

DESIGN OF ACADEMIC INFORMATION SYSTEM FOR REAL-TIME WEB-BASED MONITORING OF STUDENT LEARNING

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ABSTRACT

Madrasah Diniyah Takmiliyah (MDT) Yassirlana faces challenges in managing academic data which is still done manually, such as student registration, attendance recording, grade management, and payments. This manual system is not only time consuming but also prone to errors, such as data loss and delays in information distribution. To overcome these problems, this study designs and implements a web-based academic information system that is able to integrate academic processes comprehensively and monitor student learning progress in real-time. The research methodology includes location surveys, problem identification, needs analysis, system design with Unified Modeling Language (UML), implementation using the Laravel framework for the back-end and Bootstrap for the front-end, and testing with the black box method. This system is built to allow students to register online, teachers to manage grades and attendance digitally, and parents to monitor academic progress and payments easily through an integrated platform. The test results show that the system functions with a success rate of 85%, with the main modules such as student data management, grade management, attendance, and real-time reports running optimally. With this solution, Madrasah Diniyah Takmiliyah Yassirlana can develop more modern, structured, and responsive educational services to the needs of stakeholders.

Keywords: *Academic Information System, Web, Real-Time, Education, MDT.*