BORANG PENGESAHAN STATUS TESIS

JUDUL: SECOND HAND BOOK SYSTEM

SESI PENGAJIAN: 2007/2008 Saya ISMAYATI BINTI ISMAIL

mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

- 1. Tesis adalah hakmilik Universiti Teknikal Malaysia Melaka.
- 2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja.
- 3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi

4. **Sila tandakan (/)	
SULIT	(Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972)
TERHAD	(Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan.
/TIDAK TERHAD	

(TANDANTANGANTENCEIS)

PN. AZLIANOR BT ABDUL AZIZ

Alamat tetap: 89, Kg. Sentua 1, Utan Aji, 01000 Kangar, Perlis

Tarikh: 30 APRIL 2008 Tarikh: 30 APRIL 2008

CATATAN: **Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada pihak berkuasa.

*Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

SECOND HAND BOOK SYSTEM

ISMAYATI BINTI ISMAIL

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008

ADMISSION

I hereby declare that this project report entitled

SECOND HAND BOOK SYSTEM

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

STUDENT: _______ Date: 30 APRIL 2008

(ISMAYATI BINTI ISMAIL)

SUPERVISOR: ______ Date: 30 APRIL 2008

(MRS. AZLIANOR BINTI ABDUL AZIZ)

ACKNOWLEDGEMENTS

Alhamdullilah with the blessing from Allah I was successfully complete the Projek Sarjana Muda for Bachelor of Information Communication Technology. There a lot of parties that support and help me during this period and without cooperation from these parties, I will never be able to finish this project successfully. Special thank to Mrs. Azlianor Binti Abdul Aziz and Mrs. Rosnani Mohamed, my supervisor for their advices and guidance me to complete my *Projek Sarjana Muda*. My deepest thank to my beloved parents for their support and motivation, without their support I couldn't finish this project. Last but not least, I would like to thanks my friend especially Siti Kholijah Nasaruddin and Maziah Abdullah because helping and encourage me to go through my *Projek Sarjana Muda*.

ABSTRACT

Second Hand Book System is a web-based system that has been developed to overcome the lack of medium for promoting second hand book. This system will promote the book through the internet or online. Beside that, this system helps buyer or student to get the second hand book with cheaper price. This system will provided second hand book and seller information, only an authorized user can access this information. The main function for this system is searching book information, display seller information, manage book information (can only done by registered seller) and price calculation. This project is taken up with the intention to improve the manual promoting, sometime manual promoting give incomplete information. This system has been developed using Structured System Approach Design Methodology.

ABSTRAK

Second Hand Book System adalah sistem berasakan aplikasi web, sistem ini dibagunkan untuk mengatasi masalah kekurangan medium untuk pelajar mempromosikan buku-buku terpakai dan sistem ini membantu mempromosikannya secara online. Selain dari itu, sistem ini membolehkan pembeli atau pelajar mendapatkan buku-buku terpakai dengan harga yang berpatutan. Sistem ini memberi maklumat tentang buku terpakai dan penjual yang terlibat, hanya pengguna yang berdaftar sahaja boleh mencapai maklumat yang terdapat di dalam sistem ini. Projek ini dibangunkan untuk meningkatkan cara mempromosikan buku terpakai, kadang kala promosi yang dijalankan secara manual tidak menyampaikan maklumat yang lengkap. Fungsi utama di dalam sistem ini ialah carian maklumat buku, paparan maklumat penjual, pengurusan maklumat buku (boleh dilakukan oleh penjual yang berdaftar sahaja) dan pengiraan harga buku. Sistem ini dibangunkan menggunakan Structured System Approach Design Methodology.

TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	ADMISSION	ii
	ACKNWOLEDGEMENTS	iii
	ABSTRACT	iv
	ABSTRAK	\mathbf{v}
	TABLE OF CONTENTS	vi
	LIST OF TABLES	X
	LIST OF FIGURES	xi
	ABBREVIATION	xiii
	LIST OF ATTACHMENTS	xiv
CHAPTER I	INTRODUCTION	
	1.1 Project Background	1
	1.2 Problem Statement	2
	1.3 Objective	3
	1.4 Scope	3
	1.5 Project Significance	5
	1.6 Expected Output	5
	1.7 Conclusion	6
CHAPTER II	LITERATURE REVIEW AND PROJECT	
	METHODOLOGY	
	2.1 Introduction	

