## Quick Guide

- 1. Set up GraphHopper on Linux (see below)
- 2. Run MapPrep.sh in Graphhopper's folder

If permission is denied, run:

Chmod +x MapPrep.sh

- 3. The result should be a zipped file with all the required map files
- 4. Place those files in a folder with the country's name in your device's the maps folder (configurable in the NavConfig class).

# Standard Graph Processing

- 1. Set up GraphHopper on Linux (see below)
- 1. Download the \*.map file (map tiles) from:

http://download.mapsforge.org/maps/

2. Download the matching \*.osm.pbf file (graphs) from:

http://download.geofabrik.de/

3. Place them both in Graphhopper's root folder

You should clone the git project from:

https://github.com/graphhopper/graphhopper

- 4. Rename "country.osm.pbf" to "country.osm"
- 5. Run
- ./graphhopper.sh import country.osm
- 6. There should be a new folder in Graphhopper's folder named "country-gh".

This new folder should contain a total of 8 files:

```
edges
geometry
location_index
names
```

```
nodes
nodes_ch_fastest_car
properties
shortcuts_fastest_car
```

- 7. Copy the *country*.map file (which should be in Graphhopeer's root folder) to the *country*-gh folder. The country folder should now contain 9 files.
- 8. Place those files in a folder with the country's name in your device's the maps folder (configurable in the NavConfig class).

## Setting Up GraphHopper on Linux

#### **Used Setup**

VirtualBox v.5.2.4

Xubuntu v.16.04

#### Requirements

```
Linux

Java

Java version: 1.8.0_171, vendor: Oracle Corporation

JDK

openjdk version "1.8.0_151"

OpenJDK Runtime Environment (build 1.8.0_151-8u151-b12-0ubuntu0.16.04.2-b12)

OpenJDK 64-Bit Server VM (build 25.151-b12, mixed mode)

Maven

Apache Maven 3.3.9
```

#### Clone Graphhopper's Git Project

```
git clone git://github.com/graphhopper/graphhopper.git graphhopper
```

#### **Installing Maven on Ubuntu**

```
sudo apt-get install maven
```

The command apt-get installs the Maven in:

/usr/share/maven

To verify your maven version run:

mvn -version

### Java Troubleshooting

Display JAVA\_HOME variable path with:

echo \$JAVA\_HOME

If nothing appears then set it with:

export JAVA\_HOME=/usr/lib/jvm/java-7-openjdk-amd64