Home Services Online System (Homy Services)



UNIVERSITI TEKNIKAL MALAYSIA MELAK

BORANG PENGESAHAN STATUS TESIS

JUDUL: Home Services Online System (HOMY SERVICES)

SESI PENGAJIAN: 2013

Saya Ammar Abdullah Mohammed Alshameri

mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaaan 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 Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.

4. ** Sila tandakan (/) SULIT

TERHAD

(Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972)

(Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)

UNIVERBARTERBARDIKAL MALAYSIA MELAKA

(TANDATANGA

Alamat tetap:

Tarikh: 18/08/16

(TANDATANGAN PENYELIA)

SALLEH NORHAZIAN mo

(Nama Penyelia)

Tarikh: 18 Ogos 2016

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



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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2016

DECLARATION

I hereby declare that this project report entitled

Home Services Online System (Homy Services) Is has written by me and is my own effort and no part has been plagiarized without citations. TEKNIKAL MALAYSIA MELAKA UNIVERSI AlShamerPate: 19/08/16 **STUDENT** MMOY by Date 18 Ogos Doll (AMMAR ABOULLAH MOHAMMED ALSHAMERI) SUPERVISOR : (ASSOC. PROF.NORHAZIAH MD.)

DEDICATION

To my beloved parents and supervisor Assoc. Prof. Norhaziah Md. Salleh And to the fellowship friends of BITD, especially Muneb Yonis who gives cooperation and knowledge sharing in completing this project. Thank you so much.



ACKNOWLEDGEMENT

I would like to thank Assoc. Prof. Norhaziah Md. Salleh for giving assistant to complete this project successfully.

I would also like to thank my beloved parents who have been giving me support and motivation throughout my project.

Lastly, I would also like to thank my beloved friends who have been giving me motivation to finish and all person that involve in evaluating this Project Sarjana Muda II.



ABSTRACT

Homy Services Online System is an online system that provides online home services application, which allows the customer to order whether specific services in a specific category or order a package that contains services for a period time determined. The new system will be able for staff to managing the customer's orders in more effective way. SDLC methodology that has been used in this project development is Prototyping. Software that involves in this project development is PHP, Oracle 11g, Windows 10 and Google Chrome as a web browser.



ABSTRAK

Homy Sistem Perkhidmatan Online adalah sistem dalam talian yang menyediakan perkhidmatan aplikasi rumah dalam talian, yang membolehkan pelanggan untuk memesan sama ada perkhidmatan tertentu dalam kategori tertentu atau memesan pakej yang mengandungi perkhidmatan untuk masa tempoh yang ditentukan. Sistem baru ini dapat membantu kakitangan menguruskan pesanan pelanggan dgn lebih berkesan. metodologi SDLC yang telah digunakan dalam pembangunan projek ini adalah prototaip. Perisian yang terlibat dalam pembangunan projek ini adalah prototaip. Perisian yang terlibat dalam pembangunan projek ini adalah PHP, Oracle 11g, Windows 10 dan Google Chrome sebagai pelayar



