

BORANG PENGESAHAN STATUS TESIS

Judul : FTMK - Lab Equipments Booking System.

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FTMK - LAB EQUIPMENTS BOOKING SYSTEM (FTMK – LEBS)

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**This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)**

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2010

DECLARATION

I hereby declare that this project report entitled
LAB EQUIPMENTS BOOKING SYSTEM

is written by me and is my own effort and that no part has been plagiarized without
citations.

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DEDICATION

This thesis is dedicated to my parents and someone special who have supported me all the way since the beginning of my studies. Also, this thesis is dedicated to my fellow friend who has been a great source of motivation and inspiration. Finally, this thesis is dedicated to all those who believe in the richness of learning.

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ABSTRACT

FTMK Lab Equipment Booking System (FTMK – LEBS) is a system that provides an admin to record the information and manages the multimedia equipment for borrowed by student or lecturer to be use in their project such as Bengkel II, Projek Sarjana Muda or some presentation. This system will help the student or lecturer to booking the multimedia equipment such as touch screen, PDA, projector, switch, modem and so on before they could borrow it. Laboratory technician (the authority person/admin) can manage and make approval for multimedia equipment booking application booked by user. The admin can add, update and delete the multimedia equipment. This system hope will help the student or lecturer to book multimedia equipment with more easier and save time. Technician also can manage the multimedia equipment with more systematic. This system consists of three users that is student, staff and admin. Technician or admin will manage the lab equipment and make multimedia equipment booking application approved or not and the application approval would be sent via e-mail. Student and staff can book the lab equipment and also can search the lab equipments that they want borrow is able or not and on the other hand would be managing and monitor the equipment that have been borrowed. By developing this system, hopefully can help students and staff to book some lab equipments for some project or presentation with more easily and faster and also can help admin manage the lab equipments with more systematic.

ABSTRAK

Sistem tempahan peralatan makmal FTMK (FTMK – LEBS) satu sistem yang menyediakan satu pentadbiran merekodkan maklumat dan menguruskan peralatan multimedia yang dipinjam oleh pelajar atau pensyarah untuk kegunaan dalam projek mereka seperti Bengkel II, Projek Sarjana Muda atau persembahan. Sistem ini akan membantu pelajar atau pensyarah untuk menempah peralatan multimedia seperti skrin sentuh, PDA, projektor, suis, modem dan sebagainya sebelum mereka boleh meminjamnya. Juruteknik makmal (orang kuasa/pentadbiran) boleh mengurus dan membuat kelulusan untuk permohonan tempahan peralatan multimedia yang ditempah oleh pengguna. Pentadbiran juga boleh menambah, kemas kini dan memadamkan peralatan multimedia. Sistem ini harap akan membantu pelajar atau pensyarah untuk menempah peralatan multimedia dengan lebih mudah dan menjimatkan masa. Juruteknik juga boleh mengurus peralatan multimedia dengan lebih sistematik. Sistem ini mengandungi tiga pengguna iaitu pelajar, kakitangan dan pentadbiran. Juruteknik atau pentadbiran akan menguruskan peralatan makmal dan membuat permohonan tempahan peralatan multimedia diluluskan atau tidak dan kelulusan permohonan itu akan dihantar melalui e-mel. Pelajar dan kakitangan boleh menempah peralatan makmal dan juga boleh mencari peralatan-peralatan makmal yang mereka mahu pinjam samaada peralatan itu boleh dipinjam atau tidak. Pentadbiran pula akan menguruskan dan memantau peralatan yang telah dipinjam. Dengan membangunkan sistem ini, semoga dapat membantu pelajar-pelajar dan kakitangan membuat tempahan peralatan-peralatan makmal dengan mudah dan lebih cepat dan juga boleh membantu pentadbiran menguruskan peralatan-peralatan makmal dengan lebih sistematik.

TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENTS	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLE	xii
	LIST OF FIGURES	xiii
CHAPTER I	INTRODUCTION	
	1.1 Project Background	1
	1.2 Problem Statements	2
	1.3 Objectives	3
	1.4 Scopes	4
	1.4.1 Target user	4
	1.4.2 Modules	5
	1.5 Project Significance	6
	1.6 Expected Output	6
	1.7 Conclusion	6

CHAPTER II	LITERATURE REVIEW AND PROJECT METHODOLOGY	
2.1	Introduction	8
2.2	Facts and findings	9
	2.2.1 Client-Server Application (Three-Tier)	9
	2.2.2 Existing System	10
	2.2.3 Techniques	11
2.3	Project Methodology	12
2.4	Project Requirements	14
	2.4.1 Software Requirement	14
	2.4.2 Hardware Requirement	15
2.5	Project Schedule and Milestones	15
2.6	Conclusion	17
CHAPTER III	ANALYSIS	
3.1	Introduction	18
3.2	Problem Analysis	19
	3.2.1 Background of current system	19
	3.2.2 Context Diagram	21
	3.2.2 Data Flow Diagram (DFD)	21
3.3	Requirement Analysis	22
	3.3.1 Data Requirement	23
	3.3.2 Functional Requirement	25
	3.3.3 Non Functional Requirement	25
	3.3.3.1 System Qualities	26
	3.3.4 Other requirement	28
	3.3.4.1 Software Requirement	28
	3.3.4.2 Hardware Requirement	31
	3.3.4.3 Network Requirement	31
3.4	Conclusion	31

CHAPTER IV	DESIGN	
4.1	Introduction	33
4.2	High-Level Design	33
4.2.1	System Architecture	34
4.2.1.1	Lab Equipments Booking System	35
4.2.1.2	Lab Equipments Booking System Database	35
4.2.2	User Interface Design	36
4.2.2.1	Navigation Design	44
4.2.2.2	Input Design	45
4.2.2.3	Output Design	48
4.2.3	Database Design	49
4.2.3.1	Conceptual Database Design	49
4.2.3.2	Logical Database Design	51
4.2.3.2	Normalization	52
4.3	Detailed Design	53
4.3.1	Software design	53
4.3.2	Physical Database Design	53
4.3.2.1	Data Definition Language (DDL)	53
4.4	Conclusion	56

CHAPTER V	IMPLEMENTATION	
5.1	Introduction	57
5.2	Software Development Environment Setup	58
5.3	Software Configuration Management	59
	5.3.1 Configuration Environment Setup	60
	5.3.2 Version Control Procedure	60
5.4	Implementation Status	62
5.5	Conclusion	64
CHAPTER VI	TESTING	
6.1	Introduction	65
6.2	Test Plan	66
	6.2.1 Test Organization	66
	6.2.2 Test Environment	67
	6.2.3 Test Schedule	68
6.3	Test Strategy	69
	6.3.1 Classes of Tests	70
	6.3.1.1 User Acceptance Testing	70
	6.3.1.2 System Testing	70
	6.3.1.3 Integration Testing	71
	6.3.1.4 Unit Testing	71
6.4	Test Design	72
	6.4.1 Test Description	72
	6.4.1.1 Unit Testing	72
	6.4.1.2 Integration Testing /	
	System Testing	75
	6.4.2 Test Data	80
6.5	Test Results and Analysis	81
6.6	Conclusion	82

CHAPTER VII	PROJECT CONCLUSION	
7.1	Observation on Weaknesses and Strengths	83
	7.1.1 System Strengths	83
	7.1.2 System Weaknesses	84
7.2	Proposition for Improvement	84
7.3	Contribution	85
7.4	Conclusion	86
	REFERENCES	87
	BIBLIOGRAPHY	88
	APPENDICES	89

LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Software Requirements	14
2.2	Hardware Requirements	15
2.3	Phases, duration taken and the milestone produced at each phase	15
3.1	Data Requirement for Admin	23
3.2	Data Requirement for User	23
3.3	Data Requirement for Booking	24
3.4	Data Requirement for equipment	25
3.5	Data Requirement for model	25
3.7	Performance System Qualities	26
3.8	Integrity System Qualities	26
3.9	Security System Qualities	26
3.10	Usability System Qualities	27
3.11	Maintenance System Qualities	27
3.12	Constraints System Qualities	27
3.13	Description of Software Requirement	28
3.14	Description of Hardware Requirement	31
3.15	Description of Network Requirement	31
4.1	Input design for Lab Equipments Booking System	46
4.2	Output design for Lab Equipments Booking System	48
4.3	Table Admin	51

