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Development of confectionery shop system for Tian Mi confectionery / Noor Ezyma Zahari.

DEVELOPMENT OF CONFECTIONERY SHOP SYSTEM FOR TIAN MI CONFECTIONERY

NOOR EZYMA BT ZAHARI

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA
2006

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DECLARATION

I hereby declare that this project report entitled

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

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DEDICATION

To Malaysian ICT community

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ABSTRACT

Confectionery Shop System is designed and developed to assist confectionery manager and staff in managing product, sale, product's catalog and customer ordering systematically. Product management function in this system will allow staff to register new product, monitor products' sales performance and also monitor rejected and expired product. This system will also enable the sale process replacing the conventional cashier machine which will update product and sale record effectively. For customer, they can access a web-based product catalog, customized and design their desired cake and make ordering using a kiosk available at the confectionery shop or using their personal computer at home. The Rational Unified Process (RUP) methodology was used along the development of this ASP.net web-based system.

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ABSTRAK

Confectionery Shop System direkabentuk dan dibangunkan untuk membantu pengurus dan pekerja kedai kek dan roti dalam menguruskan produk, jualan, katalog produk dan tempahan pelanggan dengan sistematik. Fungsi pengurusan produk di dalam system ini akan membolehkan pengurus mendaftarkan produk baru, memantau prestasi jualan produk dan memantau produk rosak dan tamat tempoh. Sistem ini juga akan menyokong fungsi jualan yang akan menggantikan mesin jualan konvensional yang mana berupaya mengemaskini rekod jualan dan stok produk secara lebih effektif. Bagi pelanggan kedai pula, mereka boleh mengakses katalog produk secara *online*, mereka bentuk dan menggubah kek yang mereka inginkan melalui kiosk yang disediakan di kedai ataupun menggunakan komputer peribadi mereka di rumah. Metodologi *Rational Unified Process (RUP)* telah digunakan sepanjang pembangunan system berasaskan laman web ASP.net ini.

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TABLE OF CONTENTS

CHAPTER	SUBJECT		PAGE
	DECLARATION		ii
	DEDICATION		iii
	ACKNOWLEDGMENT		iv
	ABSTRACT		v
	ABSTRAK		vi
	TABLE OF CONTENTS		vii
	LIST OF TABLE		xi
	LIST OF DIAGRAM		xii
	LIST OF ABBREVIATION		xiii
	LIST OF APPENDICES		xiv
CHAPTER I	**INTRODUCTION**		
	1.1	Project Background	1
	1.2	Problem Statement(s)	2
	1.3	Objective	3
	1.4	Scopes	
		1.4.1 Users	4
		1.4.2 Functionality	4
	1.5	Project Significance	6
	1.6	Conclusion	6

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CHAPTER II LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction 7

2.2 Fact and Finding

2.2.1 Product Catalog and Ordering System 7

2.2.2 Product Management Software 14

2.3 Project Methodology 17

2.4 Project Requirement 19

2.4.1 Software Requirement 19

2.4.2 Hardware Requirement 20

2.4.3 Network Requirement 20

2.5 Project Schedule and Milestones 20

2.6 Conclusion 21

CHAPTER III ANALYSIS

3.1 Introduction 22

3.2 Problem Analysis

3.2.1 Background of Current System 23

3.2.2 Problem Statement 26

3.3 Requirement Analysis

3.3.1 Functional Requirement 27

3.3.2 Business Flow 29

3.3.3 Use Case View 34

3.3.4 Actors 35

3.3.5 Use Case Description 36

3.4 Software Requirement 36

3.5 Hardware Requirement 40

3.6 Network Requirement 40

3.7 Conclusion 41

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CHAPTER IV DESIGN 42

4.1 Introduction

4.2 High-Level Design

4.2.1 System Architecture 43

4.2.2 User Interface Design 47

4.2.3 Database Design 48

4.3 Detailed Design 61

CHAPTER V IMPLEMENTATION

5.1 Introduction 94

5.2 Software Development Environment setup 94

5.3 Software C nfiguration Management

5.3.1 Configuration Environment Setup 97

5.3.2 Version Control Procedures 103

5.4 Implementation Status 107

5.5 Conclusion 108

CHAPTER VI TESTING

6.1 Introduction 109

6.2 Test Plan

6.2.1 Test Organization 109

6.2.2 Test Environment 110

6.2.3 Test Schedule 112

6.3 Test Strategy 112

6.3.1 Classes of tests. 113

6.4 Test Design

6.4.1 Test Description 117

6.4.2 Test Data 117

6.5 Test Result and Analysis 117

6.6 Conclusion 117

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CHAPTER VII PROJECT CONCLUSION