TABLE OF CONTENTS

CHAPTER	SUBJECT DECLARATION DEDICATION ACKNOWLEDGEMENT ABSTRACT ABSTRAK TABLE OF CONTENTS	PAGE ii iv v vi vii xi xv xviii xv			
CHAPTER I	INTRODUCTION				
	1.1 Project Background	1			
	1.2 Problem Statement	2			
ALA	1.3 Objective	3			
L Mr.	1.4 Project Scope	4			
S	1.4.1 User Scope	4			
E .	1.4.2 System Scope	6			
	1.5 Project Significance	7			
-	1.6 Expected Output	7			
E	1.7 Conclusion	8			
2					
CHAPTER II					
CHIM I LA H	2.1 Introduction	9			
1.112	2.2 Project Methodology	10			
	2.2.1 Methodology Comparison	10			
	2.4 Project Requirement	11			
LIMIVEDS	2.4.1 Software Requirements	11			
UNIVERG	2.4.2 Hardware Requirements	12			
	2.5 Project Schedule and Milestones	13			
	2.6 Conclusion	17			
~~~					
CHAPTER III	ANALYSIS 2.1. Inter-duction	10			
	3.2 Problem Analysis	10			
	3.2 1 Currant System Analysis	20			
	3.3 The Proposed Improvements/Solutions	20			
	3.4 Requirement Analysis	21			
	3.4.1 Functional Requirements	22			
	3.4.1.1 Data Flow Diagram (DFD)	22			
	3.4.1.2 Context Diagram	23			
	3.4.1.3 DFD Level 0	23			
	3.4.1.4 DFD Level 1	28			
	3.4.2 Non-Functional Requirements	31			
	3.4.3 Other requirements	32			
	3.4.3.1 Software Requirement	32			
	3.4.3.2 Hardware Requirement	34			
	3.4.3.3 Network Requirement	35			

3.5 Conclusion

#### CHAPTER IV

## DESIGN

- 4.1 Introduction
- 4.2 High-Level Design
  - 4.2.1 System Architecture
- 4.3 Database Design
  - 4.3.1 Conceptual Database Design
  - 4.3.2 Logical Database Design
  - 4.3.3 Software Design
  - 4.3.4 Physical Database Design
- 4.4 Graphical User Interface (GUI) Design
  - 4.4.1 Navigation Design
  - 4.4.2 Input Design
  - 4.4.3 Output Design
- 4.5 Conclusion



#### REFERENCES

# LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Client and server software requirements	11
2.2	Client and server hardware requirements	12
2.3	PSM 1 Project milestones	13
2.4	PSM Project schedule	16
3.1	Non-functional requirement	31
3.2	Software requirement	32
3.3	Hardware Requirements	34
3.4	Network requirement	35
4.1	Table Assigning Data Dictionary	43
4.2	Table Category Data Dictionary	43
4.3	Table Invoice Package Data Dictionary	43
4.4	Table Customer Data Dictionary	44
4.5	Table Invoice Package History Data Dictionary	44
4.6	Table Invoice Service History Data Dictionary	44
4.7 🔄 兰	Table Invoice Data Dictionary	45
4.8	Table Invoice Details Data Dictionary	45
4.9 UN	Table Order Service Data Dictionary SIA MELAKA	45
4.10	Table Orders Data Dictionary	46
4.11	Table Packages Data Dictionary	46
4.12	Table Services Data Dictionary	46
4.13	Table Staff Data Dictionary	47
4.14	Table Stock Data Dictionary	47
4.15	Table Stock Involved Data Dictionary	47
4.16	Table Team Group Data Dictionary	48
4.17	Input Design for Login Interface	58
4.18	Input design for order a package	59
4.19	Input design for order a service	60

0	Input design for assigning a team interface	
1	Input design for record a service invoice	
2	Output design for packages ordered	
3	Output design for search by name	
	List of the user and their responsibility of test organization	
	Environment Setup Specification	
	Home Services Online System (Homy Services) application	
	environment	
	System software	
	System hardware tools	
	Home Services Online System (Homy Services)	
	Login Module	
	Search Module (by All)	
KING	Order packages	
0 #	Order Services	
1	Add Module	
2	Delete Module	
3 🇯	Update Module	
4	Admin Report	
5 U	NIassign team TEKNIKAL MALAYSIA MELAKA	
6	Test Data for Login	
7	Data for Search by all	
8	Test Data for ordering package	
9	Test Data for ordering service (by choosing the issues	
	provided)	
0	Test Dara for adding new Staff	
1	Test Data for deleting information	
2	Test Data for Updating Information	
3	Test Data for admin report	
4	Test Data for assigning team	
5	Test Result and Analysis for login	

6.26	Test Result and Analysis for search by all	94
6.27	Test Result and Analysis for ordering package	95
6.28	Test Result and Analysis for ordering services	95
2.29	Test Result and Analysis for Adding New Product	95
2.30	Test Result and Analysis for updating	95
2.31	Test Result and Analysis for Deleting	95
2.32	Test Result and Analysis for admin report	96
6.33	Test and Result and Analysis for select team	96



# LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	The waterfall life cycle model	10
3.1	Context Diagram System to Be	23
3.2	Customer DFD level 0	24
3.3	Staff (customer services) DFD level 0	25
3.4	Staff (supervisor) DFD level 0	26
3.5	Admin DFD level 0	27
3.6	Customer DFD level 1 (packages order)	28
3.7	Customer DFD level 1 (services order)	29
3.8	Login DFD level 1	30
4.1	Three-tier architecture of the system	39
4.2	Entity relationship diagram	41
4.3	DBMS	50
4.4	Create table Category	50
4.5	Create table Staff	51
4.6	Create table Services	51
4.7	Create table stock	51
4.8 UN	Create table Stock Involved MALAYSIA MELAKA	51
4.9	Create table Packages	52
4.10	Create table Customer	52
4.11	Create table Orders	52
4.12	Create table Invoice	52
