

UNIVERSITI TEKNOLOGI MARA

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

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JANUARY 2025

ACKNOWLEDGEMENT

Alhamdulillah, all praises and thanks are due to Allah-the Almighty and Mightiest place on earth-who granted me the count high in completing my final year project entitled: 'Kelas Bijak' Learning Management System by Implementing the General Architecture of an LMS. I would, without doubt, extend my heartfelt thanks to Ts. Dr. Mohd Talmizie Bin Amron, my supervisor, has been very helpful in guiding me through my project. His valuable counsel and encouragement made this work possible as well as making it realized successfully. I owe my appreciative gratitude for his patience and constructive criticism in helping me refine my ideas and essentially realize my objectives.

It is to be noted that, apart from this, my thanks go to the CSP600 and CSP650 lecturer, namely, Puan Siti Nurul Hayatie Ishak, for their providing and helping me with the resources to conduct this project. My special thanks also go to my peers, my classmates, and any participants that took some time and effort participating in sharing their perspectives and feedback. That made their input very critical in addressing the needs and evaluation of the system.

Finally, I express my deep gratitude to my family for their support and encouragement throughout this period. It was their understanding and encouragement that kept me focused and motivated to get this project through to completion. This work wouldn't have become a reality without the combined efforts and contributions of all these people, and I am very grateful to each one of them.

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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