	2.2	Facts and Finding	7
		2.2.1 Domain	8
		2.2.2 Existing System	8
	2.3	Project Methodology	11
	2.4	Project Requirement	13
		2.4.1 Software Requirement	13
		2.4.2 Hardware Requirement	14
	2.5	Project Schedule and Milestones	15
	2.6	Conclusion	17
CHAPTER III	AN	ALYSIS	
	3.1	Introduction	18
	3.2	Problem Analysis	19
		3.2.1 Current System	19
		3.2.2 Problem Statement	20
	3.3	Requirement Analysis	21
		3.3.1 Data Requirement	21
		3.3.2 Functional Requirement	24
		3.3.3 Non-functional Requirement	29
		3.3.4 Others Requirement	30
	3.4	Conclusion	31
CHAPTER IV	DE	SIGN	
	4.1	Introduction	32
	4.2	High – Level - Design	32
		4.2.1 System Architecture	33
		4.2.2 User Interface Design	34
		4.2.2.1 Navigation Design	37
		4.2.2.2 Input Design	39
		4.2.2.3 Output Design	43
		4.2.3 Database Design	44

	4.2.3.1 Conceptual and Logical	44
	Database Design	
	4.3 Detail Design	45
	4.3.1 Software Design	45
	4.3.2 Physical Database Design	49
	4.4 Conclusion	50
CHAPTER V	IMPLEMENTATION	
	5.1 Introduction	51
	5.2 Software Development Environment	51
	Setup	
	5.3 Software Configuration Management	52
	5.3.1 Configuration Environment	53
	Setup	
	5.3.2 Version Control Procedure	55
	5.4 Implementation Status	55
	5.5 Conclusion	57
CHAPTER VI	TESTING	
	6.1 Introduction	58
	6.2 Test Plan	58
	6.2.1 Test Organization	59
	6.2.2 Test Environment	59
	6.2.3 Test Schedule	60
	6.3 Test Strategy	61
	6.3.1 Classes of Tests	62
	6.4 Test Design	64
	6.4.1 Test Description	64
	6.4.2 Test Data	65
	6.5 Test Result and Analysis	65
	6.6 Conclusion	66

CHAPTER VII PROJECT CONCLUSION 7.1 Observation on Weakness and Strengths 67 7.2 Propositions for Improvement 68 7.3 Contribution 68 7.4 Conclusion 68 REFERENCES 69 APPENDICES 71

LIST OF TABLES

TABLES	TITLE	PAGE
2.1	Project schedule for PSM	15
3.1	Data Dictionary for Second Hand Book System	22
3.2	Functional requirement for Second Hand Book System	24
4.1	Input design for Login Interface.	39
4.2	Input design for new registration form	39
4.3	Input design for book information (buyer)	40
4.4	Input design for buyer information	40
4.5	Input design for seller information	41
4.6	Input design for book information (seller)	42
5.1	Version Control Procedure	55
5.2	Implementation Status	55
6.1	Test Organization	59
6.2	Environment setting for testing phases	60
6.3	Test Schedule	60
6.4	Integration Testing for Login Form	62
6.5	Integration Testing for Manage book information form	63
6.6	Integration Testing for Manage seller information	63
	form	
6.7	Integration Testing for Searching Book Information	64
	form	
6.8	Second Hand Book System Test Case	64
6.9	Test Data for registration Form	65

LIST OF FIGURES

FIGURES	TITLE	PAGE
2.1	Main page for AbeBook.com	9
2.2	Page for advance search	9
2.3	Main page for Studentbooks.co.uk	10
2.4	Page for seller registration	11
2.5	The prototyping model	12
3.1	Activity diagram for current system	19
3.2	Context Diagram for Second Hand System	25
3.3	Data Flow Diagram level 0 for Second Hand	26
	Book System	
3.4	DFD level 1 for registration	27
3.5	DFD level 1 for manage seller information	27
3.6	DFD level 1 for manage book information	28
3.7	DFD level 1 for searching book information or	28
	seller information	
3.8	DFD level 1 for print book information or seller	29
	information	
3.9	DFD level 1 for price calculation	29
4.1	System Architecture for Second Hand Book	33
	System	
4.2	Login Interface	34
4.3	Interface for registration form	35
44	Interface for book information (Buyer)	35

