Software Requirements Specification

for

Car Sales Management System

Version 1.0 approved

Prepared by

Anay Gupta (0801CS171010)

Aarushi Ghadiya (0801CS171002)

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1. **Introduction**

**1.1 Purpose**

The main purpose of Car Sales Management System is to create a convenient way for a car showroom owner to maintain and generate all the four wheeler’s record of showroom.

**The goals of the system are:**

* To achieve least manual work required to do.
* To minimize the number of employees in the showroom.
* To minimize chances of data misuse or loss.
* To reduce the working time.
* To obtain statistic information from the past record.

**1.2 Document Convention**

The document is prepared using MS Word 2007 and has used font face “Times New Roman”. Standard IEEE template is the template used to design this document.

**1.3 Intended Audience**

This project is developed for the Car Showrooms.

This project has been implemented under the guidance of college faculty.

Further modification and reviewing is done by the organization and deliver a final project. The final project version is to be reviewed by Faculties, TA’s of the subject.

**1.4 Product Scope**

The purpose of this project is to create a convenient system for car showroom owner to maintain and generate all the four wheeler’s record. The user can add, view, remove and update car details. Cars can be searched according to their brand, model name, and color. User can also generate and view sales report. User can register new employee

and can also add car owner details.

1. **Types of Users**

This software project can be used by the showroom owner and by the showroom employees**.**

1. **Role of Users**
2. **Role of Showroom owner**

The owner can register new employee. He can add, view, search, and update details of cars which are in stock. The owner can also generate sales report for his dealership. To enhance the functionality and security, the owner has to first login on the system.

1. **Role of Employees**

The employees can use the system to view, search cars in stock and can also view car details which will be updated by showroom owner. Employees can add and update customer details. To enhance functionality and security, employees need to first login to the system.

**1.5 References**

* <https://wen.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc>
* IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998

**2. Overall Description**

**2.1 Product Perspective**

The Car Sales Management System is designed to replace manual record filing system of a Car Dealership. Currently, a effective software that overcomes limitations of manual record filing system is not available. It also speeds up the data collection and collaboration. Also this software is easy to use.

**2.2 Product Functions**

Following are the functions system will perform:

* It enables Showroom owner to add, delete, view, update the details of four wheelers.
* Owner can generate and view the sales report.
* Employees at showroom can view the details of four wheelers updated by the owner.
* It enables employees to add and update details of customer.

**2.3 Operating Environment**

Operating System: Windows

Database: MySQL + SQLite

**2.4 User Characteristics**

Employees: These are the direct users who will search for the car details and will collect information.

Owner: This is the super user who will control and update cars details and information regarding sales report.

**2.5 Design and Implementation Constraints**

1. Time: No time to be witnessed during the process.

2. Investment should not exceed beyond the price quoted to the customer (showroom owner).

3. Large data storage capacity of the system.

4. Considerable RAM size needed for smooth working.

**3. External Interface Requirements**

**3.1 User Interfaces**

* Login: To allow the owner and employee to use the system.
* Car Details: To avail appropriate details and information of the cars in stock.
* Employee Details: To maintain employee details and provide additional authority. (Available only to the showroom owner)
* Customer Details: To avail appropriate information of the customers.

**3.2 Hardware Interfaces**

* A Laptop or Desktop is the Hardware support for the system.
  1. **Software Interfaces**

Following are the software interfaces required for the Car Sales Management System:

* **Operating System**: We have chosen Windows operating system for its best support and user-friendliness.
* **Database**: To save the records we have chosen MYSQL database.
* **Java**: To implement the backend of the project we have chosen Java language for its more interactive support**.**
* **Front End:** To implement front-end of the project we have chosen HTML, CSS, JavaScript.
  1. **Communication Interfaces**
* Mobile is to be used as the mode of communication between the showroom and customer.

**4. System Features**

* 1. **Functional Requirement**

1. Login :

If user has already been registered, he will be asked to login otherwise he will have to be registered by the owner. When user will enter the valid credentials homepage will be displayed. Otherwise if login fails, the authentication fails.

1. View Cars:

If the user has been successfully logged in, he can view the car details of a specific car or details of a particular car model. To view the details of cars he needs to enter the key like model or color or if available registration number on the basis of which he wants the details to be displayed.

1. Add Cars:

This function can only be performed by owner. He can add new Cars to the list and can add all required details regarding it to the system.

1. Register new employee:

Whenever any new employee joins, he needs to be registered to the system by owner so that he can also access the system. To get registered to system employee needs to submit all the required self details.

1. Generate and View sales report:

Owner can generate a daily report or weekly report or monthly report on the basis of all the stored sales details. And only owner can view these reports. The reports are generated in pdf format.

1. **Other Nonfunctional Requirements**

**5.1 Safety**

* The database may get crashed or damaged due to some viruses or operating system requirements. Therefore, it is necessary to have backup for your data. UPS/Inverter facility should be there in case of power failure.

* 1. **Security**
* The system must automatically log out all users after a period of inactivity.
* It must be ensured that access will be provided to the authorized persons through user ID and password.
* Checks can be performed at regular intervals to ensure data integrity.\
  1. **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 reliability of container and its underlying operating system.
  1. **Availability**
* In case 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 restricted from the server and saved by the administrator. Then the service will be restarted. It means 24x7 availability of the system.
  1. **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 thatmaintainability canbe done efficiently.
  1. **Portability**
* .An end-user can use this system on any version of Windows OS launched after Windows 7.
* The system shall run on Desktops and Laptops.