BORANG PENGESAHAN STATUS TESIS*

JUDUL : CARL'S RESTAURANT DELIVERY ONLINE SYSTEM

SESI PENGAJIAN : 2009 / 2010

Saya FARAH NABILA BT MD NAWI

mengaku membenarkan tesis Projek Sarjana Muda ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek 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

(TANDATANGAN PENULIS)

Alamat tetap: 377-B, KAMPUNG PAK SABAH, 23000 DUNGUN TERENGGANU

Tarikh: 28 /08/ 2012

(TANDATANGAN PENYELIA)

KASTURI KANCHYMALAY
Nama Penyelia

Tarikh: 29-8-2012

CATATAN: * Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM).
** Jika tesis ini SULIT atau atau TERHAD, sila lampirkan surat daripada pihak berkuasa.

© Universiti Teknikal Malaysia Melaka

CARL'S RESTAURANT DELIVERY ONLINE SYSTEM

FARAH NABILA BT MD. NAWI

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2012

© Universiti Teknikal Malaysia Melaka

DECLARATION

I hereby declare that this project report entitled

CARL'S RESTAURANT DELIVERY ONLINE SYSTEM

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

STUDENT : _____ Date: 28/08/2012

(FARAH NABILA BT MD. NAWI)

SUPERVISOR : _____ Date: 28/08/2012

(KASTURI A/P KANCHYMALAY)

© Universiti Teknikal Malaysia Melaka

ACKNOWLEDGEMENTS

Firstly, Alhamdulillah to Allah by the grace was given to me continued to complete PSM. Without him impossible to me complete the project on time. The acknowledgement also goes to my parents because always give support and pray for me besides many contributions, especially in term of money to complete the project. Unforgotten to my beloved supervisors Kasturi A/P Kanchymalay where always given brilliant idea and provide knowledge and experience to develop a system. She was always patient and understand the problems that student faced and give the best way to solve the problem. I also like to dedicate the appreciation to colleagues who are willing to share knowledge, information and other forms of support needed to produce the documents and develop the project. I would appreciate the help, and useful for future. Lastly, I would like to thank everyone that involve directly or indirectly to complete PSM project.

© Universiti Teknikal Malaysia Melaka

ABSTRACT

My project title called Carl's Restaurant Delivery Online System is developing to Carl's Restaurant. Carl's Restaurant is a fast food business in franchise form like MC Donald, KFC and so on. Carl's Restaurant provides delivery services using customer service staff. The system was developed to increase their profit other than to manage customer orders in a more systematic and computerized. Customers easy to manage their financial to ensure their delivery order according to their budget. The methods that use in develop this system with using System Structure Analysis and Design Methodology (SSADM) approach. In analysis that has been made, Carl's Restaurant has been wasted because use many staff while Carl's delivery order management can be handle by system. Carl's Restaurant Delivery Online System can overcome the problems faced.

© Universiti Teknikal Malaysia Melaka

ABSTRAK

Tajuk projek saya dipanggil Carl's Restaurant Delivery Online System dibangunkan untuk restoran Carl's. Carl,s restoran merupakan perniagaan makanan segera yang berbentuk francais seperti MC Donald, KFC dan lain-lain. Carl's Restaurant menyediakan perkhidmatan penghantaran yang menggunakan staff perkhidmatan pelanggan. Sistem ini dibangunkan bertujuan untuk meningkatkan keuntungan jualan selain untuk mengurus tempahan pelanggan dengan lebih sistematik dan berkomputer. Pelanggan mudah untuk mengawal pebelanjaan untuk memastikan tempahan mengikut perbelanjaan yang diperuntukan. Kaedah yang digunakan dalam membangunkan sistem ini dengan mengunakan pendekatan *Structure System Analysis and Design Methodology* (SSADM). Dalam kajian yang telah dibuat restoran Carl's membuat pembaziran kerana menggunakan ramai kakitangan sedangkan pengurusan tempahan penghantaran makanan boleh diuruskan oleh sistem. Carl's Restaurant Delivery Online System dapat membantu dalam mengatasi masalah yang dihadapi.

