

Web Mapping technologies for the valorization of slow tourism: the Via Regina project

Maria Antonia Brovelli, Candan Eylül Kilsedar, Marco Minghini, Giorgio Zamboni



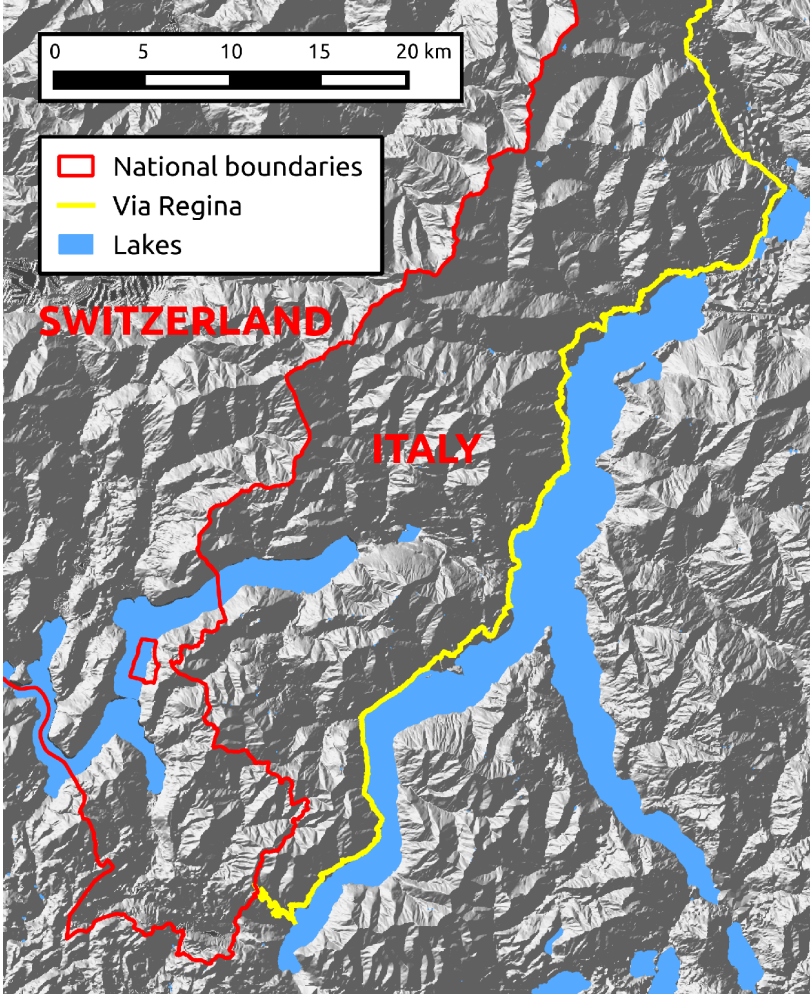
Politecnico di Milano - Como Campus
via Valleggio 11, 22100 Como (Italy)



