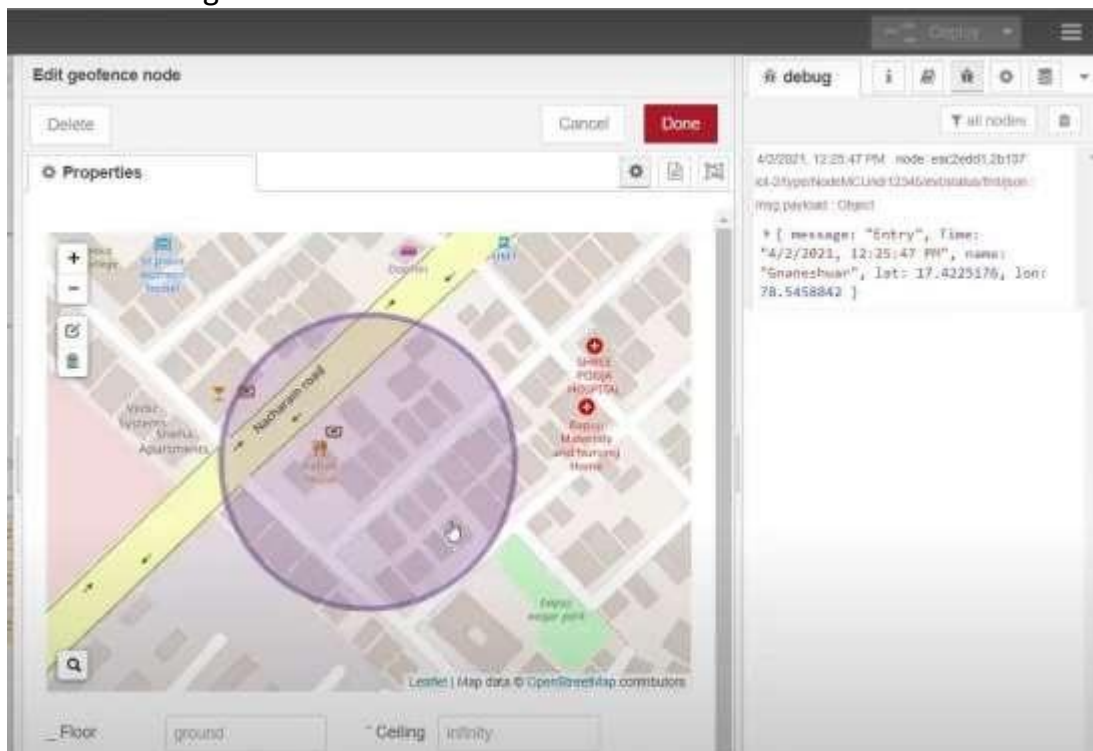
4. Edit the HTTP Request URL



5. Locate the child



6. Create the geofence node



7. Python script send requests to IBM Cloud

```
File Edit Shell Debug Options Window Help
Type help, copyright, credits or license() for more information.

>>>
... import json
... import wiotsdk.device
... import time

myConfig = {
    "identity": {
        "orgId": "yw4h61",
        "typeId": "IOT_CHILD",
        "deviceId": "I6022002"
    },
    "auth": {
        "token": "1911066abdcdefgh"
    }
}
client = wiotsdk.device.DeviceClient(config=myConfig, logHandlers=
None)
client.connect()

while True:
    name="Child"
    #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=mydat
a, qos=0, onpublish=None)
    print("Data published to IBM IOT platform :",myData)
    time.sleep(5)

client.disconnect()
```

```
Python 3.10.8 (tags/v3.10.8:8aa5f17, Oct 11 2022, 16:50:30) [MSC v.1
933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more informat
ion.

>>>
... import json
... import wiotp.sdk.device
... import time

myConfig = {
    "identity": {
        "orgId": "yw4h61",
        "typeId": "IOT_CHILD",
        "deviceId": "16022002"
    },
    "auth": {
        "token": "1911066abcdefgh"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=
None)
client.connect()

while True:
    name="Child"
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    #latitude=17.4225176
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    myData={'name': name, 'lat': latitude, 'lon': longitude}
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a, qos=0, onpublish=None)
    print("Data Published to IBM IOT platform :",myData)
    time.sleep(5)
```

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