4.5	Interface for buyer personal information	36
4.6	Interface for seller information	36
4.7	Interface book information (seller)	37
4.8	Navigation design for Second Hand Book System	38
4.9	Output design for print information	43
4.10	ERD for Second Hand Book System	44
5.1	Three-tier architecture	52
5.2	Configuration of Macromedia Dreameveawer	53
5.3	Configuration of AppServ 2.5.6	54
5.4	AppServ License Agreement	54

ABBREVIATION

SHBS - Second Hand Book System

PSM - Projek Sarjana Muda

DBMS - Database Management System

HTML - Hyper Text Markup Language

PHP - Hypertext Preprocessor

XML - Extensible Markup Language

SDM - Software Development Method

ERD - Entity Relationship Diagram

UML - Unified Modeling Language

DFD - Data Flow Diagram

ISBN - International Standard Book Number

RAM - Random Access Memory

PC - Personal Computer

CPU - Central Processing Unit.

LIST OF ATTACHMENTS

ATTACHMENT	TITLE	PAGE
Gant	t Chart	71
User	Manual	73

CHAPTER I

INTRODUCTION

1.1 Project Background

Second Hand Book System is a web based system that has been developed for *Projek Sarjana Muda*. The reason for developing a web based system it is because Internet is the best medium for communication, searching information and also the best way for promoting product or goods.

The original copies of reference book are often too expensive for student to purchase it. Student always reproduce the reference book without the permission of the copyright holder, but this act is law infringing. This system will help student find second hand book with cheaper price. Student can search book and seller information through this system. Besides that, the student that interested to sell their second hand book also can use this system to promote their book

This system will be use in the education environment, it involves student from university, college and other institution.

1.2 Problem Statement

There are few problems that occur while promoting second hand book manually. The problems stated below are the main factor for developing Second Hand Book System.

First problem that occur is lack of medium because nowadays, the students didn't have enough medium to promote the second hand book. One of the ways promoting their book is by informing their friends and it is not the best or effective way of promoting. Students are not allowed to simply place their advertisement to sell their books in their colleges.

The second problem is unclearly book and seller information because sometimes students just write this information on a piece of paper. The information about the book and seller will be dim and difficult to read. If the information is not clear, the buyer has a difficulty to contact the seller.

The new reference book is expensive because most of these books are imported from United States, United Kingdom and other countries. These imported books are expensive because of the currency exchange rate. The students do not have a strong finance to purchase new book for every subject they take.

Beside the core subject student also take other subject to complete their study. Example of these subject are *TITAS II*, *TITAS II*, *Sosial Ekonomi* and others. These kinds of textbooks are usually used for one semester. This book can be reuse by another student and they can earn money from second hand book selling.

1.3 Objective

The objectives for the Second hand book system are as follow:

1. Provide online medium for promoting second hand book.

An online medium will overcome the lack medium that has been mention in the problem statement. This online medium do not fixed any rule and regulation to promote the book.

ii. To give accurate information.

Promote book using this system is more effective than manual advertising. The accurate information about book and seller information can be view buyer. If buyers get the right information they can give a faster feedback.

iii. Provide better security for recorded information.

Promoting second hand book through this system are more secure because only an authorized user can edit book information.

1.4 Scope

The scope of this system is to develop one system that can provide a medium for student promoting their second hand book. This system is web based system and it will promote second hand book through the internet. A web based system allows user access the information at anywhere. The target user for this system is student from university, college and other institution, they can view book and seller information.

There a few of module or function involve in this system such as Registration for new user, Manage book information and others. Below are brief explanation about the module involve in this system.

I. Registration for new user.

Users have to register before they can promote the second hand book. If users do not have the authentication, they can't promote their book in this system.

II. Manage book information.

User can add new information about the book, update or delete the information. The book information involves title of the book, author, publisher and other. Seller also can upload picture of the book.

III. Manage seller / buyer information.

Add personal information such as name, telephone number, address, email address and other. They also can update and only seller can upload picture of themselves.

IV. Searching book information and display seller information.

Buyer can search book information using title or author; the seller information will be display at the bottom of the book information.

V. Book price calculation.

System will calculate the total price of book that has been selected by buyer. This total price is just estimation for buyer because user can negotiate the actual price with seller.

VI. Print book and seller information.

Buyer can print information about book and seller, this information use for their reference.