© Universiti Teknikal Malaysia Melaka

TABLE OF CONTENT

	SUBJECT		PAGE
	ACKNOWLEDGEMENT		**i**
	ABSTRACT		**ii**
	ABSTRAK		**iii**
	TABLE OF CONTENT		**i v**
	LIST OF FIGURES		**ix**
CHAPTER 1	**INTRODUCTION**		
	1.1	Project Background	1
	1.2	Problem Statement	2
	1.3	Objective	3
	1.4	Scope	4
	1.5	Project Significant	6
	1.6	Expected Output	7
	1.7	Conclusion	8
CHAPTER 2	**LITERATURE REVIEW AND PROJECT METHODOLOGY**		
	2.1	Introduction	9
	2.2	Fact and Finding (Based on Topic)	10
		2.2.1 Domain	10
		2.2.2 Existing System	11
		2.2.3 Technique	12
	2.3	Project Methodology	13

© Universiti Teknikal Malaysia Melaka

	2.4	System Development Approach (SSADM)	16
	2.5	Project Requirement	17
		2.5.1 Software Requirement	17
		2.5.2 Hardware Requirement	17
	2.6	Project Schedule and Milestones	18
	2.7	Conclusion	19
CHAPTER III	**SYSTEM ANALYSIS**		
	3.1	Introduction	20
	3.2	Analysis of Current System	21
	3.3	System Analysis	23
	3.4	Requirement Analysis	24
		3.4.1 Functional Requirement	24
		3.4.1.1 Context Diagram	25
		3.4.1.2 Data Flow Diagram	26
		3.4.1.3 Entity Relationship Diagram	27
		3.4.1.4 Flow Chart Diagram	28
		3.4.2 Non-functional Requirement	42
		3.4.3 Other Requirement	42
		3.4.3.1Software Requirement	42
		3.4.3.2 Hardware Requirement	43
		3.4.3.3 Network Requirement	43
	3.5	Conclusion	44
CHAPTER IV	**DESIGN**		
	4.1	Introduction	45
	4.2	System Architecture	46

© Universiti Teknikal Malaysia Melaka

4.3	Database Design		47
	4.3.1	Data Flow Diagram	47
	4.3.2	Entity Relationship Diagram (ERD)	48
4.4	Interface Design		49
	4.4.1	Mainpage	49
		4.4.1.1 Homepage	49
		4.4.1.2 List menu page	50
		4.4.1.3 Contact us page	50
		4.4.1.4 Register page	51
		4.4.1.5 Feedback page	51
		4.4.1.6 Login page	52
	4.4.2	Admin page	52
		4.4.2.1 Register page	52
		4.4.2.2 Update page	53
	4.4.3	Customer page	54
		4.4.3.1 Type of menu page	54
		4.4.3.2 Profile page	54
		4.4.3.3 Order Status page	55
		4.4.3.4 Order List Menu page	55
		4.4.3.5 Menu Price page	56
		4.4.3.6 List Order page	56
	4.4.4	Manager page	57
		4.4.4.1Type of menu page	57
		4.4.4.2Staff page	57
		4.4.4.3 Manager Login	58
	4.4.5	Delivery Man page (mobile application)	57
		4.4.5.1 Login page	58

© Universiti Teknikal Malaysia Melaka

		4.4.5.2 Update Customer Status page	58
	4.5	Navigation Diagram	59
		4.5.1 Admin	59
		4.5.2 Customer	59
		4.5.3Manager	60
		4.5.4 Delivery Man	60
	4.6	Conclusion	61
CHAPTER V	**SYSTEM IMPLEMENTATION**		
	5.1	Introduction	63
	5.2	System Development Environment	64
	5.3	Software Configuration Management System	65
		5.3.1 Installation of Appserv	65
		5.3.2 Installation of Dreamweaver	65
	5.4	Security Characteristic	66
		5.4.1 Authentication	66
		5.4.2 Integrity	66
		5.4.3Availability	66
	5.5	Conclusion	67
CHAPTER V I	**TESTING**		
	6.1	Introduction	70
	6.2	Test Plan	71
		6.2.1 Feature to be tested	71
		6.2.1 Feature not be tested	72
	6.4	Testing Tools and Environment	74
		6.4.1 Hardware	74

© Universiti Teknikal Malaysia Melaka

		6.4.2 Software	74
		6.4.3Tools Environment Setup	75
	6.5	Test Case	76
		6.5.1 Purpose	76
		6.5.2 Test Data	77
	6.6	User Acceptance Testing	78
	6.7	Conclusion	91
CHAPTER V II	**PROJECT CONCLUSION**		
	7.1	Observation on Weakness and Strength	92
		7.1.1 Strength	92
		7.1.2 Weakness	93
	7.2	Proposition for Improvement	94
	7.3	Conclusion	95
REFERENCES			96
APPENDICES			96

