ABSTRACT

Web-based Professional Work Administration Design with Genetic Algorithm Approach

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Professional work administration is a crucial aspect of academic activities in educational institutions. Manual processes in managing registration and scheduling often lead to inefficiencies and schedule clashes between students and examiners. To address these issues, this research develops a web-based professional work administration system integrated with genetic algorithms to automate scheduling. The system provides features such as student data management, registration validation, and optimized scheduling. Through the application of genetic algorithms, the scheduling process is executed effectively, minimizing conflicts and ensuring the availability of examiners. The implementation results demonstrate that this system improves efficiency, accuracy, and the speed of professional work administration processes, thereby supporting more organized and modern academic activities.

Keywords: Information System, Professional Work, Session Scheduling