4.13	Create table Invoice Package	53
4.14	Create table Assigning	53
4.15	Create table Invoice Package History	53
4.16	Create table Invoice Service History	53
4.17	Create table Invoice Details	54
4.18	Create table Order Service	54

4.19	Create table Team Group	54
4.20	Navigation Design for Homy Services	56
4.21	Navigation Design for Homy Services	57
4.22	Login interface for Homy Services	58
4.23	Order a package interface	59
4.24	Order a service interface	60
4.25	Assigning a team interface	60
4.26	Record order invoice interface	61
4.27	Popup alert for invalid username or password	62
4.28	Popup alert for invalid match date format	63
4.29	Popup alert for enter date lesser then current date	63
4.30	Message alert for completed payment	63
4.31	Message alert for completed order	63
4.32	View packages that have been ordered	64
4.33	View staff information by name	64
5.1	Software development environment setup for Homy	67
	Services Online System	
5.2	Creation of table Category	70
5.3	Creation of table Staff	70
5.4	Creation of table Services MALAYSIA MELAKA	70
5.5	Creation of table stock	70
5.6	Creation of table Stock Involved	71
5.7	Creation of table Packages	71
5.8	Creation of table Customer	71
5.9	Creation of table Orders	71
5.10	Creation of table Invoice	72
5.11	Creation of table Invoice Package	72
5.12	Creation of table Assigning	72
5.13	Creation of table Invoice Package History	72
5.14	Creation of table Invoice Service History	73
5.15	Creation of table Invoice Details	73

5.16	Creation of table Order Service	73
5.17	Creation of table Team Group	73
5.18	SELECT statement	74
5.19	WHERE clause	75
5.20	ORDER BY clause	75
A.1	Home page for Homy Services Online System	102
A.2	Login and sign up page	102
A.3	Customer's sign up page	103
A.4	Login page	104
A.5	Customer's Main page	104
A.6	Packages page	105
<b>A.</b> 7	Cart and payment page	105
A.8	Customer's home page	106
A.9	Issues page for specified service	106
A.10	Print invoice in Customer's home page	107
A.11	Package invoice print page	107
A.12	Print page	107
A.13 🧯	Staff's page	108
A.14	Assigning team to the order	108
A.15 UN	Supervisor page KNIKAL MALAYSIA MELAKA	109
A.16	Order details page	109
A.17	Record invoice page	110
A.18	Extend day page	111
A.19	Admin page	112
A.20	Admin report page	113

# LIST OF ABBREVIATIONS

DFD	-	Data Flow Diagram
ERD	-	Entity Relationship Diagram
SDLC	-	System Development Life Cycle



# LIST OF ATTACHMENTS

ATTACHMENT

TITLE

Appendix A

**User Manual** 



#### **CHAPTER I**

#### INTRODUCTION

#### 1.1 Project Background

Through my search for ideas to build a graduation project, an Idea of bringing out Inspired by experiences that I went through during my stay in Malaysia .During the transition to a new house where I began equipping my room, I was wanted a painting man to paint my room and carpenter as well where my room id small and the bed need to be short. So Fincurred in my search until I can find the appropriate person to fix what I need and my search was about asking a friend or looking for that person in shops specializing in building materials probably they have knowledge of someone can fix things like this or the search in Telephone book . I found one worker's number from my friend , and that person as he said he can painting and fix the bed in same time and because no time to find other one I accept him. I didn't completely accept what he has done but I just go through with. Later I found a lot of defects in his job it couldn't appear before I called him but no response maybe he changed the number or whatever, so this issue will go to other customers and the same issues occurs to them. Also I notice things like this in the city where is my hometown where it spreads a lot of bulk labor, where there are no severe control on them, where they're workers coming from their countries with certain profession and they work in a different occupations which is different what is recorded in residence permit, so maybe you find a worker with tailor profession and he works in a Plumbing profession which may cause damage to the customers, whether in the long or short run. From this logic and experience, I wanted to build a systematic program to regulate these services and to provide a suitable reference and security for customers when their need for such services without worrying about poor working or exaggerated price.

### **1.2 Problem Statements**

The problems that have been identified in the current system are:

#### • Workers without The work permit (random workers).

In this time there are a lot of workers without the work permit which means they don't have recorded into government system that they are a service worker and may they don't have an experience of fixing the issue, this thing will be causing for a lot of damages on the customer's stuffs they may deal with it.

