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WEB-BASED ADMINISTRATION OF ONLINE MULTIPLE-CHOICE TEST

A thesis submitted to the Graduate School in fulfillment
of the requirements for the degree
Master of Science (Information Technology)
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BY
Ramli bin Awang

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ABSTRAK (BAHASA. MELAYU)

Tujuan projek ini ialah untuk membangunkan satu prototip sistem ujian atas-talian bagi ujian aneka pilihan untuk digunakan di Maktab Perguruan Perlis, Perlis. Sistem ini telah dibangunkan untuk memudahkan pengurusan dan pentadbiran ujian atas-talian. Ia berasaskan intranet dan berakitekturkan pelayan/pelanggan. Metodologi Rekabentuk Pangkalan Data dan teknik *Rapid Prototyping* telah digunakan untuk membangunkan sistem. Sistem ini telah dicuba *(trial-run)* di Maktab Perguruan Perlis pada sekumpulan pelajar dengan menduduki ujian atas-talian. Segala kelemahan dan batasan pada sistem yang dikenalpasti telah dibincangkan dan beberapa syor dikemukan untuk mengatasi kelemahan ini agar ia dapat membantu dalam pembangunan projek ini pada masa akan datang.

ABSTRACT

The purpose of this project is to develop a prototype of a web-based administration of online multiple-choice test system to be used in Perlis Teachers Training College, Perlis. The system was developed to facilitate in managing and administrating an online test. It is a client/server architecture which is based on intranet. Database Design Methodology and Rapid Prototyping technique were used to build the system. The system was trial-run in Perlis Teachers Training College by a group of students sitting the online test. Problems and limitations discovered were then discussed and recommendations made to overcome the limitations for the future development of the project.

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May Allah bless us.

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INTRODUCTION

This project is initiated upon the request of course TZ6996 as one of the requirement of MSc(IT) course. The purpose of this project is to develop a prototype system of a web-based administration of online multiple-choice test for Perlis Teachers Training College. Database Design Methodology and Rapid Software Prototyping Technique will be used in modeling the system. For the notation, Unified Modeling Language (UML) and its Web Application Extension (WAE) are chosen because they are now standard notations for most methodologies.

This chapter gives an overview of Teacher's Education Division of Ministry of Education Malaysia, brief explanation about RDBMS and web database application. The problem statement, objectives, project scope, hardware and software requirements of the project are also discussed.

1.1 Teacher's Education Division

Teacher's Education Division is a one of the divisions in Ministry of Education. It sole function is to manage all the teacher's training colleges. Currently there are 27 teacher's training colleges located all over Malaysia (Kementerian Pendidikan Malaysia, 2003).

Teacher's training college is a formal institution, responsible for giving training to teacher trainees. Courses are also conducted to the existing teachers in order to enhance

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