

**UUM WEB-BASED COMPUTER LABORATORY
RESERVATION SYSTEM: A PROTOTYPE**

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UNIVERSITI UTARA MALAYSIA

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**UUM WEB-BASED COMPUTER LABORATORY RESERVATION
SYSTEM: A PROTOTYPE**

A project submitted to the Graduate School in partial fulfillment of the requirements
for the degree Master of Science (Information Technology), Universiti Utara
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ABSTRAK

Sistem tempahan makmal secara online adalah salah satu sistem yang banyak dilaksanakan di institusi-institusi pendidikan terutamanya di peringkat universiti. Sistem yang dibina ini dilaksanakan dalam bentuk aplikasi web kerana banyak faedah yang diperolehi dengan penggunaan aplikasi web.

Dengan penambahan jumlah pengguna makmal komputer yang terdiri daripada pelajar dan pensyarah, wujud masalah ketidakcukupan agihan komputer kepada pengguna di makmal komputer. Tujuan prototaip sistem tempahan makmal komputer berasaskan laman web ini dibina adalah untuk mengatasi masalah tersebut dan memudahkan pengurusan dan pengemaskinian maklumat tempahan.

Metodologi yang digunakan untuk membangunkan sistem ini adalah *Object Modelling Technique (OMT)* yang terdiri daripada lima fasa iaitu analisis, rekabentuk sistem, rekabentuk object, pelaksanaan dan pengujian. Pangkalan data yang digunakan untuk membina sistem ini adalah MySQL dan PHP sebagai bahasa pengaturcaraan. Manakala pelayan yang digunakan adalah apache dan web ini boleh dicapai dengan Internet Explorer 6.0. Faedah yang boleh diperolehi daripada sistem ini adalah pengguna boleh melihat status komputer pada bila-bila masa dan di mana jua apabila ingin membuat tempahan. Dengan wujudnya faedah ini, maka pengguna sistem ini boleh menjimatkan masa dan kos.

ABSTRACT

Online computer laboratory reservation system is a system that has been implemented to many education institutions especially at university level. This develop system is implemented using web-based application because it gives many benefits.

The increment of the computer laboratory user's, it generates insufficient computer distribution among the user in the computer laboratory. Therefore, the purpose of this prototype computer laboratory reservation system through web is to solve this problem and in addition it also will ease the management in updating the reservation record.

Methodology used to develop the system is Object Modeling Technique (OMT) that consist of five phases namely analysis, system design, object design, implementation and testing. Database used to develop the system is MySQL with PHP programming language. Apache server will be use as a server to run the system and Internet Explorer 6.0 as a web browser of the system.

The main benefit of the prototype system is the user can view the availability of the PC at anytime and from anywhere during reservation. This system is enable to save time and cost.

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LIST OF ABBREVIATIONS

ASP	Active Server Pages
DBA	Database Administrator
DBMS	Database Management System
DFD	Data Flow Diagram
ER	Entity Relationship
E-reserve	Electronic reserve
ERP	Enterprise Resource Planning
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
IIS	Internet Information Server
IS	Information System
ISLAN	Integrated Sintok Local Area Network
MySQL	My Structured Query Language
OMT	Object Modeling Technique
OOSE	Object Oriented Software Engineering
RAM	Random Access Memory
SA/SD	System Analysis/System Design
SQL	Structured Query Language
SSADM	Structured System Analysis and Design Method
UML	Unified Modeling Language
WWW	World Wide Web

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CHAPTER ONE

INTRODUCTION

This project is to fulfill upon the request of course Thesis/Project (TZ6996) as one of the graduation requirements for Master Science in Information Technology (MSc. IT) in University Utara Malaysia. The purpose of this project is to generate a model or a prototype of UUM Web-Based Computer Laboratory Reservation System.

This chapter gives an overview of organization, and further discussion about the problem statement, requirements, objectives, significance of the project and project scope.

1.1 Overview Of Organization

UUM is located at Sintok, Kedah; 48 kilometres of north Alor Setar, the capital of Kedah and 10 kilometres east of Changlun, a small town on the North-South Highway. The university was established to pursue the development of management education. Its academic programmes focus on such disciplines as management, accountancy, economics, information technology, public administration and human resource development.

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