<http://www.viaregina.eu>
viaregina2.0 @viaregina20

SLOW TOURISM AND VIA REGINA

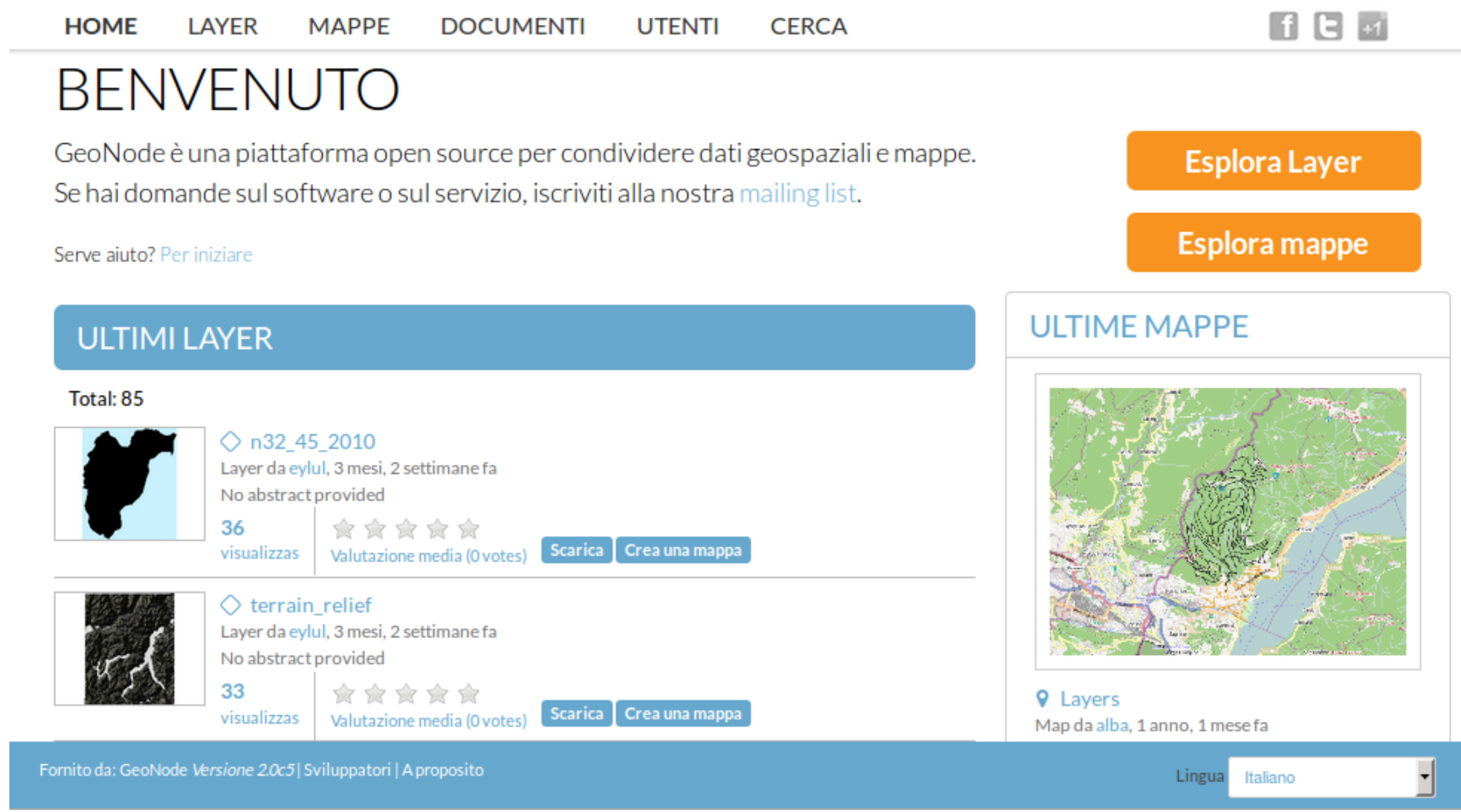
Overlooking the West coast of Lake Como in Northern Italy, [Via Regina](#) has represented a fundamental European trade and pilgrim route since the ancient Roman times. The dense system of paths departing from it and spanning the beautiful mountainous region at the border between Italy and Switzerland makes this area an awesome destination for [slow tourism](#) activities, which consist of sustainable forms of transportation, appreciation of nature and (re)discovery of the local history and culture. In the frame of the [Interreg project](#) "The Paths of Regina – Crossborder paths linked to Via Regina", which involves Italian and Swiss universities, cultural associations, local agencies and administrations, this work aims at valorizing slow tourism in the Via Regina region through the creation of open source [Web Mapping](#) applications leveraging also the modern fields of crowdsourcing and virtual globes.



