

ONLINE VEHICLE RENTAL RESERVATION SYSTEM

NURUL AIN BINTI MOHD

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA
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Tajuk Projek : Online Vehicle Rental Reservation System

Sesi Pengajian : 2008/2009

Saya ----- NURUL AIN BINTI MOHD-----
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Alamat Tetap: Lot 1558, Kg Baru Tebing Tembah,
23100 Paka, Dungun, Terengganu

(COP DAN TANDATANGAN PENYELIA)

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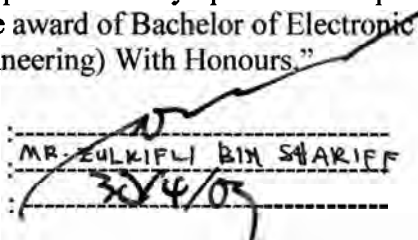
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Supervisor's Name
Date


MR. ZULKIFLI BIN SHARIEF
30/4/09

DEDICATION

To my beloved parents..

ACKNOWLEDGMENT

Firstly, thanks to Allah for giving me ability and strength to finish the project. I would not be able to finish this project without the people who generously spend their time answering foolish questions from beginner. My deepest appreciation goes to my supervisor Bro. Zulkifli Shariff for his guidance toward finishing this project.

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ABSTRAK

Internet memainkan peranan yang penting dalam kehidupan kita seharian dan memberikan pelbagai informasi samada yang berguna mahupun tidak. Untuk menjadikan kehidupan kita lebih mudah, pelbagai pembangunan web telah dibangunkan. Untuk projek Sarjana Muda ini, sistem sewa kenderaan dalam talian menjadi pilihan. Ia merupakan salah sebuah aplikasi-aplikasi yang akan melengkapkan aplikasi-aplikasi lain yang wujud dalam internet. Sistem ini menggunakan jaringan sebagai medium untuk menarik perhatian pengguna. Sistem sewa kenderaan dalam talian merupakan projek yang berasaskan satu jaringan berpangkalan sistem yang mana ia direkabentuk untuk memberikan kemudahan kepada pengguna untuk menyewa kenderaan. walaupun, sistem sebegini telah banyak wujud dalam internet, namun sistem yang di bangunkan ini mempunyai pendekatannya yang tersendiri supaya ia nampak lebih praktikal.

ABSTRACT

Internet plays an important role in our life today and brings a lot of great thing. There are so many internet applications have been developed in making our life easier. Online vehicle rental reservation system is the system that has been developed for this project. It is one of the applications that will complement other existing applications in internet. The system use internet as its medium to reach broadened audience. Online vehicle Rental Reservation System basically is a web-based system designed to provide user an easy way organizing their vehicle rental reservation. Even though, there are so many similar systems already existed in internet, the system takes its own approach to make it workable.

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CHAPTER 1

INTRODUCTION

1.1 – Preamble

As the world goes through the Internet revolution, various internet applications are emerging to make our live more efficient. One of these applications is the online vehicle rental reservation system which will be developed for the final year project. Online vehicle Rental Reservation System is a web-based system designed to provide user an easy way organizing their vehicle rental reservation. This system makes possible for users not to go or not to make an exhausting phone call to the vehicle rental agent in order to get a bunch of information about vehicles, price, reservation restriction, etc. Thus, users can save their valuable time and allocate it for other things. This system allows the users to make, cancel or modify their status of vehicle rental reservation faster because it can be done through online. This system also offers a circumstance that more convenience for a certain users because they do not deal with actual people (agent). In this way, users can take their time to go back and forth through every step of the reservation process until they satisfy with their choice.

Basically, the system has two parts. The first part is the end user (customer) part which they can make reservation, view reservation, update reservation and view other

related information about the system. The second part is for the administrators who can change and manage the system such as add new vehicle or update location.

1.2 – Objectives

The objectives of the project are:-

- To give the user an alternative way to rent vehicle.
- To give the user an easy way organizing their vehicle rental reservation
- To increase the company efficiency that provides vehicle rental service.
- To design the flexible system to be used by the company and user.
- To get experience and knowledge about web development.

1.3 – Scopes

The scopes that involve in the project include the target user, area of specification, specific entities and platform.

1.3.1 – Target user

The main target user is Malaysian community who has the qualification to drive. The user must be at least 20 years old and must have valid driver license. This condition is applied to avoid any problems happen to the users such as accident.

Other target users are foreigners, businessmen or tourists who use rental vehicles as their transportation to travel in Malaysia. According to Road Transport Department (JPJ) in their website, the foreigners or non Malaysian citizen can drive in Malaysia as long their license is valid. They must bring along the license with them and also the copy

of it in English or Malaysia language. Their license can be changed with the Malaysia competence license automatically. The countries that include in this agreement are Australia, Brunei, Belgium, China, Denmark, Egypt, Fiji, Finland, France, Germany, Hong Kong, Iran, Italy, Iraq, Japan, Korea, Libya, Laos, Mauritius, Myanmar, New Zealand, Netherlands, Nigeria, Papua New Guinea, Philippines, Poland, Russia, Switzerland, Spain, Singapore, Thailand and Turkey.

Other foreign domestic license drivers that are not included in the above condition but their countries are included in Geneva convention Agreement 1949 and 1968 also can drive in Malaysia. Their license must valid and they must bring along with them the copy of it in Malaysia or English language.

1.3.2 – Area of specification

The area of study of this project is web based application system for renting vehicle. The study includes the development of web application, web security to encrypt the user information and also in the database area used to store data input from the user.

