УДК 65.012
Оліферчук О.Ю., Шведа Н.М.
Тернопільський національний технічний університет імені Івана Пулюя

ВДОСКОНАЛЕННЯ РОБОТИ КОМАНДИ ПО РОЗРОБЦІ АВТОМАТИЗОВАНОЇ СИСТЕМИ УПРАВЛІННЯ УНІВЕРСИТЕТОМ, НА ПРИКЛАДІ ТНТУ

Oliferchuk O., Shveda N.

IMPROVING THE PERFORMANCE OF THE DEVELOPMENT TEAM IN AUTOMATED UNIVERSITY MANAGEMENT SYSTEM CREATING, ON EXAMPLE OF TNTU

In an era where technological advancements are transforming every facet of our lives, universities must adapt and embrace automation to streamline their operations and enhance their efficiency. The development and implementation of an automated university management system are pivotal in achieving these goals. The successful realization of such system requires a collaborative effort, meticulous planning, and a dedicated team that is motivated to achieve excellence.

A team is a group of individuals who come together to work towards a common goal or objective. Organizing the work of a team is crucial for facilitating collaboration, enhancing productivity, enabling clear communication, promoting accountability, and fostering adaptability. It creates a structured framework within which team members can align their efforts and work together towards the shared goals of the organization.

Ternopil Ivan Puluj National Technical University (TNTU) is a higher education institution located in Ternopil, Ukraine. TNTU focuses on providing quality education and conducting research in areas such as mechanical engineering, computer science, electrical engineering, civil engineering, architecture, economics, and management. The university aims to prepare highly skilled professionals who can contribute to the development of their respective fields and meet the demands of the global job market.

TNTU is creating a custom automated system for automating its operational needs. A development team was formed for this aim. It is advisable to offer some suggestions for improving team performance.

I believe that first and foremost for improving the performance of the development team, it is essential to foster a culture of effective communication and collaboration within the development team. Transparent and open lines of communication enable team members to share their ideas, concerns, and knowledge freely. By promoting a collaborative environment, we can harness the collective intelligence of the team, leading to innovative solutions and a more efficient development process.

For increasing the performance of the team, we should use agile methodologies. They have proven to be highly effective in software development, and they hold significant potential for creating an automated university management system. Agile principles, such as iterative development, frequent feedback loops, and continuous improvement, empower teams to adapt to changing requirements and deliver incremental value. By embracing agile practices, we can enhance the responsiveness and adaptability of the development team, ensuring that the automated university management system aligns with the evolving needs of TNTU.

Investing in the skill development and training of team members is another critical aspect of improving performance that we should apply to our team. As technology rapidly evolves, it is crucial to equip the team with the necessary knowledge and expertise. Regular training

programs, workshops, and access to relevant resources can enhance the team's capabilities in developing a sophisticated and user-friendly automated university management system.

Inside our team for following best performance practices, we should use a user-centric approach that is paramount when designing and developing the system. Understanding the needs, expectations, and pain points of the end users is crucial to delivering a solution that truly addresses their requirements. Through user testing, feedback collection, and continuous iteration, we can ensure that the automated university management system meets the unique demands of TNTU stakeholders. By placing the user at the center of our development efforts, we can create a system that enhances their experience and optimizes university operations.

Efficient project management and resource allocation are pivotal to the success of any development endeavor that is not an exception for our team also. By implementing effective project management methodologies, establishing clear goals and milestones, and allocating resources judiciously, we can optimize the team's performance and ensure the timely delivery of the automated university management system. It is imperative to identify potential risks and challenges early on and develop contingency plans to mitigate their impact.

Lastly, embracing DevOps principles can revolutionize the development process. DevOps promotes collaboration, automation, and continuous integration, enabling the team to achieve greater efficiency, reliability, and scalability. By automating repetitive tasks, implementing robust testing frameworks, and fostering seamless collaboration between development and operations, we can enhance the overall performance and quality of the automated university management system. Also, it'll help our teamwork to be more efficient.

In conclusion, the development of an automated university management system presents both challenges and opportunities. By improving the performance of our development team, we can overcome these challenges and unlock the full potential of automation in the realm of higher education. Through effective communication, agile methodologies, skill development, user-centric design, efficient project management, and embracing DevOps principles, we can create a powerful system that enhances the operations of TNTU and sets a benchmark for other institutions.

Список використаних джерел:
1. Вікіпедія. URL: https://en.wikipedia.org/wiki/Main_Page.
2. Нормативна база ТНТУ. URL: https://docs.tntu.edu.ua.