

Research Projects - Medialab for advanced Web Applications

- Intelligent web-based systems for optimal knowledge management

This research-based project concerns the mathematical analysis and design of a real time web-based system that manages structured and semi-structured knowledge, based on semantic modeling and fuzzy groups. The system will be applied on workflow management, document management and real-time reporting

Prerequisites: Java, XML, XSLT, PHP, MySQL, SQL Server 2000, T-SQL

Optional: Web services, J2EE (JBoss, Tomcat, JSP, Servlets, EJB), Matlab, IR Methods

- Design of an on-line dynamic collaboration portal for the effective interconnectivity and interoperability of Public Administration issues

This research-based project concerns the mathematical analysis and design of a dynamic portal with a back-end application clustered server and DB, for the on-line collaboration and workflow management of regional authorities or several public administration issues. Dynamic reporting tools, batch processes for effective data mining.

Prerequisites: Java, XML, CSS, XSLT, Web services, J2EE (JBoss, Tomcat, JSP, Servlets, EJB), MySQL or SQL Server 2000

Optional: Matlab, Agent programming

- Web-based multidimensional analysis and web-OLAP reporting (WOLAP) for distributed wireless sensor grid networks

This research-based project concerns the analysis and design of an on-line portal, with back-end application server and a distributed database for the statistical analysis and reporting of distributed measurements coming from a wireless sensor grid. The system will be applied for environmental and energy distributed sources

Prerequisites: Java, XML, XSLT, Web services, J2EE (JBoss, Tomcat, JSP, Servlets, EJB), SQL Server 2000 (T-SQL) or MySQL, Statistics-probabilities

Optional: Matlab, Advanced differential topology, OLAP Cube, MDX