4.4	Table user	51
4.5	Table booking	51
4.6	Table equip	52
4.7	Table for model	52
4.8	Table SMS	52
4.9	Table Email	52
5.1	Development Environment for LEBS	59
5.2	Version Control Procedure	61
5.3	Implementation Status	62
6.2	Test Environment Specification	67
6.3	Test Schedule	68
6.4	Black Box Testing and White Box Testing	
	Test Classes	69
6.5	Test Cases for Login Module	72
6.6	Test Cases for Booking Module	73
6.7	Test Cases for Update Profile Module	74
6.8	Test Cases for Booking Approval Module	74
6.9	Test Cases for Manage Equipments Module	75
6.10	Test Result and Analysis for Login Module	75
6.11	Test Result and Analysis for Booking Module	77
6.12	Test Result and Analysis for Update Profile Module	78
6.13	Test Result and Analysis for Add, Delete and Update Lab Equipments Module	78
6.14	Test Result and Analysis for Searching Module	79
6.15	Test Data for FTMK-LEBS	80
6.16	Test Result and Analysis	81

LIST OF FIGURES

DIAGRAM	TITLE	PAGE
2.1	Three-Tier Architecture	9
2.2	Main Page of Vanderbilt booking system	10
2.3	Form login of Booking system page	11
2.4	Form of Booking system	11
2.5	V-Shape Model	13
3.1	Flow chart for current system	19
3.2	Context Diagram for Lab Equipments Booking System	21
3.3	DFD for Lab Equipments Booking System	22
4.1	System Architecture in LAB EQUIPMENTS BOOKING SYSTEM	34
4.2	Staff/Student main page of Lab Equipments Booking System	36
4.3	Admin main page of Lab Equipments Booking System	37
4.4	Login user form of Lab Equipments Booking System	37
4.5	Login admin form of Lab Equipments Booking System	38
4.6	Booking form of Lab Equipments Booking System	38

4.7	View updates profile form of Lab Equipments Booking System	39
4.8	View booking list form of Lab Equipments Booking System	40
4.9	View booking detail form of Lab Equipments Booking System	41
4.10	Change password form of Lab Equipments Booking System	41
4.11	Forgot password form of Lab Equipments Booking System	42
4.12	Send SMS form of Lab Equipments Booking System	43
4.13	Send Email form of Lab Equipments Booking System	43
4.14	Manage Equipments form of Lab Equipments Booking System	44
4.15	Navigation Design of Lab Equipments Booking System	45
4.16	ERD in Lab Equipments Booking System	50
4.17	Create database lebs	54
4.18	Create table adminlogin	54
4.19	Create table userlogin	54
4.20	Create table booking	55
4.21	Create table equip	55
4.22	Create table model	55
4.23	Create table email	55
4.24	Create table SMS	56
5.1	Software Environment Setup	58

CHAPTER I

INTRODUCTION

1.1 Project Background

Universiti Teknikal Malaysia Melaka (UTeM) was formerly known as Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM) and was established on 1 December 2000. After the re-branding of KUTKM it is now known as UTeM commencing 1 February 2007. There are seven faculties in UTeM such as Faculty of Electronic and Computer Engineering, Faculty of Mechanical Engineering, Faculty of Manufacturing Engineering, Faculty of Technology Management and Technopreneurship, Faculty of Electrical Engineering and Faculty of Information and Communication Technology.

Our FTMK have borrowed lab equipment service for the staffs and students. By apply the lab equipment, they will get the equipment that they apply. However, there are several problems, which are related to its service in application process. Although the system application is a simple procedure but it takes long time to complete one application process. Thus, we would like to introduce Lab Equipments Booking system that allows user to apply lab equipments wherever they are by accessing through online faster and effective. Lab Equipments Booking system also a system which is easy to update.

1.2 Problem Statements

There are few problems or can be said weakness identified in the current manual notification system for student and staff FTMK. The problem that identified listed as follows:

(a) Lack of information

Students or staffs may not know where they should go to apply and borrow the equipment. They also not know what documents that they should bring along to apply the equipment. For example: Documents that required such as a copy of identity card, or matrix card or something else. If one of the required documents not submitted the application maybe might be postpone till all document complete.

(b) Waste of time

If more people queue up to apply at one time at the admin office, there might be take time to response each one of them to settle the application. Students or staffs may have to attend classes or any other important work besides waiting to their turn.

