OPEN MAPPING EDUCATION SERIES

OPENSTREETMAP MODULES 1-5

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OPENSTREETMAP MODULE 5

INTRODUCTION TO MOBILE MAPPING TOOLS



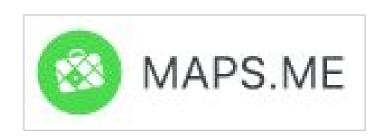
MOBILE MAPPING

Whether your sitting at a cafe or conducting a street survey, there are mobile tools that enable you to map on the go. Get directions while offline, add places to the map, and share real time street views!

This module will introduce you to three applications, but new tools are being created every day in this ever evolving field of open mapping!











PART ONE: OsmAnd



INSTALLING OsmAnd

The OsmAnd app uses OpenStreetMap data, making updates the most recent available. People add new places to the map, refine details, and delete defunct points of interest.

ANDROID: Open the Play Store on your mobile device. Search for OsmAnd and Install.

iOS: Open the App Store on your iPhone. Search for OsmAnd and Install.

AMAZON: App also available on Amazon.com



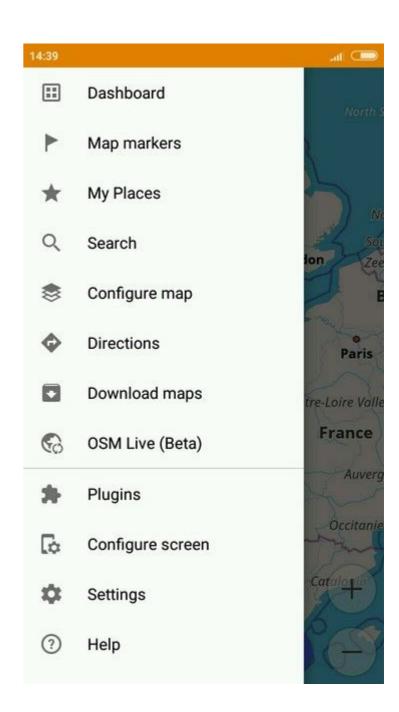
For additional information, visit http://osmand.net/



CUSTOMIZE OsmAnd

SETTINGS: When you first launch OsmAnd, the parameters are set to default. Configure them by changing features in the menu. Upon launch, the start screen suggests that you download maps. Pick World Map or your local area and proceed to the application.

LANGUAGE: To set app language, go to Settings - General - Display language. Now all your menus will be in the chosen language.

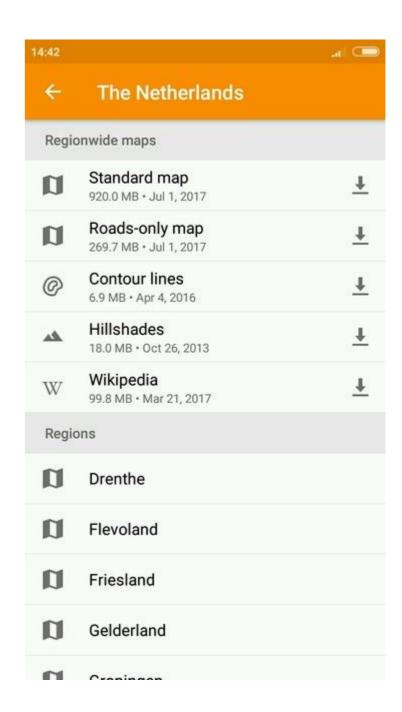




CUSTOMIZE OsmAnd

MAPS: Download a World basemap to begin, which will allow you to view the maps of the regions and countries. To download the map of the region you need, go to Download Maps and choose the one you need. After the map is downloaded, tap the 'back' button to go to the map screen.

DOWNLOADS: The free version allows 7 free downloads. OsmAnd+ allows unlimited downloads and map updates.





OFFLINE MAPS - OsmAnd

For offline use, you need to pre-download your maps.

ANDROID: There are two main types of maps you can download. Vector Maps (preferred solution): Download pre-fabricated "vector" maps in OsmAnd's native format. Compact files allow zooming in to high zoom levels without losing detail or resolution. Prepared Maps: Make your own maps using OsmAnd Map Creator on your PC and transfer them to the "osmand" folder on your device.

