

ABSTRACT

Design and Development of a Web-Based Final Project Administration Information System Using Genetic Algorithms (Case Study of the Information Systems Study Program at Universitas Pembangunan Jaya)

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The final project defense is a key component in higher education that evaluates students' final achievements. The scheduling process for final project defenses often encounters challenges such as schedule conflicts, lengthy processes, and errors resulting from non-integrated systems. This study aims to design and develop a web-based administrative information system for final project defenses using genetic algorithms, applied to the Information Systems Study Program at Universitas Pembangunan Jaya. The system offers automatic scheduling features that optimize scheduling arrangements based on time preferences, faculty availability, and room capacity. Genetic algorithms are utilized to minimize errors and reduce repetitions in the scheduling process. The study adopts the Rapid Application Development (RAD) approach to expedite system development. Testing results indicate that the system effectively reduces scheduling time, minimizes human errors, and enhances information transparency. Therefore, the proposed information system is expected to significantly contribute to the management of final project administration in educational institutions.

Keyword : *Administrative Information System, Scheduling, Genetic Algorithm, Rapid Application Development (RAD).*

Labraries : 14

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