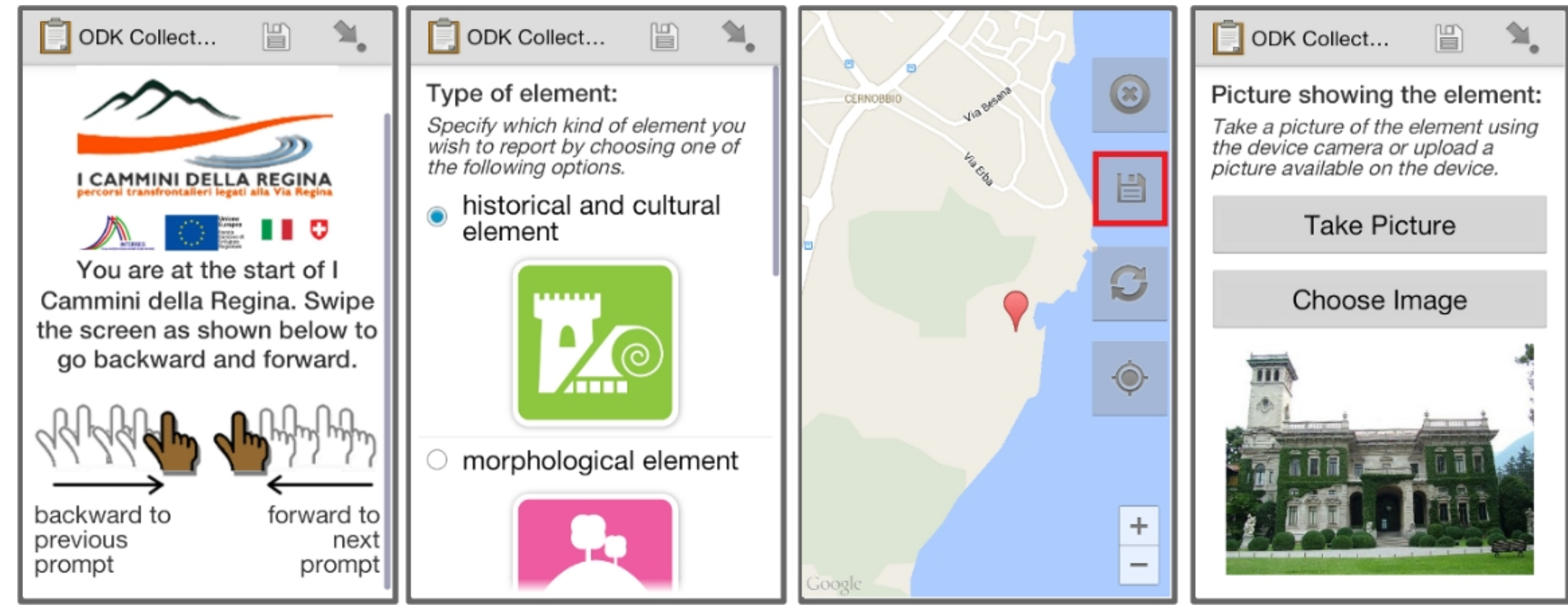
PARTICIPATIVE UPLOAD OF GEOSPATIAL DATA

Geospatial data of interest in the project are differentiated in [two categories](#):

- data derived from [official sources](#) → uploaded by the project partners into a participative platform based on [GeoNode](#) (which also allows the creation of custom maps) and directly available as WMS/WFS



- data crowdsourced by the [general public](#) using an Android app (based on the [Open Data Kit](#) suite) to report interesting elements (historical/cultural points of interest, morphological elements, tourism services and dangers)