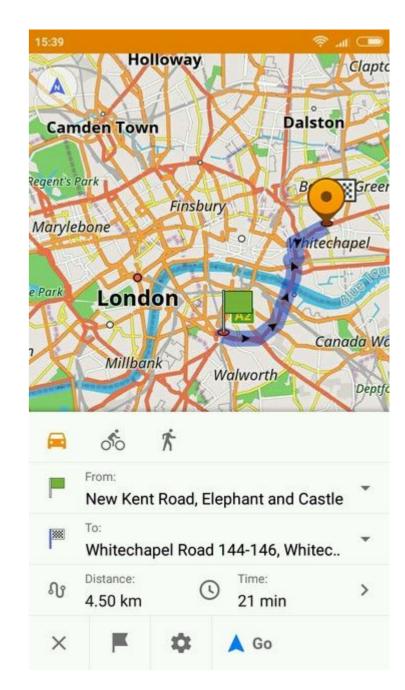
iOS: After you install the application, you can view and manage offline maps of any country in the world. Tap the menu button on the left, then select Maps & Resources, choose the continent and then proceed to the map download. You can also use the Search field to find the necessary map.

Source: http://osmand.net/features?id=start



NAVIGATION - OsmAnd

- To start the navigation, use the navigation button on the map screen.
- Set the starting point and destination. Choose current location, Favorite location, select a point on the map or use an address. Also set a starting point by long tapping on the map and choosing 'Directions from' in the menu box.
- To navigate to a point, press the navigation button in the context menu.
- When your points are selected, tap 'GO' to create a route and start guidance. Voice guidance is optional. App can run in the background.

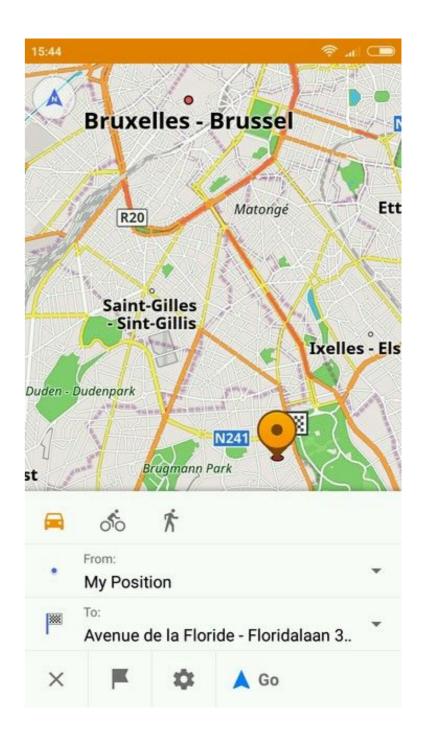




NAVIGATION - OsmAnd

PROFILES: Choose car, bicycle or pedestrian mode to build your route using the navigation settings bar. Routes are calculated according to the traffic rules and navigated by taking into account your way of movement.

SCREEN: To switch the screen on only before turns, go to Settings — Navigation Settings — 'Turn screen on' and set for how long you'd like to keep the screen on. For instance, if you pick 10 seconds, the screen will be on for 10 seconds on the turn and then switch off again till the next turn.

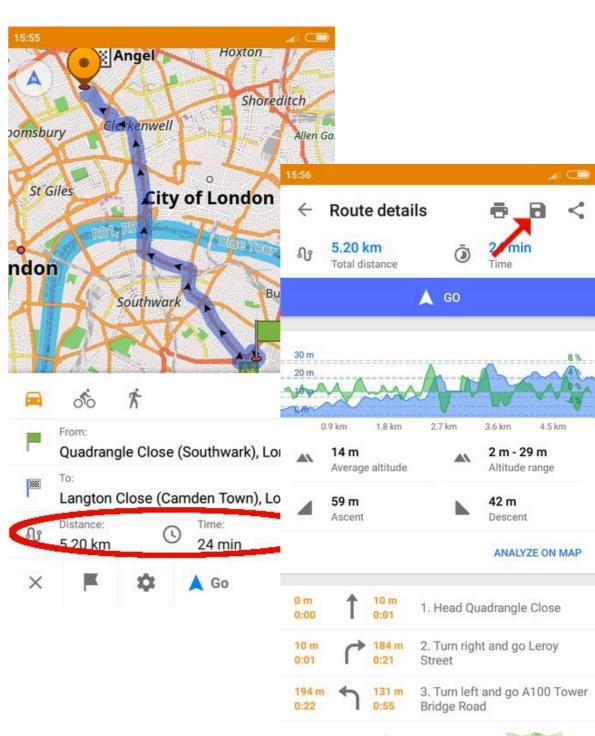




SAVE NAVIGATION ROUTES - OsmAnd

You can build a route and save it as a reliable GPX file to use again.

