Contribution ID : 117

CampusMapper - a light-weight internet mapping tool using MySQL, Tomcat and SVG

Friday 15 Sep 2006 at 09:00 (00h30')

CampusMapper is an interactive mapping tool for the University of Twente campus. It's part of the Wireless Campus LBS project in which state-of-the art Location-Based Services are developed that use the university's WiFi network as its foundation.

The Wireless Campus LBS
Wireless Campus LBS is an informal co-operation project at the University of Twente (UT) in cooperation with the International Institute for Geo-Information Science and Earth Observa-tion (ITC) to provide Location Based Services (LBS) for the UT campus. This LBS run on the existing Wireless Campus system that provides the whole 140ha University grounds with WiFi based internet access. The project serves as a testbed for research activities as well as an infrastructure to develop practical use cases upon. A first use case has been to provide the participants of SVGopen2005, the 4th Annual Conference on Scalable Vector Graphics with an LBS to help them navigate the conference locations and locate fellow attendants [1].

CampusMapper Customised Mapping Service
For the wireless Campus LBS a spatial database is being build (using MySQL) which eventually will hold all topographic and building data of the campus. The University services (such as Public Relations and Facility Management) are especially interested in it, as it can provide the basis for quickly and easily customised maps of the campus or parts thereof. ITC has experience in and knowledge of building such mapping services and was willing to help this project forward by building a protype of such an interactive, web-based application. This involved extending and structuring the spatial database and building Open Standards based Webservices. The architecture and setup of the services was based upon the GDI-light concept, as experimented earlier with in the RIMapper system [2], employing MySQL, Java Servlets and SVG. This paper presents the technical background and setup of this application and plans for future development, among others to achieve OGC WMS compatibility.
[1] Köbben, B., K. Muthukrisnan, et al. (2005): Wireless Campus LBS - A testbed for

cartographically aware database objects. Proceedings of Symposium 2005 Location Based Services & TeleCartography, G. Gartner (ed.). Wien: Research group Cartography, Institute of Geoinformation and Cartography, TU Wien. pp. 47-51.
[2] Köbben, B. (2004): RIMapper - a test bed for online Risk Indicator Maps using data-driven SVG visualisation. Proceedings of 2nd Sypmposium on Location Based Services and TeleCartography, G. Gartner (ed.). Wien: Institute of Cartography and Geo-Media Techniques. pp. 189-195.

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