© Universiti Teknikal Malaysia Melaka

LIST OF FIGURE

TABLE	TITLE	PAGE
2.1	Pizza Hut Delivery System	11
2.2	Detailed Agile Development	14
2.3	Project Schedule and Milestone	18
3.0	Flowchart of customer Order Process	21
3.1	Flowchart of Customer Receive Order	22
3.2	Context Diagram	25
3.3	Data Flow Diagram	26
3.4	Entity Relationship Diagram	27
3.5	Main page flowchart	28
3.6	Register page flowchart	29
3.7	Feedback page flowchart	30
3.8	Login page flowchart	31
3.9	Admin main page flowchart	32
3.10	Register customer page flowchart	32
3.11	Register staff page flowchart	33
3.12	Register favorite menu page flowchart	34
3.13	Register dessert menu page flowchart	35
3.14	Register promotion page flowchart	36

© Universiti Teknikal Malaysia Melaka

3.15	Register location page flowchart	37
3.16	Customer main page flowchart	38
3.17	Customer view order page flowchart	39
3.18	Customer profile page flowchart	40
3.19	Delivery man page flowchart	41
3.20	Manager page flowchart	41
3.21	Non-functional requirements of the system	42
4.1	3-Tier Client-Server Architecture	45
4.2	Data Flow Diagram	47
4.3	Entity Relationship Diagram	48
4.4	Home page	49
4.5	List menu page	50
4.6	Contact us page	50
4.7	Register page	51
4.8	Feedback page	51
4.9	Login page	52
4.10	Register page	52
4.11	Update page	53
4.12	Type of menu page	54
4.13	Profile page	54
4.14	Order status page	55

© Universiti Teknikal Malaysia Melaka

4.15	Order list Menu page	55
4.16	Menu Price page	56
4.17	List order page	56
4.18	Type of menu page	57
4.19	Staff page	57
4.20	Manager login	58
4.21	Login page (mobile application)	59
4.22	Update customer status page	59
4.23	Navigation diagram for admin	60
4.24	Navigation diagram for customer	60
4.25	Navigation diagram for manager	61
4.26	Navigation diagram for delivery man	61
6.1	Features to be tested for Login Module	69
6.2	Features to be tested for Register Module	69
6.3	Features to be tested for Admin Management Module	69
6.4	Features to be tested for Order Module	70
6.5	Features to be tested for Manage Order Module	70
6.6	Features to be tested for Mobile Application Module	71
6.7	Environment Setup Specification	73
6.8	Purpose Description Module	74
6.9	Input Login Module	75
6.10	Input Register Module	75

© Universiti Teknikal Malaysia Melaka

6.11	Input Admin Management Module	76
6.12	Order Module	77
6.13	Manage Order Module	77
6.14	Mobile Application Module	78
6.15	User Acceptance Test (Login)	79
6.16	User Acceptance Test (Register)	80
6.17	User Acceptance Test (Admin Management)	81-84
6.18	User Acceptance Test (Order)	84-85
6.19	User Acceptance Test (Manage Order)	86
6.20	User Acceptance Test (Mobile Application)	87-88
6.21	Test Schedule	88

© Universiti Teknikal Malaysia Melaka

CHAPTER 1

INTRODUCTION

1.1 Project Background

Carl's Restaurant, one of its subsidiary hamburger chains, has opened its first flagship restaurant in Kuala Lumpur, Malaysia. The franchise restaurant opened on Monday, July 23 and is the fifth of 25 that will be opened over the next six years as per an agreement with Singapore-based franchisee Aspac F&B SDN. BHD. Aspac has been operating Carl's Restaurants in Singapore since 2005, and is excited to enter the Malaysia market.

Carl's System actually improves with the current system where the current system not provides online ordering. Customer need to call customer service to make their order. The current system makes some problem for staffs handle all customers especially during promotion.

This system is important to all parties' admin, staff and customer for Carl's Restaurant to handle delivery order online. Usually, customer takes time to think about their order and it causes the waiter process become slowly. With this system, Carl's Restaurant can less their worker to handle delivery order while improving their profit. This system also important to customer knows the status of order and can add the other order anytime. Besides that, customer knows the total price order, it important to customer control their order according their budget.