- Go to the navigation menu, then tap the information menu.
- Tap Save in the upper right corner and name your GPX track to save.
- To use it for navigation, go to
 Configure Map menu GPX Track.
- Select your track and press OK.
 You'll see the track on the map.
- Press the navigation button.
- When asked to use this track for navigation, press Yes.

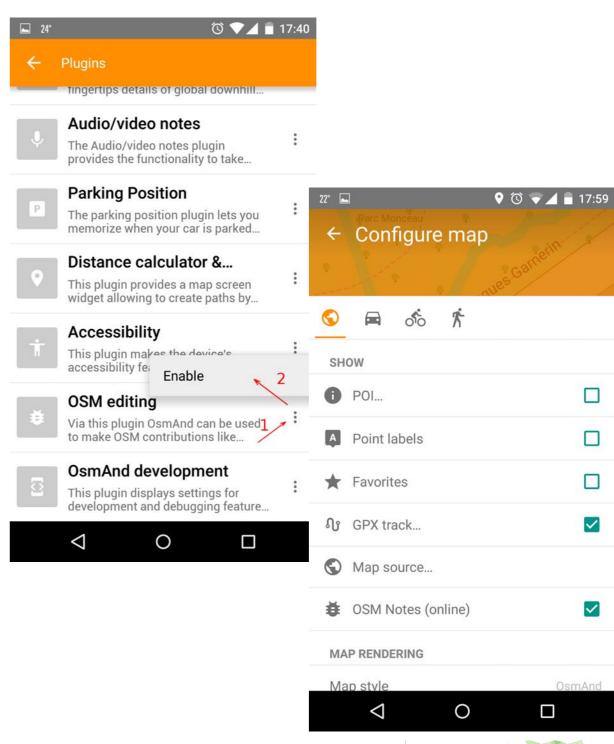




ADD DATA POINTS - OsmAnd

New shop opened near you? Add it to the map!

- Go to Plugins OSM Editing and press Enable.
- Tap on the map where the new POI (point of interest) has to be placed.
- Create POI, add its name and other details like working hours, website, etc.
- Provide your OpenStreetMap credentials to introduce changes.



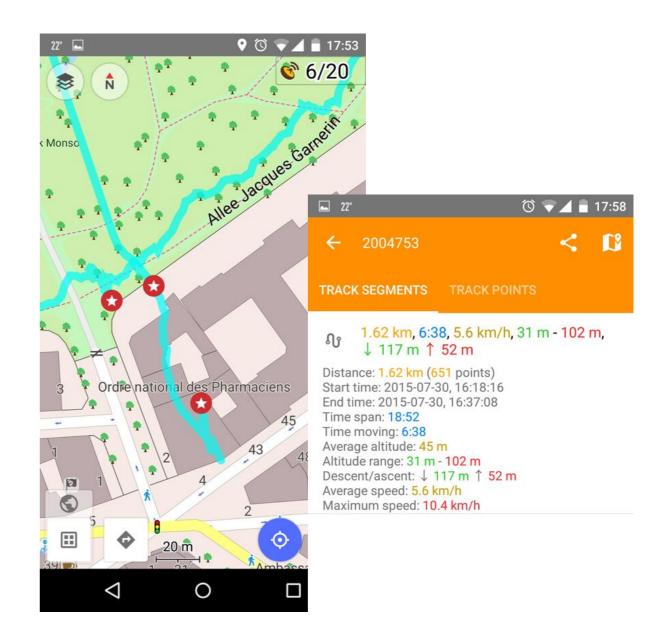




ADD TRACKS - OsmAnd

Add your tracks to OpenStreetMap.

