**Software Requirements Specification**

**for**

**Car purchasing web application**

**Version 1.0 approved**

**Prepared by Bosy Shafey**

**Information technology institute**

**29-04-2019**

**Table of Contents**

**1** [**Introduction**](#_y65noob7bsar) **4**

**1.1** [**Purpose**](#_3znysh7) **4**

**1.2** [**Intended Audience and Reading Suggestions**](#_a5uxphtwktcf) **4**

**1.3** [**Product Scope**](#_m44ls905cya) **4**

**1.4** [**References**](#_g1uoe5ihz2t0) **4**

**2** [**Overall Description**](#_je5cc7c7skyc) **5**

**2.1** [**Product Perspective**](#_2s8eyo1) **5**

**2.2** [**Product Functions**](#_9jkwv12vs18q) **5**

**2.3** [**User Classes and Characteristics**](#_7nyegdf4bqj1) **5**

**2.4** [**Operating Environment**](#_dai6rc76bga) **5**

**2.5** [**Design and Implementation Constraints**](#_45fdz6m64qsx) **5**

**3** [**External Interface Requirements**](#_r1xrrbccwxrm) **6**

**3.1** [**User Interfaces**](#_2jxsxqh) **6**

**3.2** [**Software Interfaces**](#_mpdcmmdkwvf5) **6**

**3.3** [**Communications Interfaces**](#_5z78rnaeiw5h) **7**

**4** [**System Features**](#_s8m5pclvtkk9) **7**

**4.1 Functional requirements**

**Customer**

**4.1.1 Registration**

**4.1.2 Log in**

**4.1.3 Searching**

**4.1.3 Reserving a car**

**4.1.4 Log out**

**administrator**

**4.2.1 Log in**

**4.2.2. Change car status**

**4.2.3 Add Customer**

**4.2.4 Delete customer**

**4.2.5 View Customers**

**4.2.6 Remove car from search**

**5** [**Nonfunctional Requirements**](#_3whwml4) **8**

**5.1** [**Performance Requirements**](#_2bn6wsx) **8**

**5.2** [**Safety Requirements**](#_uifnp1ezbm5k) **8**

**5.3** [**Security Requirements**](#_nvy95ifq6uwh) **8**

**5.3** [**Software Quality Attributes**](#_ktx5dtxzcc4b) **8**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Bossy Shafey | 29-4-2019 | customer change request | version 1 |
| Bossy Shafey | 5-1-2019  2-5-2019 | customer change request  last updated ,version 3 | version 2  version3 |

# **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 shop 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**

User1: 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.

User2: Customer

Functions: the customer can 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 can log out from this web application.

## **User Classes and Characteristics**

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

## **Operating Environment**

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

## **Design and Implementation Constraint**

The user name should 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.

# **External Interface Requirements**

## **User Interfaces**

The customer interface should be contain login page, registration page, reservation page, the home page contains scrollable list of cars and search bar,About us page contains information about car web application page,

## **Software Interfaces**

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

## **Communications Interfaces**

The user should registered by email and phone the comnunication between the customer

and the web application will be through email or phone

The application will be lanuched in the IIS Server.

# **System Features**

## Functional Requirements

**Customers**:

**4.1.1 Registration**

The user can 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 will appear .

## 4.1.2 Log in

The customer should be registered and have valid username and valid password this function has very high priority if the customer want to reserve a car.

**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.
2. Search criteria filter for car model.
3. Search criteria filter for car price from high to low.
4. Search criteria filter for car price from low to high.

**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.

**4.1.4 Log out**

The customer can logout from the application after searching or purchasing a car by pressing on the logout button.

**Administrator:**

**4.2.1 Log in**

The admin must login with admin credentials , the username and password for admin must be unique.

**4.2.2. Change car status**

Admin can remove a car from search page after 24 hours if it is confirmed to be bought.

aslo admin can change car status from reserved to bought.

**4.2.3 Add Customer**

Admin can add unregistered user.

**4.2.4 Delete customer**

Admin can delete customer from the web application

**4.2.5 View Customers**

admin can view all registered customer

**4.2.6 Remove car from search**

admin can remove car from search after selling it.

# **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 and Transaction per second = 500 Tps

## **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 technique should be applied on the requirements and implementation of the requirements