© Universiti Teknikal Malaysia Melaka

1.2 Problem Statement

This system is develop to found several problem that appear when to order Carl's delivery. The system is important to customer and also staff to comunicate each other quickly.

Using the current system, its take time to Carl's customer services handle delivery customer. It because sometime customer **take a lot of time to think about their order.** Beside that, during many customer its causes waiter is not enough to handle the customer.

The current system also causes **high cost to control customer**. Its because Carl's need many workers to handle their customer in the ordering process, serve process and others.

Besides that, the current system causes the customer only know the total price order during payment process. It **difficult to customer arrange the order according their budjet.**

Lastly, the current system also **provide the weekly, monthly and annual report manually** and possibility of the staff to make mistake is high.

© Universiti Teknikal Malaysia Melaka

1.3 Objective

In the Carl's Restaurant Delivery Online System (CRDOS), it consists of five objectives that relate with problem statement.

- Customer order systematically and computerizes. It's because to avoid loss of data.
- Reduce Carl's worker. It is important to increase Carl's profit.
- Automatic calculation during customer order. It is easy to customer know their order price on that time to ensure their budget.
- Provides mobile application for delivery man view customer info and update order status.
- Provides report of product demand. It is to prevent fault of entering data.

© Universiti Teknikal Malaysia Melaka

1.4 Scope

This system have three users. The user consists of:

Admin

- **Login**
  Only authorized user can access the system.

- **Register**
  Admin must register new admin and staff before using the system.

- **Admin Management**
  Admin insert / delete / update / view the information of staff, new place. Update menu and price of new promotion.

- **Report**
  Admin can request report of product demand.

Customer

- **Login**
  Only authorized user can access the system.

- **Register**
  Customer must register before using this system

- **Order**
  In this module customer can add/view/delete their order.

© Universiti Teknikal Malaysia Melaka

Staff

- **Login**

  Only authorized user can access the system.

- **Manage Order**

  In this module staff use the system to view order and update status of order.

- **Mobile Application**

  Staffs use this system to view the customer address and update the status of order.

© Universiti Teknikal Malaysia Melaka

1.5 Project Significant

Carl's is a large organization. This system is important for organization to ensure the needs and customer facilities to make delivery orders can reduce customer costs and also profit able the organization. Carl's have problem especially when promotion where customer's demand increased. This condition causes customer services are difficult to handle all customers. Besides the customer, this system is also useful for staff and admin.

Admin will control the whole system but staff can handle customer order, payment, and status of order and print the receipt. Customer uses this system to login and make their order. This system helps Carl's management to manage systematically beside give more benefit to their organization.

© Universiti Teknikal Malaysia Melaka

1.6 Expected Output

After develop CRDOS, the expected output from the system is it beneficially to the the target user. In addition this system can give latest information to customer. Beside that this system can be a secure system where before entering system, user need to login before continue the nest operation.

This system also will help the management to improve their organization and increase their profit. Beside that it can ensure that management of Carl's can be standardized and well manage. In addition this system can save all data secure and safely.

© Universiti Teknikal Malaysia Melaka

1.7 Conclusion

The conclusion have defined the problem statement and objective to develop Carl's Restaurant Delivery Online System (CRDOS) that develops with consist six modules. This is login, register, order, manage order, admin management, mobile application and report. This system consists of three user admin, staff and customer. This system is important to all users for help handle their daily work and manage delivery order. This system use hardware like laptop, printer and others and use software like Window 7, Adobe Dreamweaver and MySQL.

The next topic will discuss about methodology, what the methodology can be use and what the system development approach is suitable for our group.

© Universiti Teknikal Malaysia Melaka

CHAPTER 2

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

In methodology phase, system developer needs to identify the type of methodology that is going to use to develop the system. This is very important as the methodology gives us a way to understand complexities. Besides, must identify the right methodology that will match perfectly with the system development in term of all aspects without any constrain and limitation.

This system should be analyzed detailed to that it will meet with user's requirements. For this system, Agile System Development Life Cycle (SDLC) as the system methodology and it will be developed based on the Structured Systems Analysis and Design (SSADM) technique.

© Universiti Teknikal Malaysia Melaka