

THE COMPLEX ANALYSIS OF THE SPECIALIZED EDUCATIONAL WEB-PORTAL

Molodets L.V., *IN-43*,
G.I.Litvinenko, *EL adviser*

It is an important task. Today increasing the activity's effectiveness and reducing its costs integrating information and simplifying access to it. Web-portals are a key to this task. Building regular architecture web-portals makes their development, expansion and adaptation simpler.

Web-portal, supporting the discipline "Databases and integrated management system" is considered very timely because, being introduced in the process of contemning education, it provides a user with well-timed and well-organized information, making this information accessible and easy to understand. This web-portal means regulated collection of data containing all the information necessary for fast data search, access on three user levels: administrator, moderator, user.

The next general functional aim, that can be formulated for nearly all the Information Technologies is satisfying the need for providing a reliable and well-timed presentation of full, trustworthy and confidential information for its further functional usage. The totality of the features, necessary for satisfying these needs, characterizes the quality of an information system functioning.

Here is a list of menaces which influence the quality of an information system functioning:

1. software and hardware insufficient reliability;
2. untimely processing and presentation of information;
3. staff and users accidental errors;
4. unauthorized access;
5. virus attack in the presence of antivirus precautions;
6. Outdated information stored in the data base in comparison with the real information.

The totality of features, which determine the possibility of usage proper use of an information system, is called its quality. The Quality is determined by technical, operating, economic and ergonomic characteristics of an information system. The Quality can be calculated with the help of a qualitative index which must have physical sense,

describe the quality in full, be easy to calculate and must not contradict each other.

A qualitative index is a vector. Indexes of features, that are by, serve as the components of this vector are represented.

The basic qualitative indexes of an IS are: productivity, reliability, denial resistance, scalability, compatibility, mobility, adaptability, effectiveness, time of response.

Building web-portals with proper architecture demands a complex analysis of the projected web-portal being designed.

The complex analysis includes the following tasks:

- Choice of software and hardware for the web-portal:
- Choice of machine code.

All the Internet servers are processed by Apacher Server, and Apacher Server PHP best of all interacts with, so when designing a specialized Internet web-portal which supports the discipline "Data bases and integrated control systems" the machine language PHP is considered the best choice:

- Carrying out calculations and ensuring the reliability of information system.

Reliability is characterized by probability of the service denial.

- • Carrying out calculations of the generic productivity of the information system. Productivity can be calculated either by the number of inquiries processed in a unit of time or by me time spent on processing one inquiry.