(c) Late response from the admin officers

After the application complete, students and staffs have to get the equipment which have applied. Every time the students and staffs have to refer to the office whether the equipment is done or not. There are some complaints that the admin are not around or busy with their work when we go to the office. More application might slow the process to be done fast because using manual.

(d) Information not updated

Old system is not regularly update because registered manually. By using Lab Equipments Booking system, the admin may easily update the information faster by just search the equipments name or id model. Besides, no need paper resources to fill up the information. Low cost because less paper usage. The admin just need to change if any changes in the Lab Equipments Booking system database.

1.3 Objectives

The main objectives of our Lab Equipments Booking system to solve the weakness of the current system as follows:

(a) To provide guidelines for application

We will provide details steps how to apply as well. So, user easily can fill in the form through Lab Equipments Booking system and send to our admin for further process.

(b) To make convenient and faster application wherever access through online

Students or staffs no need to queue up in the admin office to get the manual form as well. They can access through online wherever they are. The application can be complete by following steps in few minutes.

(c) To deliver mail to the user (student/staff) to announce booking application status.

Students or staffs no need to refer many time to office, just have to wait till the notification from the officers to their email. After get the mail,

they may proceed to get the equipments at office. Save time and energy as well.

(d) To create an effective and up to date online Lab Equipments Booking system

The admin officers can update the equipments details if necessary through Lab Equipments Booking system and no need manual paper that need to keep piles of files as recovery file. Just keep the details into the Lab Equipments Booking system database that is always updated if have changes.

1.4 Scopes

Our system will focus primarily on booking equipments, verification and notification system for FTMK. Target user divided into two groups:

1.4.1 Target user

a) Student

Approval for student application will be done by admin or faculty of the entire student.

b) Staff

Approval for staff will be done by application officers

1.4.2 Modules

The application of Lab Equipments Booking system divided into five (5) modules:

a) Login

Login section will be including three users: admin, student and staff. Each user will login using their id and password into the system as well.

b) Booking

All FTMK staff and student can book the lab equipment at booking form page before user can borrow the equipments.

c) Verification

In this section, if the applier is FTMK student or staff, system will be allowing users to enter this system and the application for booking lab equipment will be proceed.

d) Notification

In this section, the approved application will be processed and the data will be kept into database. Then, a notification mail will be sent to applier email.

e) Administration

Admin as usual will keep user details. We can said admin manage the Lab Equipments Booking system and database such as check booking from user, manage lab equipments, and so on.

1.5 Project Significance

One of the main purposes to develop Lab Equipments Booking system is to provide an effective and easier booking, equipments management for students and staffs. Lab Equipments Booking system is designed to ensure all the details are collected from applicer is correct and safe to be saving into database. Lab Equipments Booking system is also convenient to use as it can be accessed anywhere at any time as long as user has an internet connection as well. Lab Equipments Booking system also developed to make a simple procedure of lab equipment booking application is done fast and effective.

1.6 Expected Output

The project is basically built with web based components. The first component is the online application where used by applicer, the person who will approve the application and the admin officer. A verification mail will be sent to administrator and further process done by admin. Then, after equipments is ready another notification mail sent to applicer to announce to collect the equipment. The second component is the database, where used to store all the data including equipments details, booking detail, user detail and so on.

1.7 Conclusion

This chapter contains the detail description of the proposed project which is Lab Equipments Booking system. Our system will provide a whole new perspective on notification and verification method. We hope the system will help the student and staff to make lab equipment application easier and efficient. In this chapter, the possible solution is also suggested.

Chapter II will discuss on the literature review and the methodology that will be used in this system. Literature review will describe all the research and findings related to this project and the methodology selected to develop this project.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter will discuss the analysis and existing or similar application that is related to the project. Literature review will focus on the research of the existing and future application. Literature review is a process of searching, collecting, analyzing and drawing conclusion from all debates and issue raised in relevant body of literature. It describes all the analysis and findings which are related research, case study and other findings that are related to this project. In addition, it also consist the knowledge of the project elements such as domain specification, techniques and how these elements related and combined to each other.

Methodology is the key of succeeding in finishing a project within time and being able to satisfy user's requirements. It is also a description of the selected approach that will be used when developing the project. Every step in the selected methodology will be justified to suit every task. Since there are many kind of methodology, it is vital to select appropriate methodology that will be used.