1.5 Project Significance

Student can get a lot of benefit when using this system, one of that is they can purchases the reference books at a lower price. Students also are able to posses the original copies of books at a lower price. With cheaper books, students are more willing to buy and own books. This will enhance and increase their reading habits. In addition, they are willing to purchase new books because they know that there is a medium for them to resell their books if later they do not use it. Overcome shortage of book in library because the amount of books is not sufficient to support all students in university.

The web based system helps to reduce or curb the act of photocopy or photography of published materials and the infringement of copyrights. In addition, photocopy materials are mostly difficult to read and view compare to non photocopy books.

Although it is not the main reason, students are then able to earn some pocket money when they sell their old books to their friends through the second hand book system. This may help to solve or reduce financial problem faced by certain students.

1.6 Expected Output

The expected output from this project is producing a system that can help student from all university promoting their second hand book. The entire module that has been listed in scope can work properly and achieving the objective.

1.7 Conclusion

This chapter explains about the main purpose of project and also to introduce system that will be developing. This chapter covers about project background, project problem statement, objective, scope, project significant and expected output.

The next activities are literature review and project methodology and it will be explain in the second chapter.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature reviews involves a lot of activities such as study on the current system, analyze journal or article that related with the project and others. The information from literature review will be use to identify the advantage and disadvantage of the current system.

While study on existing system, the methodology for to be system can be recognize. The best project methodology will be decided through this chapter and it will be use for developing this system.

2.2 Facts and Findings

Reason for developing Second Hand Book System is to solve problem that has been mention in Chapter 1. Before developing a new system developer must study and find information that related with this new system. This information can be found on internet and they also can study on current or existing system. The studies of existing system and other information are elaborated in sub topic.

2.2.1 Domain

Domain that related with this project is education because this system will be use by student of university, college and other institution.

2.2.2 Existing System

Abebooks.com (Advanced Book Exchange Inc., 2003) is an online C2C ecommerce for used, rare, and out-of-print books based in Victoria, B.C., Canada and Düsseldorf, Germany. It is incorporated in 1995 and its website is launched in 1996. Abebooks.com connects book sellers and buyers around the globe. Till now, there are more than 40 million titles listed in Abebooks.com. Abebooks.com has more than 10,000 registered bookseller members. Registered booksellers are required to pay a monthly subscription fee range from USD\$25 to USD\$300 to list their books, depending the number of books that they want to list. For the moment, the company has 90 employees. Abebooks.com becomes the main supplier of used books for Amazon, Barnes & Noble, and eBay/Half.com. The main features in Abebook.com are book reviews, author interviews, bookseller profiles, tips for booksellers, and Q&A and articles on collecting. Besides, Abebook.com has inventory management software named HomeBase 2.1 that focuses on bookseller's needs. Booksellers can easily upload their books to Abebooks' HomeBase 2.1 has ISBN lookup feature that make cataloguing faster and easier.

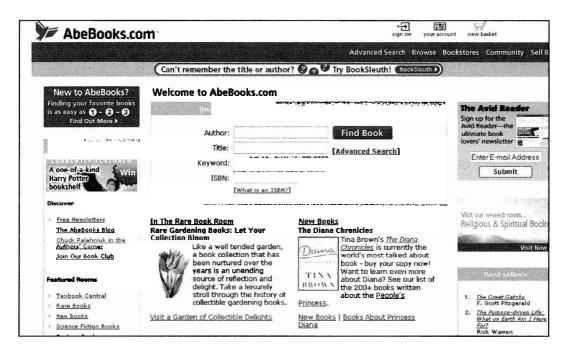


Figure 2.1: Main page for AbeBook.com

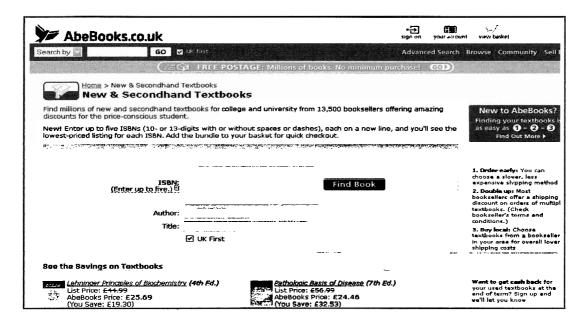


Figure 2.2: Page for advance search

According to Binshan Lin (2002), more and more approaches for representing information on the web are present, such as HTML, web database application, and XML documents. Studentbooks.co.uk (Studentbooks.co.uk, 2003) is a web based system that