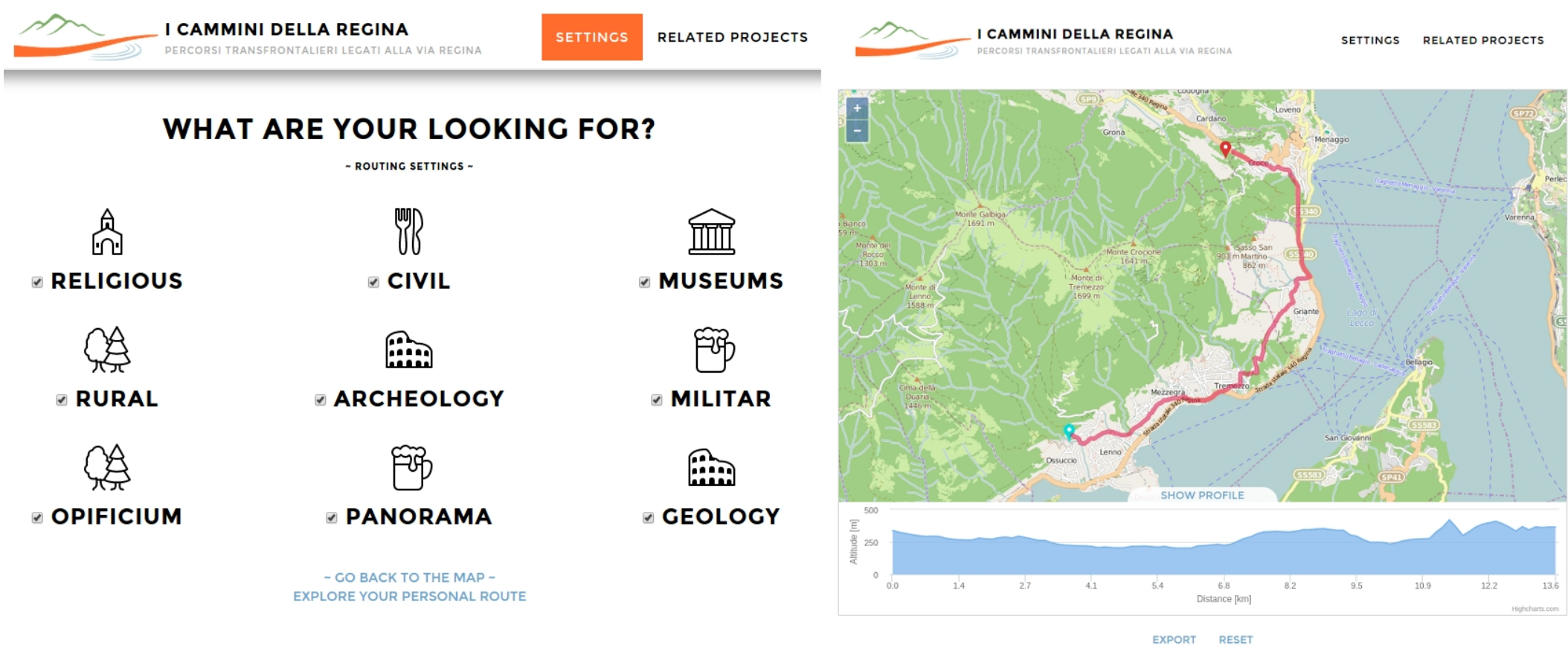
2D WEB MAPPING

Web Mapping solutions are first developed to provide a traditional [2D data view](#) using the standard JS libraries [OpenLayers](#), [GeoExt](#) and [ExtJS](#):

- 2D viewers showing all the reports collected through the app during the project's [mapping parties](#) (one-day walks along the Via Regina paths)



- main 2D viewer of the project with advanced functionalities: computation of [customized routes](#) according to the user's preferred points of interest (using [pgRouting](#)) and [terrain profile](#) (using [ZOO WPS](#)); [print](#) of the user's computed route with ad hoc statistics (travel time, average slope, height difference, etc.); [geocoding](#); exploitation of [TripAdvisor](#) API to visualize accommodations, restaurants and attractions sites



3D WEB MAPPING

A fully realistic, [3D data visualization](#) is finally achieved through a customization of the PoliCrowd platform based on [NASA World Wind](#) virtual globe. Besides accessing the project's layers, users can interact with the POIs reported through the app by adding [multimedia contents](#) and [time-filtering](#) their visualization.

