Web Maps for Cities – Comparison, Evaluation and Improvement based on the Karlsruhe City Map

The results presented in the evaluation and comparison, are approximate to the reality of the actual status of interactive city maps; clearly, more detailed studies with larger samples might show more information to improve the map of Karlsruhe, despite this, the conclusions drawn from the study along the development of the different graphical tools, and with the recommendations made to improve the Karlsruhe Webstadtplan, the map will give a leap in quality in terms of usability and design obtaining a higher rating than they already had.

An interactive map is the most versatile web map although it may appear more complex to potential users. For this reason the objective in terms of content, functionality, usability and design that follow the studied standard, must have as the most important, independently for the kind of user, the graphic and multimedia information, and giving an attractive and informative experience with the map, trying to handle in one single application the different static, animated and interactive information, the GIS functionalities, even the possibility of a connection with social networks.

The future for the interactive city maps goes through JavaScript frameworks, an example are the different tools developed in this thesis. There are many quality frameworks such as Web-SIS, CartoDB, OpenLayers, Leaflet, etc. for the interface development. Gives to the cartographer an enormous flexibility to create a map with all the required characteristics to build an interactive quality map with which the user will have a satisfying experience. Is necessary to have cartographic knowledge, knowledge of web usability standards and web programming especially.

Web Integration - A.P.I.

- Web-SIS of BARAL Geohaus-Consulting AG
- Object Oriented JavaScript framework to embed maps into websites
- Required to include the API into the HTML.
- To create an empty map:
  1. Websis namespace
  2. Object Class
  3. Map class
  4. Control class