7.1 Observation on Weaknesses and Strengths 118

7.2 Propositions for Improvement 119

7.3 Conclusion 119

REFERENCES 120

APPENDICES 121

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LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Catalog Comparison	12
2.2	Ordering System Comparison	13
4.1	Data Dictionary for table Product	66
4.2	Data Dictionary for table ProductType	67
4.3	Data Dictionary for table ProductSubmit	67
4.4	Data Dictionary for table ProductExp	67
4.5	Data Dictionary for table Weight	68
4.6	Data Dictionary for table CakeWeight	68
4.7	Data Dictionary for table Staff	68
4.8	Data Dictionary for table Sale	69
4.9	Data Dictionary for table SaleItem	69
4.10	Data Dictionary for table Order	70
4.11	Data Dictionary for table OrderItem	70
4.12	Data Dictionary for table OrderConfirm	71
4.13	Data Dictionary for table CakeOption	71
4.14	Data Dictionary for table CakeOptionItem	72
4.15	Data Dictionary for table CustomizedCake	72
4.16	Data Dictionary for table CustomizedOption	73

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LIST OF DIAGRAM

DIAGRAM	TITLE	PAGE
2.1	Secret Recipes product catalog Screenshot	8
2.2	Secret Recipes e-booking page Screenshot	9
2.3	USABirthdays product information Screenshot	10
2.4	Gift Malaysia product catalog Screenshot	11
2.5	ShopAssist screen shot	14
2.6	Cash Register Express screen Shot	15
2.7	Comcash screen shot	16
3.1	Business Modeling Process for current system (Sales and Product management)	24
3.2	Business Modeling Process for current system (Ordering)	25
3.3	Overview of Confectionery Shop System	28
3.4	Business Flow for User Registration and Maintenance Module	29
3.5	Business Flow for Product Management Module	30
3.6	Business Flow for Sales Module	31
3.7	Business Flow for Catalogue Module	32
3.8	Business Flow Diagram for Ordering Module	33
3.9	Use case view of Confectionery Shop System	34
4.1	System software architecture based on 3-tier architecture	43
4.2	Packages Dependency of Confectionery Shop System	44
4.3	Packages of Confectionery Shop System	45
4.4	Class Diagram for Confectionery Shop System	46

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4.5	Navigation Flow of Confectionery Shop system	47
4.6	Confectionery Shop System Entity Relationship Diagram (ERD)	50

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LIST OF ABBREVIATION

CASE	-	Computer-Aided Systems Engineering
ICT	-	Information and Communication Technology
POS	-	Point Of Sale
RUP	-	Rational Unified Process
ASP	-	Active Server Page
LAN	-	Local Area Network
HTTP	-	Hypertext Transfer Protocol
WWW	-	World Wide Web

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LIST OF APPENDICES

APPENDICES	TITLE	PAGE
A	Use Case Description	121
B	Sequence Diagram	165
C	Input and Output Design	179
D	Test Design, Test Result and Test Analysis	208
E	PSM Gantt Chart	234
F	Surat Pengesahan Kajian Kes	239

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CHAPTER I

INTRODUCTION

This chapter will describe the whole project briefly. It is very important to understand this project before it will discuss more detail in next chapter. The most important part to be viewed clearly is project background, problems that bring out this project, the objectives to achieve project scope and project significant.

