ABSTRACT

Web application development has changed significantly with the advent of Artificial Intelligence (AI) technology, which can speed up the development process and improve time efficiency. This study aims to compare the time efficiency and code quality between konvensional and AI-based web application development. The methodology used is application development using two approaches, conventional and AI-based, with development time measured and code quality analysed using SonarQube. The results showed that using AI reduced development time, especially for routine tasks, but resulted in code with more duplication and more security issues. On the other hand, conventional development resulted in code with less duplication and was more manageable, although it took longer. Code quality in terms of readability and modularity is better with the conventional approach, while AI is superior in terms of speeding up development time. In conclusion, the use of AI improves time efficiency, but developers should still pay attention to code quality to ensure applications are secure and maintainable.

Keywords: AI-*generated code, code duplication, maintenance, conventional vs AI-generated method, web application development, sonarqube*