Open Street Map with iPhone

Report

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Summary: In this document are explained the steps I taken to carry out the Bachelor Project.

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1.Introduction

The idea of the Bachelor project is to use the iPhone as a dispositive for mapping the **OSM** (OpenStreetMap).
For mapping we need GPS, voice recorder, a digital camera and applications to make the differents actions of the OSM platform. All these features are covered by the iPhone.

The main aim of the project has been write an user guide to explain step by step how you can use the iPhone to collaborate with the OSM community. In the user guide are explained the following actions:

- Creating an OSM account.
- Visualizing the maps.
- Tracking.
- Editing the nodes of the maps.
- Visualize and add Points of Interest (POIs).

My work has been find the application for each action that fit better with the requirements. After trying them, I decided wich one is better based in the features, if it was easy to use, the price, internet conection and others.

In the next pages you will see some tables comparing the features of the **Apps**(applications) depending on the performed action. This tables will show the differences between them.

2. Visualizing the maps

You can visualize the maps using also the browser and the OSM website, but with and App you will have better performance and extra features included.

APPlication	PRICE €	Lite version	Internet required	Description
▶ Omaps	1,59 €	NO	Yes,only to download the map	oMaps lets you save maps and then acces them even without an Internet connection
OffMaps	1,59 €	YES	Yes,only to download the map	OffMaps stores maps directly on your device for any area and lets you search the map offline
▶ WikiMap	2,39 €	YES	Yes. 3G, Wifi,	It allows you to accurately show your location on a street or a satellite map even with no Internet connection (offline maps).
▶ OpenMaps	2,39 €	YES	Yes. 3G, Wifi,	OpenMaps is a feature-rich, fast & easy to use map application that displays and edits open map data of OpenStreetMap.org, the free wiki world map.

*▶ Selected Apps for the user Guide.

3. Tracking

The most important thing when you take tracks with the iPhone is the accuracy and the different options the application offers to upload the tracks.

APPlication	PRICE €	Lite version	Uploading tracks	Description
► OSMTrack	0,79 €	YES	OSM platform, e-mail.	Collects GPS coordinates as you move and allows you to upload the resulting GPS trace directly to the OpenStreetMap server.
Trails	2,99 €	YES	E-mail	Record your hikes, bike trips or jogs directly on your iPhone.
MotionXGPS	2,39 €	YES	E-mail	Complete App to save tracks, waypoints, live navigation, interactive stopwatch.

*► Selected Apps for the user Guide.

4.Editing the nodes of the maps

Editing maps is the process of making changes to the map data - such as adding roads, naming the streets, pubs or changing names of features. A *node* is the basic element, building block, of the OSM scheme. Nodes consist of latitude and longitude (a single geospatial point).

APPlication	PRICE €	Lite version	Internet required	Description
▶ iLoe	0 €	YES	YES	Collects GPS coordinates as you move and allows you to upload the resulting GPS trace directly to the OpenStreetMap server.
OpenMapsFree	0 €	YES	YES	OpenMaps is a feature-rich, fast & easy to use map application that displays and edits open map data of OSM.

*▶ Selected Apps for the user Guide.

5.Visualizing and adding POI's

These are handled as nodes, possibly without any way attached. Where the point of interest is actually part of the way, for instance:
- Churches, schools, town halls, distinctive buildings.
- Post offices, shops, postboxes, telephone boxes.
- Pubs.
- Car parks and lay-bys (and whether free or not).
- Speed cameras.
- Tourist attractions.

APPlication	PRICE €	Lite version	Internet required	Description
Leisure	0,79 €	NO	YES	To look for recreational activities in the surrounding area or in any city. Originally thought only to find the nearest playground, now almost all search terms for leisure and tourism are installed.
▶ Mapzen POI	0 €	YES	YES and OSM account.	Mapzen POI Collector is the perfect tool for anyone interested in creating maps for OpenStreetMap.

*▶ Selected Apps for the user Guide.

References:

- **OpenStreetMap** (http://www.openstreetmap.org/)
- **OSM Wiki** (http://wiki.openstreetmap.org/wiki/IPhone)
- **OffMaps** (http://itunes.apple.com/en/app/offmaps/id313854 422?mt=8)
- **oMaps** (http://omapsiphone.com/)
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- **OpenMaps**(http://izeize.com/openmaps/)
- **OSMTrack(**http://www.osm4iphone.com/**)**
- **Trails(**http://itunes.apple.com/app/trails-gps-tracker/id289190494?mt=8 **)**
-**MotionXGPS (**http://itunes.apple.com/us/app/motionx-gps-lite/id293935935?mt=8 **)**
- **iLoe(**http://wiki.openstreetmap.org/wiki/ILOE **)**
- **OpenMaps Free (**http://itunes.apple.com/en/app/openmaps-free/id359719250?mt=8 **)**
- **Mapzen POI Collector** (http://mapzen.cloudmade.com/mapzen-poi-collector)
- **Leisure** (http://eiseler.de/iphone/Johannes_iPhone_Site/Leisure.html)