1.1 Project Background

In the era of rapid development of Information and Communication Technology (ICT), food-manufacturing industry should not ignore the benefits and facilities provide by the ICT's wide range of products and services. Therefore, in this project Confectionery Shop System will be designed and developed to assist confectionery shop employee and staff in managing product, sale, product's catalog and customer ordering systematically. Product management function in this system will allow staff to register new product, monitor products' sales performance and also monitor rejected and expired product. This system will also focus on the sale

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process using touch screen monitor by replacing the conventional cashier machine which will update product and sale record effectively. For customer, they can access a web-based product catalog, customized and design their desired cake and make ordering using a kiosk available at the confectionery shop or using their personal computer at home.

1.2 Problem Statement

In the existing manual system, in order for customer to make cake or bread ordering, customer need to come to the confectionery shop and choose the product from product's album and tell the confectionery shop's staff how they want their cake. On the other hand, staff will describe the product one by one and write what the customer wants on the order receipt. In other case, where customer want a specific cake design, staff will draw the design at the order receipt for reference for the cakes maker and the customer will be given other receipt which do not have the cake design drawing.

In the process of making customer's cake ordering, the cake maker will refer to the customer order receipt and if the cake maker does not understand the cake design he or she will ask the staff at the counter. But if the staff is not working at that day, the cake maker will make the cake by following his or her understanding and this will make the customer angry and disappointed if the cake is differ from one which the customer order.

For product catalog preparation, staff will take photo of product one by one and put them into a photo album. More products to offer mean more photo album needed. Staffs also need to change the photo album to the new one when the photo album was damage because customers always use it.

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For cake ordering design, it is limited to the design provide and if customer need other than that, ordering need to do other way (draw the design at the order receipt).

In sale process, although cashier machine can record the sale transaction, but it is not practical enough. Shop owner or manager need to check the sale transaction on the receipt generate by the cashier machine and write them on sale record book. It also difficult to update the information from time to time.

1.3 Objective

The system that will be developed will fulfill the following objectives:

i. To provide computerize product management for confectionery shop's staff.
ii. To provide product catalog that allow customer to browse products using a kiosk set up at confectionery shop or using customer's personal computer at home which have Internet access.
iii. To provide the capability to allow customer to customize and design their desired cake guided by variety of design and choices offered by the system
iv. To provide a capability for customer to make product order online.
v. To provide a capability for manager to query report on product's inventory and sale.

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1.4 Scope

1.4.1 User

The system that will developed will support the following user type:

i. Manager
Manager or shop owner will have the full access on all system functions like product catalog, manage product, view sale information, generate report and other.

ii. Staff
Shop staff can access the ordering information and sale over counter function.

iii. Customer
Customer can view and browse product catalog, customized their own cake and make ordering using the kiosk provide at the shop or using their pc which have internet access at home.

1.4.2 Functionality

Confectionery Shop System has five modules. Below are the details about all modules:

i. User Registration and Maintenance Module

This module responsible for registering staff's user id and password and enable manager to create password that will be use to access the system. This module will let manager to create staff's record and system will

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automatically generate staff's id that will be use to trace sale, order receive and other operation done by staff in using this system.

ii. Product Management Module

This module will let user to register new product, edit product information, view product information and print product report.

iii. Sales Module

This module will act replace the existing traditional cashier machine which will manage all the sale transaction and will process, record and update the sale information on system database.

iv. Catalog Module

This module will let customer view all products provide at confectionery shop and make ordering by selecting the item displayed.

v. Ordering Module

The ordering can be done in two ways. One with a kiosk provides at the shop and the other way is by online using Internet. Customer can make ordering by choosing product from the catalog or customized and design their desired cake using the function available. When done, user will submit the ordering and system will generate the ordering number. User need to bring the ordering number to the sale counter and tell the staff the ordering number and pay the deposit.

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1.5 Project Significant

Confectionery Shop System is new approach to be implemented in the confectionery retailer industry. Other than to benefit from the ICT facilities, it will give advantage and good return to this industry sector. Computerized product and sale management will help retailer owner to increase the sale performance and product quality. Staffs can work in a new environment that is more efficient. For customer, the new approach in ordering system can give them more choices and flexibility and also more user friendly.

