

**IMPLEMENTING RELATIONAL DATABASE  
FOR ON LINE ORDERING BOOKS SYSTEM**

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**UNIVERSITI UTARA MALAYSIA  
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**IMPLEMENTING RELATIONAL DATABASE FOR ON LINE  
ORDERING BOOKS SYSTEM**

A thesis submitted to the Graduate School in partial fulfillment of the requirements  
for degree Master of Science (Information Technology),  
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by

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## **ABSTRACT (BAHASA MALAYSIA)**

Kajian ini dibuat untuk menghasilkan satu prototaip Sistem Pesanan Buku Atas Talian (*Online Ordering Books System*) berasaskan Web. Kajian ini dibuat memandangkan kurangnya penggunaan serta pendedahan mengenai sistem yang berasaskan Web yang dapat menguruskan pesanan buku-buku yang lebih cekap di koperasi UUM. Metodologi sistem yang digunakan dalam kajian ini ialah metodologi *System Development Research*. Prototaip sistem ini dibina menggunakan beberapa perisian seperti pangkalan data MySQL, PHP serta pelayan Web Apache. Faedah-faedah dan kelebihan dalam menggunakan perisian-perisian tersebut juga dibincangkan di dalam kertas kajian ini. Gabungan teknologi-teknologi tersebut telah berjaya membina sebuah sistem prototaip yang dapat meningkatkan kecekapan dan keberkesanan pesanan buku di koperasi UUM ini.

## **ABSTRACT (ENGLISH)**

The study was carried out in order to produce a Web-based application of Implementing Relational Database for Online Ordering Books System (CoSIS) in Universiti Utara Malaysia (UUM)'s co-operative. This is done due to lack of online systems that can cater for such as ordering books system. The System Development Research Methodology is the methodology used in the study. The prototype of CoSIS is built using the MySQL relational database, together with PHP and Apache Web server. The benefits of these technologies are discussed in this paper. The combination of these technologies makes the CoSIS featured with many benefits that are believed can enhance today's online ordering books system.

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## TABLE OF CONTENTS

	<b>Page</b>
<b>PERMISSION OF USE</b>	i
<b>ABSTRACT (BAHASA MALAYSIA)</b>	ii
<b>ABSTRACT (ENGLISH)</b>	iii
<b>ACKNOWLEDGMENTS</b>	iv
<b>TABLE OF CONTENTS</b>	v
<b>LIST OF TABLES</b>	xi
<b>LIST OF FIGURES</b>	xii
<b>LIST OF ABBREVIATIONS</b>	xiv

## CHAPTER 1: INTRODUCTION

1.1	Problem Statement	2
1.2	Project Significance	2
1.3	Project Objective	3
1.4	Project Scope	3
1.5	Hardware and Software Requirements	4
1.6	Summary	5

## **CHAPTER 2: LITERATURE REVIEW**

2.1	The Definition of Relational Database	6
2.1.1	A Database is Self-Describing	8
2.1.2	A Database is a Collection of Integrated Records	8
2.1.3	A Database is a Model of a Model	9
2.2	The History of Database Processing	10
2.3	File-Processing Approach versus Database Processing Approach	13
2.3.1	The Pros and Cons of File-Processing Approach	13
2.3.2	The Pros and Cons of Database Processing Approach	16
2.4	The Web-based Applications	18
2.4.1	The Architecture of Web Applications	19
2.5	The Concept of CoSIS	24
2.5.1	Amazon.com	25
2.5.2	BookMall Online Ordering	26
2.5.3	Comparison Between The Ordering Systems	28
2.6	Tools for CoSIS	29
2.6.1	About MySQL	31
2.6.2	PHP and Apache Web Server	36
2.7	Summary	37

## **CHAPTER 3: METHODOLOGY**

3.1	System Development Research Methodology	39
3.1.1	Construct a Conceptual Framework	41
3.1.2	Develop System Architecture	43
3.1.3	Analyze and Design the System	45
3.1.4	Built the Prototype System	47
3.1.5	Observe and Evaluate the System	49
3.2	Summary	50

## **CHAPTER 4: DATABASE DESIGN AND DEVELOPMENT**

4.1	Construction of the Conceptual Framework	51
4.1.1	UUM's Co-operative Objectives	51
4.1.2	Co-operative's Operation	52
4.2	System's Architecture Development	57
4.2.1	Member Online Registration	61

4.2.2	Stock Management	62
4.2.3	Ordering Process	62
4.2.4	List of Order	63
4.2.5	Maintenance	63
4.3	Analyze and Design the System	64
4.3.1	Data Modeling	64
4.3.2	Process Modeling	70
4.4	Design and Built the Prototype System	78
4.4.1	Build the CoSIS Database	78
4.4.2	Develop the User Interface and PHP Scripts	84
4.5	Summary	87

## **CHAPTER 5: FINDINGS**

5.1	The Admin Menu	88
5.2	Books Catalogue Menu	91
5.3	Books Status Menu	93
5.4	The Help Menu	94
5.5	Summary	95

## **CHAPTER 6: SYSTEM EVALUATION**

6.1	System's Ordering	96
6.2	System's Database	97
6.3	System's User Interface	98
6.4	System's Benefits	99
6.5	System's Weaknesses and Limitations	101
6.5.1	System's User Interface	102
6.5.2	System's Efficiency and Effectiveness	102
6.6	Summary	103

