

RENTAL VEHICLE SYSTEM

SITI SARAH NUR BTE REZUAN

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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FASA 1E,
32040 SERI MANJUNG
PERAK DARUL RIDZUAN

(TANDATANGAN PENYELIA)

Puan Zahriah Sahri

Nama Penyelia

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RENTAL VEHICLE SYSTEM

SITI SARAH NUR BTE REZUAN

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
2007

DECLARATION

I hereby declare that this project report entitled

RENTAL VEHICLE SYSTEM

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

STUDENT : _____ Date: _____
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SUPERVISOR : _____ Date: _____
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DEDICATION

A special dedication goes to my beloved parents Mr. Rezuan bin Sulaiman and Mdm Zaiton binti Hj Nek because giving support in completing my final year project which is entitled Rental Vehicle System (RVS).

I also would like to dedicate to the people who help and support direct or indirect in finishing my project successfully.

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A note of thanks is dedicated to few lecturers in UTeM in giving me some ideas, information and for spending their valuable time and effort. I can only express their generosity by being thankful for having such kind lecturers who are supportive.

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ABSTRACT

This project is about developing a system for managing the rental car based on the user's demand. This to-be system called Rental Vehicle System (RVS). This system concerns on booking a rental car for their usage while the tourist going for holiday at Langkawi. The RVS will be developed by using the computerized system to obtain the advantage of the technological use. There will be giving higher security in managing data, faster in accessing data, and the systematic of data management. The RVS is going to be used by three different users, which are Administrators, Company, and Users. RVS is developed using PHP as the programming language and MySQL as the database. Therefore, this to-be system may help the management goes well in pursuing the successful data access.

ABSTRAK

Projek ini dibangunkan di atas permintaan pengguna dalam mengendalikan penyewaan kereta. Sistem yang akan dibangunkan ini dikenali sebagai *Rental Vehicle System (RVS)*. Sistem ini lebih kepada untuk penyewaan kereta semasa pengguna ingin melancong ke Pulau Langkawi. Sistem ini dibangunkan dengan menggunakan teknologi berkomputer untuk mengambil kebaikan di atas penggunaan teknologi masa kini. Sistem ini akan menyediakan pangkalan data yang mempunyai kawalan, dapat memperolehi data dengan lebih cepat dan dapat digunakan dengan lebih sistematik. Sistem ini akan digunakan oleh tiga pengguna yang berbeza iaitu kakitangan syarikat, ketua dan juga pengguna. Sistem ini dibangunkan dengan menggunakan PHP sebagai bahasa pengaturcaraan and MySQL sebagai pangkalan data. dengan itu, sistem ini dapat menjadikan pengurusan lebih cekap.

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LIST OF ABBREVIATIONS

RVS	Rental Vehicle System
DBMS	Database Management System
SSADM	Structured Systems Analysis and Design Methodology
PHP	Personal Home Page
LDS	Logical Data Structure
DFD	Data Flow Diagram
DBLC	Database Life Cycle
ERD	Entity Relationship Diagram
NIC	Network Interface Card
RAM	Random Access Memory
PSM	Projek Sarjana Muda
OS	Operating System
LAN	Local Area Network
WAN	Wide Area Network
NF	Normal Form
PK	Primary Key
FK	Foreign Key
RDBMS	Relational Database Management System

SQL	Structured Query Language
DDL	Data Definition Language
DML	Data Manipulation Language
DBA	Database Administrator
DCL	Data Control Language

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CHAPTER 1

INTRODUCTION

1.1 Project Background

Rental Car Company uses manually system to manage their company management and it is limit to the staff and manager. So, the system is functioned when a customer or tourist made a call to make a reservation to rent a car and when staff filled in the name of the tourist and the type of car that they want to rent. The other ways they make to rent a car is the customer or tourist just drop by at the registration counter and just fill a rental car form.

Besides that, the customer or tourist just can rent a car. It is because certain car rental company doesn't provide a van or trucks. Besides that, if they want to rent other type of vehicle such as motorcycle or a boat for private use, they need to go the other company to rent the type of vehicle that they want. Basically, the water vehicle will provide by the hotel that the customer or tourist stayed.

To overcome this problem, one system will be developed which is Rental Vehicle System (RVS). This system is a web based system that developed to make an online reservation to rent a vehicle. In the other meaning, it will operate online. This system is developed to be used by the company that provides a rental vehicle to their customer or tourist.

This project will submit the user requirements and take the vehicle's reservation from the customer. So that, when customer attends to the car rental company, they do not have to register again. The staff will only check the reservation list to make sure that the customer is already reserve a vehicle. The deposit payment also can be done at the counter, so that customer's bank account will be safer instead of paying online. The new system must be built to help this car rental company to manage its workers, clients and also to be known by other people.

This project is giving the experience about develop a website and also gives the skills of manages a database.

1.2 Problem Statement

A new system must be developed to enhance the current system. This is because the current system is lack of function in the following aspect:

1. Hard to reserve a car

The current system is used just to store about the client information as they are going to the company car rental. For reservation, clients have to call and clerk takes long time to record the data.

2. Leak of security or unauthorized user

All staffs and also the manager can access the same information. There are no security aspects in the manual system because staff can view the data that only the administrator should know about. Besides that, other people also can access or change the information.

3. **Use a lot of paper to save a data**

The customer records, receipt or bill, reports and others are all save in paper. It will cost a lot of money to buy a paper. Besides that, by using a paper, the high of loose it is high.

4. **Difficult to access information when admin need the client record**

By using file system, it gives difficulties to admin to retrieve the record. In this situation, the Rental Vehicle System (RVS) will give opportunities to admin

5. **Have a problem while make a calculation during the payment**

Human is not perfect so they are chances of making a mistakes, especially when record the information and doing the calculation. So by using the system can reduce this problem.

1.3 **Objective**

The objective of this project is to enhance the current system especially to add some functionality that the customer will obviously like about it. There are a few goals that will be achieved in this project:

1. **To make the management more efficient**

The management process will become easier and faster. The computerize system can help rental vehicle company to solve the problem that occur in their management process.

2. To develop an online system

Customer can make a reservation to rent a car by online. Besides that, before the customer want to rent the vehicle, they can also know about the type of car that the company provides the package that the company offered.

3. To reduce a paper using

All the customer record, bill or receipt, report will be key in the computer. So, there no more paper usage to store all the data.

4. To make the cost registration efficient

All the calculation for the payment will be easier. The system will automatically calculate the price that needs to be paid and it will reduce a mistake during the calculation.

5. To build a secure system

As the system will be operated online, staff can be login only with a correct password. So, other Internet user cannot login easily and other information will be stored safely.

1.4 Scope

The scope of this project includes the target user, function of the system and also the technology included.

1.4.1 User

1. Admin

Admin is capable to maintained and solve the problem that occur in the system.

2. Staff

The staff that works at the reservation table will get information from client and view reservation form to ensures that the client has reserve any vehicle during the time the client come to take the vehicle rent.

3. Client

Client is the internet users that will browse the website to get the information about the car rental company and make a reservation for a specific vehicle.

1.4.2 Function

1. Login module

Staff are required to login before the can access to the system. The staff's username and password are required. They then will be verified and it is the correct staff, they will allow to access to the system.

2. Staff module

Staff can search information about the client and also fill the data about the client such as payment.

3. Customer module

Customer module can make a reservation and view the information of the car rental company cost for the vehicle that will be rent, the facilities, service and package offered at a time.