AUTOMATED CLASS SCHEDULING SYSTEM FOR AEMILIANUM COLLEGE INC.

A Project Study Presented to the Faculty of the
Master in Information Technology
Aemilianum College Inc.
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PROJECT STUDY ABSTRACT

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The Automated Class Scheduling System for Aemilianum College Inc. is designed to streamline and optimize the process of creating class schedules, reducing manual workload and minimizing scheduling conflicts. This system aims to enhance efficiency in academic planning by automating schedule generation based on predefined constraints such as faculty availability, room capacity, and course requirements. The development of this system follows the Agile Development

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Methodology, ensuring flexibility, continuous improvement, and active stakeholder involvement throughout the development process.

During the development, testing, and evaluation of the Automated Class Scheduling System, several key findings were established. The system effectively managed faculty loadings, class programs, faculty schedules, and room utilization, streamlining the scheduling process and ensuring optimal resource allocation. The Admin Module played a crucial role in managing user roles, class scheduling configurations, and system settings, allowing administrators to oversee user management, maintain departmental schedules, and customize scheduling criteria to meet the institution's needs. Additionally, the integration of report generation within the system successfully provided comprehensive summaries of teaching loads, class programs, faculty schedules, and room utilization, thereby facilitating data-driven decision-making and efficient resource management. The system was evaluated against the ISO 25010 industry standards and was found to meet the expected levels in functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability. It achieved a 3.17 overall mean from the evaluators, indicating that it met expectations across all quality attributes.

Based on these findings, several conclusions were formulated. The Automated Class Scheduling System was successful in managing faculty loadings,

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class programs, faculty schedules, and room utilization, optimizing the scheduling process and resource allocation. The Admin Module was effective in handling user management, class scheduling configurations, and system settings, ensuring that administrators could easily maintain schedules and customize the system to fit institutional requirements. The report generation feature proved to be an essential tool for providing insights into teaching loads, faculty schedules, and room utilization, aiding in data-driven decision-making and resource management. Furthermore, the system met ISO 25010 industry standards in terms of various quality attributes, with an overall mean of 3.17, which reflected that it met evaluators' expectations across all areas.

From the conclusions, several recommendations were made. The Automated Class Scheduling System effectively streamlined the management of faculty loadings, class programs, faculty schedules, and room utilization, ensuring efficient resource allocation. The Admin Module provided administrators with an effective tool for managing user roles, class scheduling, and system settings, allowing the system to align with institutional requirements. The report generation feature continued to provide valuable insights that supported effective decision-making. The system's successful adherence to ISO 25010 standards across various quality attributes, with a 3.17 overall mean, demonstrated that it met evaluators' expectations. Additionally, the seamless integration of all features and functionalities in the system highlighted

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its overall effectiveness in improving the class scheduling process and enhancing operational efficiency.