UNIVERSITI TEKNOLOGI MARA

LEARNING MANAGEMENT SYSTEM FOR AL-ITQAN (AssistIQ+) BY IMPLEMENTING INFORMATION VISUALISATION THEORY

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ABSTRACT

Management Information Systems (MIS) are vital for organizations as they provide the necessary tools and data to enhance productivity, reduce costs, and support effective decision-making. Academy located in Kuala Nerus, Terengganu, specializes in Quran and Iqra' recitation, and tuition services for primary and secondary school subjects. Al Itqan Academy faces several challenges, such as being time-consuming and prone to errors during data, challenging to find tutors who effectively match the needs of the students, and inefficient record keeping for class management, payment processes, and progress tracking. To address these issues, the objective of this project is to develop learning management system for Al Itqan Academy (AssistIQ+) by implementing information visualization theory. In the educational sector, a well-structured learning management system (LMS) is crucial for facilitating the learning process, ensuring accountability, and optimizing resources, which is particularly important for Al Itqan Academy. This project follows an adapted waterfall model consisting of six phases; planning, analysis, design, implementation, testing, and documentation. This project aims to reduce time taken and errors in the registration process, and also to improve the matching process between tutors and students. As well as enhance the efficiency of record-keeping in Al Itqan Academy. The evaluation has been conducted based on three experts and 31 potential users, based on usability and nine elements in the theory. The results indicated that AssistIQ+ meets essential functional and usability standards. This demonstrates that the system is practical and reliable. Conclusively, it is expected to support academic management effectively and should be further enhanced for future use.

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CHAPTER TWO: LITERATURE REVIEW