

Managing the process of creating property certificates for government and municipality real estates in Republic Bulgaria.

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The diploma thesis examines a module for managing the process of creating property certificates for government and municipality real estates in Republic Bulgaria. This module is part of "Information system for managing government and municipality real estates (ISMGRE)" ISMGRE is a packet of applications for managing documents and registers of cadastral information (data for physical properties of a real estate – borders, area, type, etc.). Also the system stores information to support the process of creating property certificates and storing the published ones.

The design of the system is based on the following two rules:

- to be compatible with the law enforcements in Republic Bulgaria
- to be compatible with the existing workflows like exchanging, processing, managing and storing data at the moment of development

The Information system for managing government and municipality real estates provides possibility to define different workspaces (municipalities, regions, etc.), user roles and access rights. The access rights can be assigned separately for each role. They define the activation of the menus in the system. The examined module for creating property certificates allows creating, editing, searching, displaying and printing of property certificates. The creation of property certificate follows the workflow used in the government administration. The process contains several steps like approvement, signing the property certificate, etc. All user actions are logged, and then monitored from the administrator.

ISMGRE, which module is subject to the current diploma thesis is build on the top of the Microsoft's .NET libraries for distributed applications and the database management system SQL Server 2005 of the same company. The system is a client-server application. The client is a dialog based Windows application build on top of the Windows Forms library, exposed by .NET Framework. The server consists of several web services, which can be invoked by an arbitrary client. Using a web service increases the opportunity for integration with other systems in the government administration. This increases the effect of the system vastly. The web services are build with the provided by Microsoft Web Service Enhancements library. For the interaction with the database is used an ORM tool – NHibernate. NHibernate is an open source project, developed by independent developers.

The pilot testing of the system has been conducted in Vratza district and the Council of ministers of Republic Bulgaria. The system has been installed on central server in council of ministers on the following address: <http://212.122.186.228/>. Thanks to the support of separate workspaces, both organizations can work simultaneously. Till

now several hundreds real estates and their property certificates are entered. With this, the pilot testing is completed.

The system has been presented on the Technical fair of Plovdiv 2007. Competing with more than 40 other projects the system won special award from Microsoft.