1.6 Conclusion

The Confectionery Shop System that will be developed is going to achieved its objectives mention earlier and solve the problem arise from the current system and hope to give better way for confectionery shop owner in managing their product and sales and promote the good quality service to customer.

For the next chapter will focus about searching, collecting and analyzing that relevant issue that similar in the project. The technique, tools and approaches used also will be explained in the chapter.

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CHAPTER II

LITERATURE REVIEW AND PRODUCT METHODOLOGY

2.1 Introduction

This chapter are basically about searching, collecting and analyzing the relevant issue for the project. On the other hand, the technique, tools and approaches will be explained in this section.

2.2 Facts and Finding

2.2.1 Product Catalog and Ordering System

i. Secret Recipes website

Secret Recipes is a food retailer franchise that offer variety of confectionery item like cakes, pastry, muffins and others. It also has

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a website that offer product catalog that user can view variety of product offered by the company along with its price. For interested customer, other than go to the shop to have their dessert, they can order online with the e-booking service offered by the website. In this service, user can order Secret Recipe's cake by ticking the type of cake, fill in their personal information, choosing either order the cake for present or otherwise and finally fill in the delivery information in the form displayed.

The information about the Secret Recipes can be access at their website at www.secretrecipe.com.my. Figure 2.1 below shows the product catalog and e-booking service offered by Secret Recipes online.

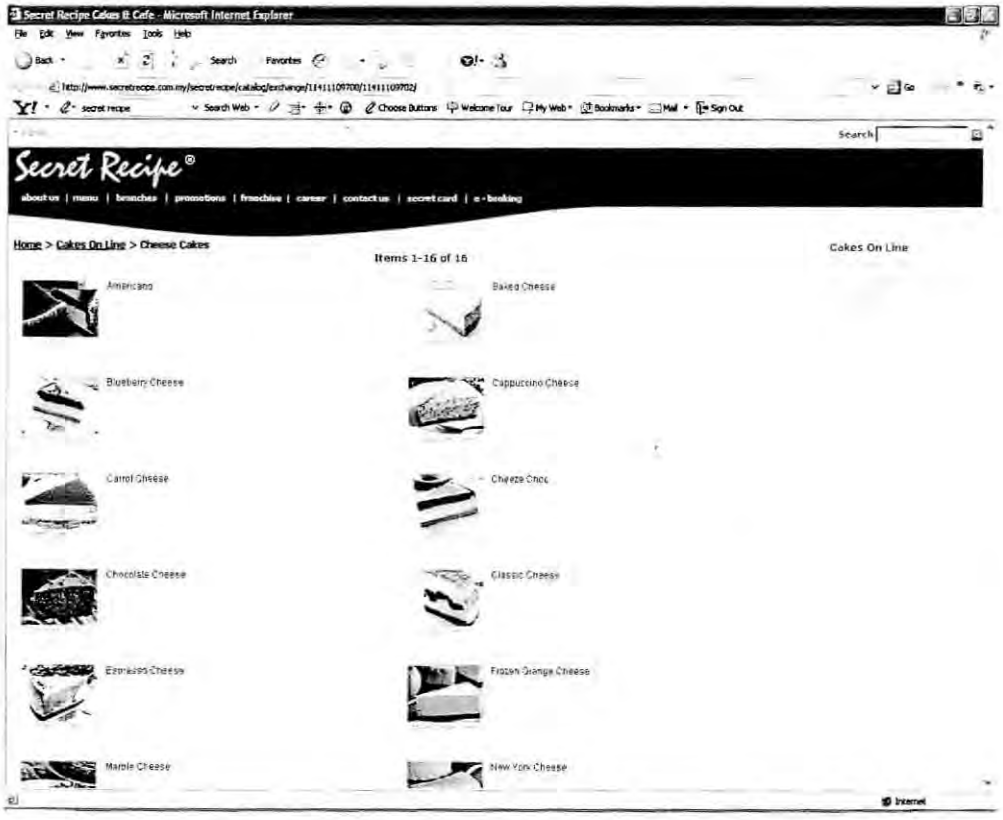

Figure 2.1: Secret Recipes product catalog

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