Universiti Teknologi MARA

DEVELOPMENT OF DFM ENTERPRISE CAR RENTEL BOOKING SYSTEM

JULIA NASA ANAK ALUS

Thesis submitted in fulfilment of the requirements for Bachelor of Information Technology (Hons.)
Information Systems Engineering
Faculty of Computer and Mathematical Sciences

January 2017

STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

JULIA NASA ANAK ALUS 2013413654

JANUARY, 2017

ABSTRACT

The idea to develop this project rise after conducted an interview session with the stakeholder which is the owner of DFM Enterprise, Puan Azar Binti Aziz. The methodology used in completing this project is Waterfall Model. When each of the phases are finished, the problems are being solved as the objectives achieved. There are two type of booking system, which is stand-alone system and online booking system. The purpose of developing this system are to assist stakeholder in organize the information, to minimize the redundancy of booking and to assist in calculating the booking price. To solve the problem faced by the stakeholder, there are several objectives that need to be completed such as to gather and analyse requirement from stakeholder, to design and to develop the suggested system. As for this project the stand-alone system is more suitable compare to the online booking system. This is due to the limitation of stand-alone system. Therefore, by using it in this project, the limitation can be minimize. At the end of this project, the problems are being solved as the system can make booking and store the information of customers. Finally, there are several suggestions made as the recommendation for future works or improvements.

TABLE OF CONTENT

CONTENTS		
SUPERVISOR'S APPROVAL	ii	
STUDENT'S DECLARATION		
ACKNOWLEDGEMENT		
ABSTRACT		
TABLE OF CONTENT		
LIST OF FIGURES	viii	
LIST OF TABLES	X	
CHAPTER ONE: INTRODUCTION	1	
1.1 Background of Study	1	
1.2 Problem Statement	2	
1.3 Research Aim	3	
1.4 Research Objectives		
1.5 Limitation	3	
1.6 Research Scope	4	
1.7 Research Significance	4	
1.8 Research Outline of the Thesis	5	
1.9 Chapter Summary	6	
CHAPTER TWO: LITERATURE REVIEW	7	
2.1 Booking	7	
2.2 Manual Booking System	7	
2.3 Online Booking System	9	
2.4 Stand-Alone System	12	
2.4.3 Comparison between Stand-Alone System and Online System	15	
2.5 Example of Existing Booking System	15	
2.6 Methodology	19	
2.6.1 Waterfall Model	20	
2.6.2 Rapid Application Development (RAD)	22	
2.6.3 Spiral Model	25	
2.6.4 Comparison of Methodology	27	
2.7 Chantar Summary	20	

CHAPT	ER THREE: METHODO	LOGY29		
3.1	Waterfall Model	aterfall Model29		
3.2	Phases	ases		
3.3	Description of Phase	33		
3.3	1 Project Planning	33		
3.3	2 Analysis	34		
3.3	3 Design	38		
3.3	4 Implementation	39		
3.4	Hardware and Software	Requirements39		
3.4	1 Hardware	39		
3.4	2 Software	40		
3.5	Chapter Summary	40		
СНАРТ	ER FOUR: RESULTS A	ND ANALYSIS41		
4.1	Data Gathering	41		
4.1	1 Interview	41		
4.2	Analysis	43		
4.2	1 Use Case Diagram.	43		
4.2	2 Use Case Description	on44		
4.2	3 Activity Diagram	45		
4.2	4 Domain Class Diag	ram46		
4.3	System Design	47		
4.3	1 System Architecture	·48		
4.3	2 Entity-Relationship	Diagram 49		
4.3	3 Design Class Diagra	nm50		
4.4	Implementation	51		
4.5	Chapter Summary	56		
СНАРТ	ER FIVE: CONCLUSIO	N AND RECOMENDATION57		
5.1				
5.2	Recommendation for Future Work			
5.3	5.3 Chapter Summary			
APPEN	DICES A (SRS)	64		
A DDEN	DICES B (DCD)	111		