- Turn the <u>Trip recording plugin</u> on, make a track, go to My places -My tracks.
- Press the three-dots button next to your track and select 'Export'. Your track will be added to https://www.openstreetmap.org/traces, where you can view it and other users can find it helpful. Be sure to tag objects and roads.









PART TWO: MAPILLARY



INSTALL MAPILLARY



The Mapillary app allows anyone to capture street-level imagery. Put any place on the map, and update the imagery as often as you'd like.

To get started capturing your own street-level images, you will need a <u>smartphone</u>, <u>action camera</u> or <u>360° camera</u>. You can then start capturing <u>sequences</u> of images, which can be used for 3D reconstructions and geospatial data collection.

ANDROID: Open the Play Store on your mobile device. Search for Mapillary and Install. You must have 4.0 or later, a camera & GPS.

iOS: Open the App Store on your iPhone. Search for Mapillary and Install. You must have iOS 7.0 or later and at least iPhone 4.

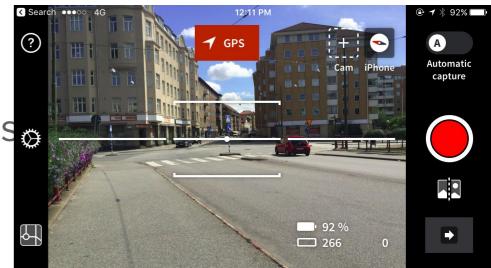
Census Bureau

MAPILLARY - CAPTURE IMAGERY



- 1. Tap on the Capture icon at the bottom of the app screen to access the camera.
- 2. Position your camera so that it has an unobstructed view, facing forward and level with the horizon.
- 3. Tap on the big red button.
- Start moving and the app will start automatically capturing images. Capture as much as you want. Tips <u>HERE</u>.
- 5. Tap on the red button again to stop capturing images in this sequence.





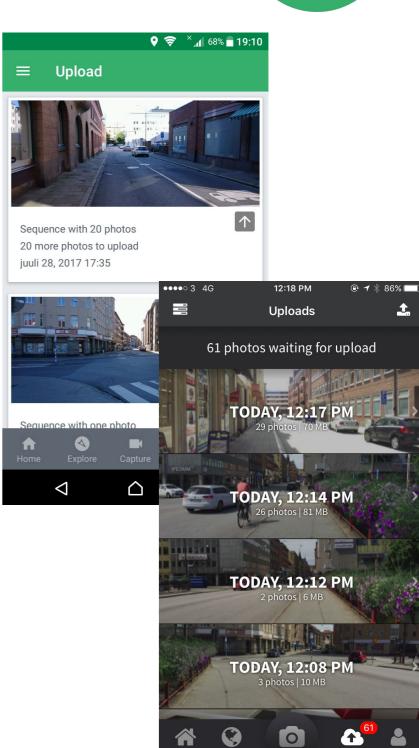




MAPILLARY - UPLOAD IMAGERY



- Tap the exit arrow on the Capture screen, or tap the Upload Icon at the bottom of the main screen to reach the Upload screen.
- Review images and discard any bad ones (e.g. blurry, pointed at the ground, etc.).
 Keep desired copies of images before you upload.
- 3. When reaching wifi connection, tap on the arrow in the Upload screen to initiate upload (by default, the app will not upload on mobile network).
- 4. Images will be uploaded & deleted from your device.









MAPILLARY - AFTER UPLOAD



- 1. Images are processed on the Mapillary system and combined together with other images from the area, faces and license plates blurred.
- 2. You'll get a notification about your uploads being on the map.
- 3. You can reach the upload via the Profile tab or in the Home tab.
- 4. Click on the item to open it in the Explore tab and navigate around. Share your captures via the share button on the image.
- 5. To make edits to your sequences, go to the Mapillary web.
- 6. Use the images to show places and extract map data (<u>more details</u> <u>here</u>).







PART THREE: MAPS.ME



MAPS.ME

Maps.Me is another app that allows you to navigate offline and add data to OpenStreetMap. Install using Android or iOs.

Access their detailed User Guide here.



User Guide



OPENSTREETMAP SERIES COMPLETE!

CONGRATULATIONS!



THANK YOU!

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