**Software Requirements Specification**

**for**

**Car purchasing web application**

**Version 1.0**

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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# **Introduction**

## **Purpose**

The online purchasing car dealership is intended to provide complete solutions for customers who want to buy cars through a single gateway using the internet. It will enable the customer to browse through the online web application and purchase them online without having to visit the car dealership physically. The administration module will enable a system administrator to add, delete and update the users and cars data.

This document is meant to discuss the features of online purchasing car dealership, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other.

## **Intended Audience and Reading Suggestions**

This document could be reference for developers, project managers, marketing staff, users, testers, product owner ,and documentation writers.

## **Product Scope**

This platform will host an enormous database of cars enabling the sellers to advertise and market their cars and to help the buyers to search for desired cars.

## **References**

IEEE 830-1999 standard for writing SRS document.

# **Overall Description**

## **Product Perspective**

The online purchasing car dealership is aimed to achieve the highest selling in the world of cars, and also facilitates the user needs.The online purchasing car dealership should be user-friendly, ‘quick to learn’ and reliable software for the above purpose. It is intended to be a stand-alone product and should not depend on the availability of other software. It should run on both UNIX and Windows based platform.

## **Product Functions**

Role 1: Administrator

Functions: Admin should log in with valid account and he/she can remove a car from search page after 24 hours if it is confirmed to be bought, aslo Admin can add, delete, and view users data.

Role 2: Customer

Functions: the user shall register in the online car purchasing , log in , view all cars in the application , search in the application based on different criteria ,browse through application and reserve a car or more.at the end the user can log out from this web application, any user can see most popular cars in the homepage without registration and login.

## **User Classes and Characteristics**

The customer should be familiar with using the internet and online shopping,the administrator should illustrate the rules of buying through the application.

## **Operating Environment**

The online purchasing car dealership is a website that shall operate in all popular browsers, like chrome , Internet explorer and firefox.

## **Design and Implementation Constraint**

* The user name shall be unique, the project is web based, and the administrator features should be work in this phase.The car will be removed from the search page for 24 hrs, if the car is confirmed to be bought, it will be removed permanently and if not it will appear again in the search page after the 24 hours. the user should be registered and logged in before buying a car. [Car\_SYS\_14]
* Unregistered users can not reserve any car [Car\_SYS\_21]
* Reservation tap shall changed car status from free to reserved and removed from search page.[Car\_SYS\_21]

# **External Interface Requirements**

## **User Interfaces**

The customer interface shall be contain login page, registration page, contact us, reservation page, the home page contains scrollable list of cars and search bar,About us page contains information about car web application page.[Car\_SYS\_10],[Car\_SYS\_11],

The car description should contains the model year, Engine CC , color , gear transmission , condition(new or used) , Kilometers(for used cars) and Price [Car\_SYS\_30]

As admin search results shall be (free, sold, and reserved cars)

## **Software Interfaces**

In this phase there is no interaction between this application and other application

## **Communications Interfaces**

The user shall registered by email and phone the communication between the customer

and the web application will be through email or phone.

# **System Features**

The car web application tailored to be browsed based application which help the user to access the system without specific tools or programs only just popular web browser.

The system will help the users to get any required information about any car model. the system contains several models with several colors and price list.

## Functional Requirements

**Customers**:

**4.1.1 Registration**

The user shall register in the application using these data unique username , password , password confirmation , phone, email and address. the username should be unique , the password constraints are upper and lower case letters, number ,special character and more than 8 characters. the mail should be valid mail and the all fields are mandatory and the user must fill all fields and then the user should press on the sign up button , if the user enter invalid data an error message “in red color” will appear .

If the user tries to Register without entering the username or the password, " All the fields are mandatory. Please try again" Error message appears in red color.

[Car\_SYS\_01],[Car\_SYS\_19],[Car\_SYS\_37] [Car\_SYS\_36]

If the user tries to register with used email, " This email is already used. Please try again" Error message appears in red color.[Car\_SYS\_35]

If the user tries to register with used username, " This username is already taken. Please try again" Error message appears in red color. [Car\_SYS\_34]

If the user enter invalid username or password, " The username and password you entered did not match our records. Please double-check and try again. " Error message appears in red color.[Car\_SYS\_33]

## 4.1.2 Log in

The customer shall be registered and have valid username and valid password this function has very high priority if the customer want to reserve a car. [Car\_SYS\_02]

If the user tries to login without entering the user name or the password, Error message appears in red color, the error message will be “invalid username or password”.[Car\_SYS\_36]

**4.1.3 Searching**

The customer can search in the application search bar based on different criteria as listed

1. Search criteria filter for car color. [Car\_SYS\_04]
2. Search criteria filter for car model.[Car\_SYS\_05]
3. Search criteria filter for car price from high to low. [Car\_SYS\_06]
4. Search criteria filter for car price from low to high. [Car\_SYS\_07]

The search result shall be for not reserved cars only. [Car\_SYS\_08]

**4.1.3 Reserving a car**

The customer can reserve a car from the application ,then the status of the car changed from available to reserved and this car should be removed from the search for 24 hours until the customer confirm buying it,reservation tap shall changed car status from free to reserved and removed from search page. [Car\_SYS\_12],[Car\_SYS\_14],[Car\_SYS\_13]

**4.1.4 More details**

when the user hovers over the car, it shall expand to unveil the car description and a button for more should be provided and by clicking on it, it will direct the user to another page displays the car detailed specification. [Car\_SYS\_21],[Car\_SYS\_27]

**4.1.5 Log out**

The customer can logout from the application after searching or purchasing a car by pressing on the logout button.[Car\_SYS\_30]

**Administrator:**

**4.2.1 Log in**

The admin must login with admin credentials , the username and password for admin must be unique. [Car\_SYS\_30]

**4.2.2. Change car status**

Admin can remove a car from search page after 24 hours if it is confirmed to be bought. [Car\_SYS\_18]

All the reserved/sold cars shall be appear in the admin search page with their associated users and the time of the reservation/buy.[Car\_SYS\_32]

**4.2.3 Add Customer**

Admin can add unregistered user from the admin panel control [Car\_SYS\_15]

**4.2.4 Delete customer**

Admin can delete customer from the web application from the admin panel control [Car\_SYS\_16]

**4.2.5 View Customers**

Admin can view all registered customer from the admin panel control [Car\_SYS\_17]

**4.2.6 Remove car from search**

Admin can remove car from search after selling it.[Car\_SYS\_14]

# **Nonfunctional Requirements**

## **Performance Requirements**

The system shall accommodate high number of items and users without any fault.

Responses to view information shall take

* Response time = 10 second [Car\_SYS\_38] ,and Transaction per second = 500 Tps [Car\_SYS\_39]

## **Safety Requirements**

System use shall not cause any harm to human users.

## **Security Requirements**

Out of scope*.*

## 

## **Software Quality Attributes**

A very little knowledge and techniques are applied to ensure software quality attributes ,quality characteristics for this product will be important to the customers and developers. Some to consider are: adaptability, availability, correctness, flexibility, maintainability, portability, reliability, reusability, robustness, testability, and usability. these techniques should be applied on the requirements and implementation of the requirements