#### • Customers have a lack of time to search on the worker to serve them.

Without using this kind of program you may have to exert effort to find the exact man for the work and may need to looking in the internet about worker or looking in the phone book and maybe some workers has changed them number, so here is the problem and its hardly to reach to the worker to serve online.

• Spending the money and wasting the time

Because there is no an online system that have ability to provide a services to the customers, the customers will spend their money in trialing the worker's work in their houses and don't know whether they found the exact man or not to deal with issue and this is will be wasting the time because the customer don't know the worker's efficiency and it may effect on the stuff rather than fixing it so the customer will exert effort to find another worker in old way.

#### • Using the papers in recording the information issues related

All the progresses of ordering a service to assign the team to deal with customer issue to record the invoice once the repaired finish is done manually.

### 1.3 Objective

The primary goal to Developing this system is to enhance and redesign the present system. There are six goals for this system:

## i. Ordering a service or a packages online.

The system will allow customers to choose whether they need a service or a packages and they can specify their issues.

### ii. Keep the payment information more secure and proper

The data will be secure because the only one who can access is responsible person or who is the information related to him. So, the probability loss of data will be decreased.

## iii. The progresses that related to repairing the issues are online.

All progresses that related to the issue will be online. From the staff's customer server receive an order service or a package to assign the team to go to rapier the customer's issue to record the invoice once the issue has been repaired

# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## iv. Reduce uses of a papers

Through this system, all the information of the components of the system will be saved into database and the use of papers will decrease

#### v. Generate information report.

The administrator will allow generating a report showing the information about all the services, packages, customer and staff.

#### 1.4 Project Scope

A few scope have been define to develop this project. This system has two scopes which is user scope and system scope. The scope of the system is described in Section 1.4.1 for user scope and Section 1.4.2 for system scope.

#### 1.4.1 User Scope

User scope is the user that will be use the system. There are four types of user which are admin, supervisors, customer and staff's customers' services.

#### i. Admin

TEK

- □ Have privileges to view the staff information.
- □ Have privileges to view the customer information.
- Have privileges to generate customer purchase report.
- □ Have privileges to generate team revenue report.
- Have privileges to generate package and services most revenue report.
- □ Have privileges to update or delete customer information.

Have privileges to update or delete staff information

### ii. Staff's customers services

- □ Have privileges to view customers' package's order.
- □ Have privileges to view customers' service's order.
- □ Have privileges to assign date to supervisor to deal with customer's issue.
- □ Have privileges to assign date to supervisor to deal with customer's packages.
- □ Have privileges to print the packages and service invoice of customers.

# iii. Supervisor

- $\Box$  Have privileges to assign worker to his team.
- □ Have privileges to view ordered service's details for the orders assigned to him.
- □ Have privileges to view package's details for the orders assigned to him.
- □ Have privileges to record service invoice.

## iv. Customer

- $\Box$  Have privilege to make online service order.
- □ Have privilege to make online package order.
- □ Have privileges to update their information.

□ Have privileges to print their packages and service invoice.



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA** 

System scope is the scope of the modules in the system. There are five modules in this system which are Online Order a Services Module, Online Order a Packages Module, Staff's Schedule Module, Managing Customer Orders Module and Managing Team Module.

## i. Online Order a Services Module

This module is for customer make an order services.

### ii. Online Order a Packages Module

This module is for customer make an order package to.

## iii. Staff's Schedule Module

This module allows staff's customers services to assign date to specific

team to deal with the customer orders.

## iv. Managing Customer Orders Module.

This module allows supervisor to deal with customer orders.

# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

### v. Managing Team Module

No

This module allows the supervisor to view the staff (worker) and add them to the team.

0.00