ABSTRACT

The size of the explanatory note is 80 sheets, contains 6 illustrations, 21 tables, 6 appendices, 23 references to sources.

Topicality. Today, many users are faced with the problem of ineffective time management due to the growth of the volume of information, tasks and obligations both in education and work. Existing task planning and organization systems do not always provide a sufficient level of interactivity and flexibility to address the individual needs of users, which leads to a decrease in productivity and high-quality task performance.

The aim of the study. The purpose of the research is to improve software for the work time organization system, optimize time management processes, increase the productivity and efficiency of task performance by users.

Research object: Processes for developing an architectural and software solution for a work time planning system.

Research subject: Methods, technologies and tools that will increase the efficiency of task performance by users and reduce planning time.

To achieve this goal, **the following tasks** have been formulated:

− to conduct an analysis of existing solutions for planning and time management, including their advantages and disadvantages;

− to explore modern technologies and tools that can be used for software development;

− to study methods and approaches used in the design of time management systems using machine learning algorithms;

− to develop an architectural solution for software;

− to develop software for planning working hours taking into account modern technologies.

The scientific novelty. The method of task distribution has been improved, which ensures the generation of an individual schedule for users, in order to create a more adaptive and personalized system that will increase the productivity and efficiency of planning.

The practical value. The practical value of the software developed lies in its wide application for both individual users and organizations. In addition, the software has the potential for use in educational institutions for both individual needs and team projects, which will contribute to improving the organization of the educational process.

Relationship with working with scientific programs, plans, topics. Work was performed at the Department of Informatics and Software Engineering of the National Technical University of Ukraine «Kyiv Polytechnic Institute. Igor Sikorsky».

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1) Kurzhumova M. I., Rodionov P. Yu. System of recommendations in software for organizing working time. Materials of the VI International Scientific and Practical Conference of Young Scientists and Students “Software Engineering and Advanced Information Technologies” (SoftTech-2023). Kyiv, Ukraine, May 21-23, 2024. P. 84–88.

2) Rodionov P. Yu., Marchenko O. I., Kurzhumova M. I. Features of developing software for organizing working time. Science and Technology Today. 2024. Vol. 34, No. 6. – P. 1076–1086.

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