1.3.3 – Other Related Specific Entities

The specific people use the system is the end users (customers) who use the system. Other specific entities are the users who are responsible for the system's maintenance and management such as database administrators and webmasters.

1.3.4 – Specific platform

There are no specific platforms used to run the system because the system is based on web-based application that use internet as its medium, the system can be used

in any platform such as Windows, Macs and Linux. The project is done in Windows platform and the output will be tested in various circumstances to make it portable. The web server used is apache and the database server is MySQL server. The server scripting languages used is PHP and for the databases is MySQL.

1.4 – Delimitation

The system operates in Malaysia only means that the user who rent the vehicle cannot go outside from this country with that vehicle. For example, someone who rent the vehicle cannot go to Thailand. The system does not include the information about other countries except Malaysia.

1.5 – Constraints

The constraints of the project include the hardware, software, budget and time. The constraint might be the real requirement required for the development of the project.

1.5.1 – Hardware

In doing this project, the system will use these type of hardware.

- Intel(R) Pentium(R) Dual CPU 1.6 Ghz
 - 1 Gb Of RAM
 - 1.60 Gb Hard disk
 - GeForce 4 Graphic card
 - Monitor, keyboard, mouse, speaker
- Web server (Apache, IIS/PWS)

Hardware constraint that limit this capacity

- Remote server to test the system
- Internet connection

Even though the hardware such as remote server and internet connection limit the project capacity, but it is not bother the project development. This is because the server can be setup in the project PC itself by using local host. The test can be done without the internet connection.

1.5.2 – Software

The system will need minimally these types of software specifications.

- Windows 98, Me, 2000, XP or Linux
- Database – MySql
- HTML editor – Microsoft FrontPage
- Server – apache, Microsoft IIS/PWS, MySql server
- Internet Explorer
- Graphic editor – Adobe Photoshop, Macromedia Fireworks.
- Server Scripting language – PHP Triads (PHP4 and MySql)

The software constraint

- The powerful software such as Macromedia Dreamweaver
- Microsoft server operating system
- Microsoft SQL Server

The system use in this project is already installed with Windows XP, Microsoft FrontPage and IIS server. Many open source software can be used in developing this project such as Linux, PHP and MySql database. The combination of these open source software is already made the powerful tool to develop this project.

1.5.3 – Budget

The real budget to develop this project is less than RM200. What the project needs are the paper for the documentation, the payment for doing research, software and hardware. Besides that, this project does not involve any extra cost such as external consultancy and labor because it is done personally. The software and hardware used are belong to the university and me as developer. So, there is no need to buy the new hardware and software.

1.5.4 – Time

The expected time to finish the whole system is from two month until four month including the analysis, research session and design. The system analysis is done in one semester (semester 1) and the design phase is in another semester.

1.6 – Project Stages In Diagram

The system is planned to finish in two semesters. So, the figure below is the project stages start from planning stage which will begin in the first semester to the maintenance stage which will be done in second semester.

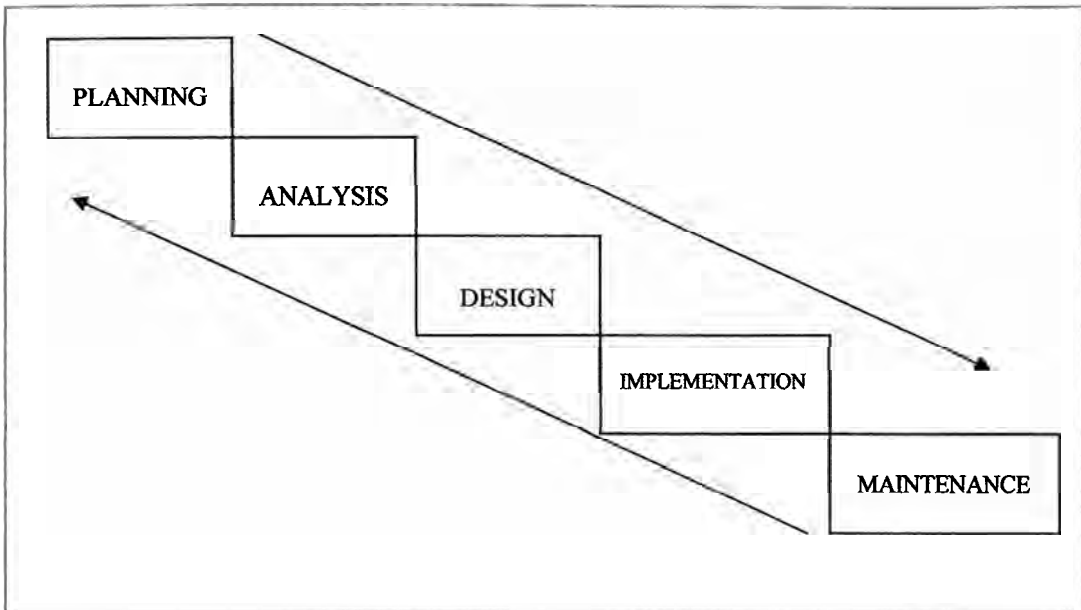


Figure 1.1 - Project stages

1.6.1 – Planning Phase

The online vehicle rental system was planning

1.6.2 – Analysis Phase

- Data gathering

Data gathering is done by doing research in internet. Much of the data is get from the US based company websites which is already established in this field.

- Data flow