

APPLICATION OF GIS TECHNOLOGIES IN THE DEVELOPMENT OF A REAL ESTATE AGENCY DATABASE

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A database (DB) is a set of specially organized data that is stored for a long time in the external memory of a computer system and that reflects the state of objects and their relationships in the subject area under consideration [2].

A database management system (DBMS) is a set of language and software tools designed to create and share a database by many users [2].

There are many database management systems in the world. Despite the fact that they can work with different objects in different ways and provide the user with different functions and tools, most DBMSs are based on a single well-established set of basic concepts.

Software that actively uses databases is called application software. Wherever information is accumulated, there is a need to manage it, namely: to quickly find it, perform statistical calculations, create an analytical report, get an operational picture, start monitoring processes, provide a user-friendly interface, facilitate work, create clear, accessible, useful and necessary functions [1].

To automate the work of a real estate agency at the most modern level, the database must include the following processes (Fig. 1):

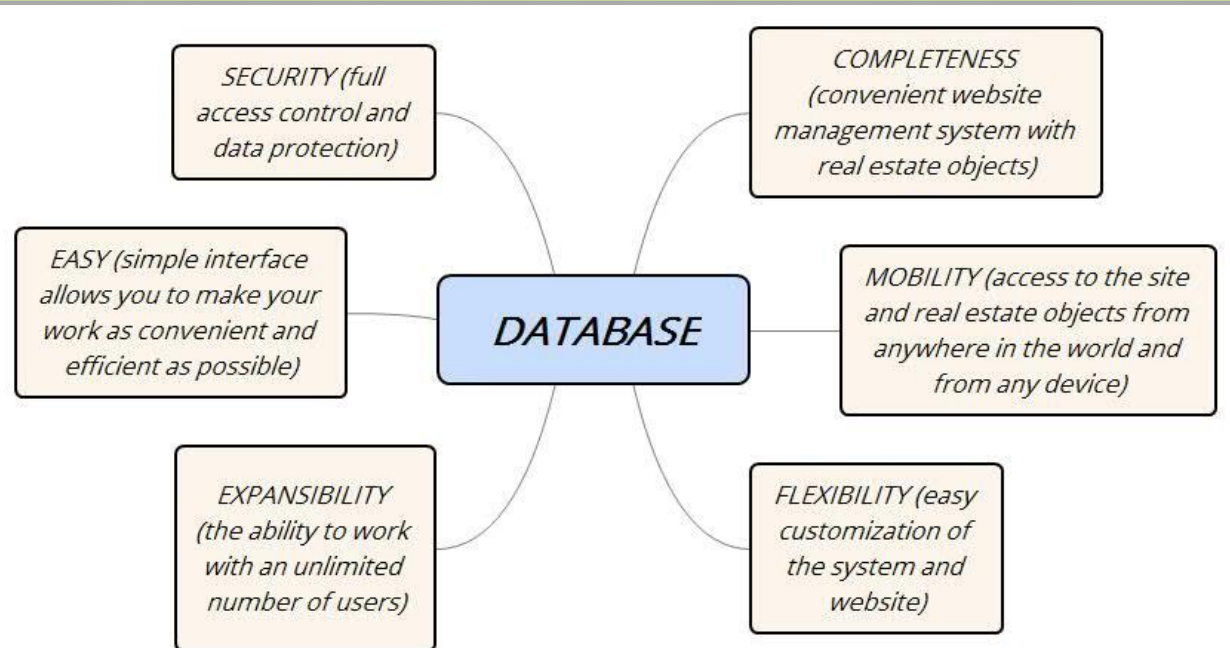


Figure 1. The structure of the database

The set of basic processes includes a set of capabilities, namely [3]:

- ✓ conducting operations «Purchase», «Sale», «Lease», etc;
- ✓ accounting of applications for the sale and lease of real estate of any type;
- ✓ accounting of applications for the purchase and rental of real estate;
- ✓ cross-searching between applications and real estate descriptions;
- ✓ accounting of completed and postponed transactions;
- ✓ creation of custom reporting forms;
- ✓ queries by any parameters;
- ✓ export of data in Excel, txt, csv and xml formats;
- ✓ data exchange between remote offices using e-mail;
- ✓ the ability to provide the client with information in a «secure» form (the ability to close commercial information);
 - ✓ slideshows of photos of real estate objects, drawings and plans in any formats (bmp, jpeg, rle, wmf);
 - ✓ manage user access to various program modes and functions;
 - ✓ viewing data on your website on the Internet;

- ✓ automatic publication of ads on Avito and other real estate portals;
- ✓ support for simultaneous work of an unlimited number of users;
- ✓ powerful and fast database;
- ✓ user-friendly and simple interface;
- ✓ detailed documentation built into the program.

To summarize, I would like to add that modern real estate agencies and private realtors in large cities have long appreciated the need to use geospatial data and GIS technologies when implementing the processes of buying, selling and renting real estate.

References.

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