SYSTEM REQUIREMENTS SPECIFICATION

FOR   
CAR RENTAL MANAGEMENT SYSTEM

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**1.INTRODUCTION**

**1.1 Purpose**

The company wants to find a solution to reduce its operating costs. The system being developed is a system to handle the business needs of renting out vehicles to customers, maintaining records and data on vehicle fleet, operating the customer portal website, and reporting the state of the system to the company. The system does not fulfill any other needs of the business.

**1.2 Scope**

Car Rental System is basically a internet based application so that the users an know the details of their accounts, availability of cars.The project is specifically designed for the users to rent a car online. The product will work as a complete user interface for Car rental management process and usage from ordinary users. User can book existing car online.

* **2. Overall Description**
* **2.1 Product Perspective**
* CRMS is a replacement for the ordinary library management systems which depend on paper work for recording booking and users’ information.
* **2.2 Product Functions**
* **2.2.1 Administrators** 
  1. 􏰀 1.Admin should be able to insert, modify and delete cars.

2.Can accept or reject a new user according to the Car Rental policy or payment methods.

3.Can get the information (status report) of any member who has Rent a Car.

4.Add and edit car categories and arrange car by categories.

5.Add and edit authors owner information.

 6.Can send lateness warnings to people who have exceeded deadline date.

7.Can record Car returned by users.

**2.2.2 Normal Users**

* Members are given a provision to check their account’s information and change it.
* Members have the ability to search through Cars by categories,information related to cars.
* Can extend the period of renting car according to the Rental policy.
* The customer may suggest a car to be brought to the Car collection.

**2.3 Operating Environment**

The Car Rental Management System is a website and shall operate in all famous browsers.

**2.4 User Characteristics**

Users of the website are members, administrators who maintain the website. Members and Manager are assumed to have basic knowledge of computers and Internet browsing. Administrators of the system should have more knowledge of internal modules of the system and are able to rectify small problems that may arise due to disk crashes, power failures and other catastrophes. Friendly user interface, online help and user guide must be sufficient to educate the users on how to use this product without any problems or difficulties.

**2.5 Design and Implementation Constraints**

* The information of all users, Cars must be stored in a database that is accessible by the website.
* MS SQL Server will be used as SQL engine and database.
* The Online Car Rental System is running 24 hours a day.
* Users may access CRMS from any computer that has Internet browsing capabilities and an Internet connection.
* Users must have their correct usernames and passwords to enter into their online accounts and do actions.

**3. Specific Requirements**

**3.1 Functional Requirements**

This section provides requirement overview of the system.Various functional modules that can be implemented by the system will be -

3.1 Description

3.1.1 Registration

If customer wants to buy the product then he/she must be registered, unregistered user can’t go to the shopping cart.

    3.1.2 Login

Customer logins to the system by entering valid user id and password for  the shopping.

3.1.3 Changes to Cart

Changes to cart means the customer after login or registration can make order or cancel order of the product from the shopping cart.

3.1.4 Payment

For customer there are many type of secure billing will be prepaid as debit or credit card, post paid as after shipping, check or bank draft. The security will provide by the third party like Pay-Pal etc.

3.1.5 Logout

                   After the payment or surf the product the customer will logged out.

3.1.6 Report Generation

After all transaction the system can generate the portable document file (.pdf) and then sent one copy to the customer’s Email-address and another one for the system data base to calculate the monthly transaction .

3.2 Technical Issues

This system will work on client-server architecture. It will require an internet server and which will be able to run PHP application. The system should support some commonly used browser such as IE etc.

4. Interface Requirement

   Various interfaces for the product could be-

   1. Login Page

   2. Registration Form

3. There will be a screen displaying information about product that the shop having.

4. If the customers select the buy button then another screen of shopping cart will be opened.

5. After all transaction the system makes the selling report as portable document file (.pdf) and sent to the customer E-mail address.

4.2 Hardware Interface

The System must run over the internet, all the hardware shall require to connect internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

  4.3 Software Interface

The system is on server so it requires the any scripting language like PHP, VBScript etc.The system require Data Base also for the store the any transaction of the system like MYSQL etc. System also require DNS(domain name space) for the naming on the internet. At the last user need web browser for interact with the system.

5. Performance Requirement

There is no performance requirement in this system because the server    request and response is depended on the end user internet connection.

6. Design Constrain

The system shall be built using a standard web page development tool that conforms to Microsoft’s GUI standards like HTML, XML etc.

7. Other non Functional requirement

7.1 Security

The system must automatically log out all customers after a period of inactivity.

The system should not leave any cookies on the customer’s computer containing the user’s password.

The system’s back-end servers shall only be accessible to authenticated administrators.

Sensitive data will be encrypted before being sent over insecure connections like the internet.

7.2 Reliability

The system provides storage of all databases on redundant computers with automatic switchover.

The reliability of the overall program depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes.

Thus the overall stability of the system depends on the stability of container and its underlying operating system.

7.3 Availability

The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. In case of a of a hardware failure or database corruption, a replacement page will be shown. Also in case of a hardware failure or database corruption, backups of the database should be retrieved from the server and saved by the administrator. Then the service will be restarted. It means 24 X 7 availability.

   7.4 Maintainability

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the program will be done. Also the software design is being done with modularity in mind so that maintainability can be done efficiently.

      7.5 Portability

The application is HTML and scripting language based. So The end-user part is fully portable and any system using any web browser should be able to use the features of the system, including any hardware platform that is available or will be available in the future.

An end-user is use this system on any OS; either it is Windows or Linux.

The system shall run on PC, Laptops etc.