

Course code: **LEAFLET**

Course title: **Leaflet – creating interactive maps on Web pages**

Days: 2

Description:

Course intended for:

The training is designated for programmers wanting to get familiar with the Leaflet technology, which is used for creation of interactive Web-based geographic information systems (GIS)

Course objective:

The training objective is to get the participants familiar with the theoretical and practical issues of creation of Web map applications using the Leaflet library.

The training participants will learn to:

- Create an interactive map and integrate it with other Web technologies
- Use plug-in mechanisms to add new functionalities
- Prepare spatial data, which can be added to the map statically or dynamically.
- Use a leaflet library to solve advanced problems (routing, geocoding)

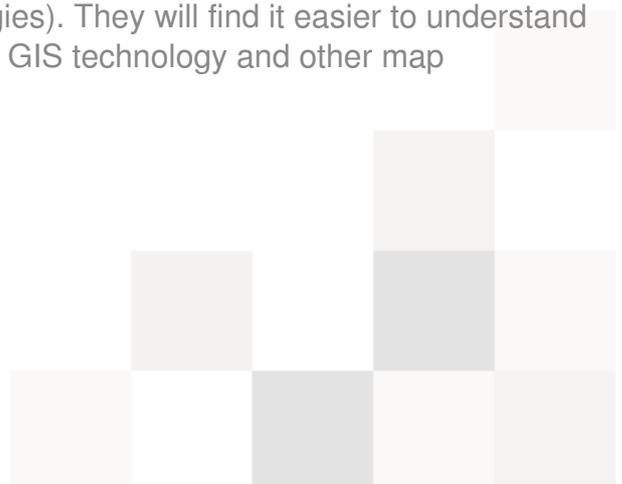
After the training, the participants will have the knowledge enabling them to create Web applications in form of interactive maps.

Requirements:

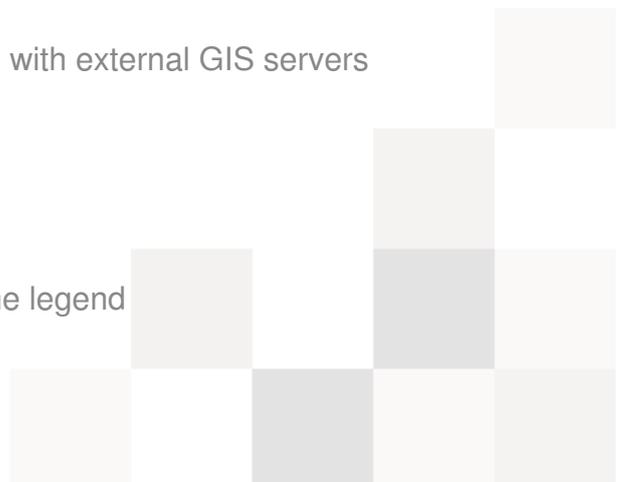
The training participants are required to have the basic knowledge of JavaScript and Web application development (including server technologies). They will find it easier to understand the issues being discussed thanks to familiarity with GIS technology and other map development technologies (e.g. OpenLayers)

Course parameters:

2 days 8 hours each



1. Introduction to Leaflet technology
2. Installation of Leaflet in the Web environment
3. Integration of Leaflet with other Java script frameworks (ExtJS, jQuery UI)
4. Discussing of data sources:
 - Commercial and free base layers (Google, Bing, ESRI, OSM, MapQuest and other)
 - Spatial services WMS and WFS
 - Vector file data
5. Discussing of plug-in mechanisms (installation, configuration)
6. Creation of map content (static configuration, dynamic adding of data)
7. Interface components and interaction with the map:
 - Navigation
 - Object information display
 - Navigation map
 - Legend
 - Magnifying glass
 - Drawing
 - Other
8. Advanced use of Leaflet library – Integration with external GIS servers
 - Address finding (geocoding)
 - Finding the shortest paths (routing)
9. Symbolizing of layers and development of the legend



10. Leaflet on mobile devices

11. Limitations of Leaflet library and directions of development