## **CHAPTER 7: RECOMMENDATIONS AND CONCLUSION**

7.1	Recommendations	104
7.2	Conclusion	105
7.3	Summary	107
	<b>REFERENCES</b>	108

**APPENDIX A: LIST OF ENTITIES, AND THEIR DATA TYPE IN  
COSIS'S DATABASE**

**APPENDIX B: SAMPLE OF MEMBER'S REGISTRATION FORM  
(CURRENT SYSTEM)**

**APPENDIX C: USER MANUAL FOR CoSIS**

**APPENDIX D: EXAMPLE OF SOURCE CODE FOR CoSIS  
(BOOK'S STOCK MODULE)**

## **LIST OF TABLES**

		<b>Page</b>
Table 1	Books selling activities in year 2001	53
Table 2	Entity Types	57
Table 3	Relationship Types	58
Table 4	Attributes Associated With Entities	60
Table 5	Attributes for Entities in First Normal Form	67
Table 6	Attributes for Entities in Second Normal Form	68
Table 7	Attributes for Entities in Third Normal Form	69

## LIST OF FIGURES

	<b>Page</b>
Figure 2.1      Architecture of Web Applications	20
Figure 2.2      The Interface of Amazon.com	26
Figure 2.3      The Interface of Australian Online Bookshop	28
Figure 3.1      A Process for System Development Research Methodology	40
Figure 4.1      Co-operative's Organizational Chart	56
Figure 4.2      Entity Relationship Diagram for UUM's Co-Operative	59
Figure 4.3      Entity Relationship Diagram for CoSIS (Second Normal Form)	65
Figure 4.4      Final Entity Relationship Diagram for CoSIS	66
Figure 4.5      Context Diagram for CoSIS	72
Figure 4.6      Data Flow Diagram Level 0 for CoSIS	73
Figure 4.7      Data Flow Diagram Level 1 for Process 1.0	75
Figure 4.8      Data Flow Diagram Level 1 for Process 2.0	76
Figure 4.9      Data Flow Diagram Level 1 for Process 3.0	77
Figure 4.10     Creating database with MySQL in DOS prompt	78

Figure 4.11	Creating table with MySQL in DOS prompt	79
Figure 4.12	Example of phpMyAdmin interface to create a new database	80
Figure 4.13	Example of phpMyAdmin interface to create a Member table	81
Figure 4.14	Example of Member table with its attributes in phpMyAdmin	82
Figure 4.15	Example of database Cart with its tables in phpMyAdmin	83
Figure 4.16	Lecturer's Table in Koop's Database	84
Figure 4.17	CoSIS main menu	85
Figure 4.18	Example of PHP script (dbconnect.php) that is used to connect to database Cart	86
Figure 5.1	Add Book Form	89
Figure 5.2	Member's Registration Form	90
Figure 5.3	Book's Details	92
Figure 5.4	Receipt of Order	93
Figure 5.5	Books' Ordered Status	94
Figure 6.1	Admin's Verification	100
Figure 6.2	Deleting Validation	101

## LIST OF ABBREVIATIONS

ACID	<i>Atomic, Consistent, Independent, Durable</i>
ASP	<i>Active Server Page</i>
CASE	<i>Computer-aided Systems Engineering</i>
CGI	<i>Common Gateway Interface</i>
COBOL	<i>Common Business Oriented Language</i>
CPU	<i>Central Processing Unit</i>
DBMS	<i>Database Management System</i>
DFD	<i>Data Flow Diagram</i>
DOS	<i>Disk Operating System</i>
ERD	<i>Entity Relationship Diagram</i>
FAST	<i>Facilitated Application Specification Technique</i>
GIF	<i>Graphics Interchange Format</i>
GPL	<i>GNU General Public License</i>
HTML	<i>Hypertext Markup Language</i>
HTTP	<i>Hypertext Transfer Protocol</i>
IIS	<i>Internet Information Server</i>
JSP	<i>Java Server Page</i>

LAMP	<i>Linux, Apache, MySQL, P* (PHP, Perl, Python)</i>
LAN	<i>Local Area Network</i>
MMS	<i>Modular Management System</i>
MySQL	<i>My Structured Query Language</i>
ODBMS	<i>Object-oriented Database Management System</i>
OOP	<i>Object-Oriented Programming</i>
PHP	<i>Hypertext Preprocessor</i>
PIECES	<i>Performance, Information, Economics, Control, Efficiency, Service</i>
PL/I	<i>Programming Language 1</i>
PowerSchool	<i>PowerSchool Student Information System</i>
SIS	
RDBMS	<i>Relational Database Management System</i>
SSL	<i>Secure Sockets Layer</i>
SQL	<i>Structured Query Language</i>
UNIX	<i>Uniplexed Information and Computing System</i>
VB	<i>Visual Basic</i>
WWW	<i>World Wide Web</i>
XML	<i>Extensible Markup Language</i>

## **CHAPTER 1**

### **INTRODUCTION**

Currently, developing a web-based application has become a priority to most organizations, be it corporate sectors, government or education institutions. Most of the corporate sectors have been using the web-based applications to support their everyday business activities, such as the online service site of San Francisco-based mPower ([www.mpower.com](http://www.mpower.com)) and freeware and open source programmer content site Andover.net (Babcock, 2000). Furthermore, pioneers such as Amazon.com, Dell and Federal Express have demonstrated success with Web-based businesses (Oppel, 1999). Though, there are not many Higher Level Education (IPT) have been developing Web-based application to handle their co-operative system such as in managing book stocks, ordering books process, report on request and other activities that can make their co-operative run smoother.

In this Implementing Relational Database for Online Ordering Books System (CoSIS) project, the Hypertext Preprocessor (PHP) and Apache web server are used as the tools to support everyday activities in co-operative in managing ordering process and books record more efficiently and together with that, MySQL and

The contents of  
the thesis is for  
internal user  
only

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