

UDC 004

## **ANALYSIS OF USER NEEDS AND THE SPECIFICS OF EDUCATIONAL INSTITUTIONS FOR THE CREATION OF COMMUNICATION SOFTWARE**

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In today's world, educational institutions increasingly rely on technology to improve communication between all participants in the educational process: administration, teachers, students and their parents [1]. Developing effective software to support communication activities is an extremely important step that allows you to optimize work processes, increase the level of interaction and ensure high-quality information exchange. One of the key stages of this process is the analysis of user needs and the specifics of each educational institution [2]. The following stages are proposed:

1. Definition of the main categories of users. Before starting software development, it is important to identify the main categories of users who will interact with the system. In educational institutions, such users are:

- administration deals with the management of the institution, planning of the educational process, accounting and reporting;

- teachers are responsible for conducting classes, evaluating students and communicating with parents;

- students are persons who study at the institution and use the software to access educational materials, communicate with teachers and other students;

- parents are interested in their children's academic performance, and also receive important information about the educational process.

2. Analysis of the needs of each category of users. Each of the categories of users has its own specific needs that must be taken into account during software development:

- administration needs (simplified access to statistics and reports on students' progress; tools for planning schedules and managing educational courses; tools for setting up communication between all participants in the educational process);

- needs of teachers (the ability to create and share educational materials; functionality for keeping electronic journals and evaluating students; convenient means of communication with students and parents) [3];

- student needs (access to educational materials, schedules and assessments in a convenient format; tools for communication with teachers and classmates; the ability to receive instant notifications about important events and classes).

- parents needs (convenient access to information about childrens academic performance and attendance; the possibility of communication with the administration and teachers for clarifications).

3. Determination of the specifics of the educational institution. The specifics of each educational institution can significantly affect the software requirements. Among the important aspects that should be taken into account, we can highlight:

- type of educational institution: schools, universities, vocational schools - each type has its own characteristics and needs.

- size of the institution: large institutions may need a more complex system capable of processing a large amount of data and requests;

- available resources: it is necessary to take into account whether the system will be supported by the institutions IT department, or whether external technical support is required.

Analysis of user needs and the specifics of educational institutions is not just necessary, but a critically important stage in the development of effective communication software [4]. Taking into account the specific requirements of all participants in the educational process, software will be created that will meet the needs of the modern educational environment, and will contribute to increasing the effectiveness of communication and interaction between all participants in the process. Thus, the right approach to analyzing user needs will ensure the success and long-term benefits of new software for educational institutions.

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