UNIVERSITI TEKNOLOGI MARA

'KELAS BIJAK' LEARNING MANAGEMENT SYSTEM BY IMPLEMENTING THE GENERAL ARCHITECTURE OF AN LMS

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ABSTRACT

The Learning Management System (LMS) called 'Kelas Bijak', which intends to combine teaching and learning by serving as a system for proper resource management, assessments, and report cards. All LMS have indeed been the conspicuous facades of education in this modern era that change the way students and teachers grit their teeth across the table together with other administrators. The project will address the primary school students and teacher's problems at Sekolah Kebangsaan Tanjong Mas, knowing that locality does not have localized digital tools in Bahasa Melayu that support interactive learning. Kelas Bijak is built on the General Architecture of an LMS, which specifies three core components as follows: learner (student), instructor (teacher), and administrator (admin). It adopts the Adapted Waterfall Model implementing a structured project framework, which is a method of carrying out phases such as Requirement Analysis, System Design, System Development, Testing, and Documentation. In keeping with the design, teachers can manage materials as well as develop assessments and track student performance, while students can access resources, complete tasks, and monitor their progress. The effectiveness of the system has been evaluated by three experts, who made their assessment based on functionality and content quality. The three experts' evaluation demonstrates that the LMS is effective and user-friendly, not to mention its suitability for the intended purpose. Findings also show that 'Kelas Bijak' democratizes access to learning materials, stimulates interactive education, and facilitates both teaching and learning processes. The present project further discusses its achievements and areas for improvement, such as incorporating personalized learning features, gamification elements into the learning, and making the system mobile optimized.

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