DEVELOPMENT OF AN INFORMATION SYSTEM FOR THE OPTIMISATION OF PROJECT TEAM COMPOSITION

Morhun A.A., Sushko H.V., Kononenko I.V.
National Technical University «Kharkiv Polytechnic Institute», Kharkiv

In today's world, the success of any project depends largely on the composition of its team. The right mix of skills, experience and personalities can propel a project towards its goals, while an inappropriate team can lead to delays, conflict and ultimately failure. However, determining the optimal team composition is a complex task that requires consideration of many factors and constraints.

The traditional approach to team formation often relies on the intuition and experience of the project manager. While this method has its merits, it is subjective and can be influenced by bias. In addition, it may not scale well with the increasing size and complexity of projects in today's fast-paced industries.

Recently, a method for selecting team members that takes into account the uncertainty and subjectivity of the information that influences the selection of team candidates was described in [1]. The authors proposed a mathematical model that takes into account the candidate's competencies, payment, and working time within constraints such as minimum competencies, budget, laboriousness, and project implementation time.

In this paper, we will present the development of an information system designed to optimise the composition of project teams according to [1]. The information system will be a web application. The following pages will be present: registration, authorisation, optimisation, history of previous optimisations, payment, user profile, feedback and pages describing the optimisation. The information system will be available in two languages: Ukrainian and English. It will have free and paid subscriptions. The system will be designed with a user-friendly interface and robust security measures to ensure data privacy and protection. It will also be scalable to accommodate a growing number of users and adaptable to evolving project team needs.

The results of this study may significantly streamline the process of team formation, leading to more successful projects and higher levels of satisfaction among team members.

References:

1. Kononenko, I. Mathematical model of software development project team composition optimization with fuzzy initial data [Text] / I. Kononenko, H. Sushko //Radioelectronic and Computer Systems. – 2021. – Vol. 3. – P. 149-159. DOI: 10.32620/reks.2021.3.12.