

**Online Vehicle Booking System**  
**Software Requirements Document**  
**V 1.0**

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# Introduction

## 1.1 About this document

### 1.1.1 Purpose & Scope of the document

The purpose of the software requirements document is to systematically capture requirements for the project and the system **Online Vehicle Booking (OVB)** application. OVB is a system used for vehicle booking functions for customers, branch administrators and main administrators. Customers enter their information, vehicle requirements and gets through the required results.

The scope of this document is limited to addressing the requirements from a user, quality, and non-functional perspective. It is recommended that design aspects are not added in this document

### 1.1.2 Intended Audience

Project Team

## 1.2 About the Software System

The client would like to develop an independent application **Online Vehicle Booking System (OVBS)**. The core essence for the system is realization of vehicle booking functions for customers, branch administrators and main administrators. Customers enter their information, vehicle requirements and gets through the required results.

The following section will cover aspects related to Property Insurance Management System.

### 1.2.1 Purpose

The **Online Vehicle Booking System (OVBS)** core essence for the system is realization of vehicle booking functions for customers, branch administrators and main administrators. Customers enter their information, vehicle requirements and gets through the required results.

The following are the important modules in the system

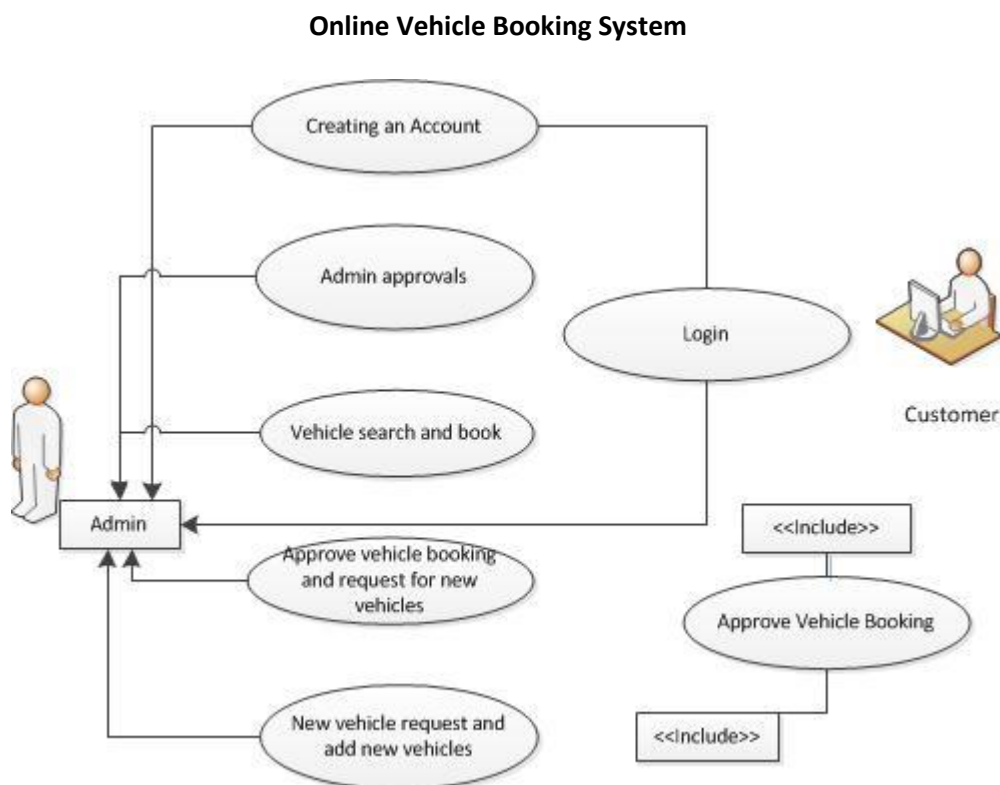
- a. Creating an Account for Role (Customer, branch admin and admin) and profile creation for these roles
- b. Admin approvals
- c. Vehicle search and book
- d. Approve vehicle booking and request for new vehicles
- e. Approve new vehicle request and add new vehicles

### 1.2.2 Scope of the system

The scope of the system is explained through its modules as follows

- Creating an Account - create an account for them in the website based on their role.
- Admin approvals - by admin to approve users' accounts with the system.
- Vehicle search and book - The customer should be able to search the vehicle postings based on his interest.
- Approve Vehicle Booking and Request for New Vehicles Module - The branch admin should be able to view the list of booking requests for vehicles to his branch.
- Approve New Vehicle Request Module - The admin should be able to view the list of stock addition requests from branch admins.

#### Use Case Diagram



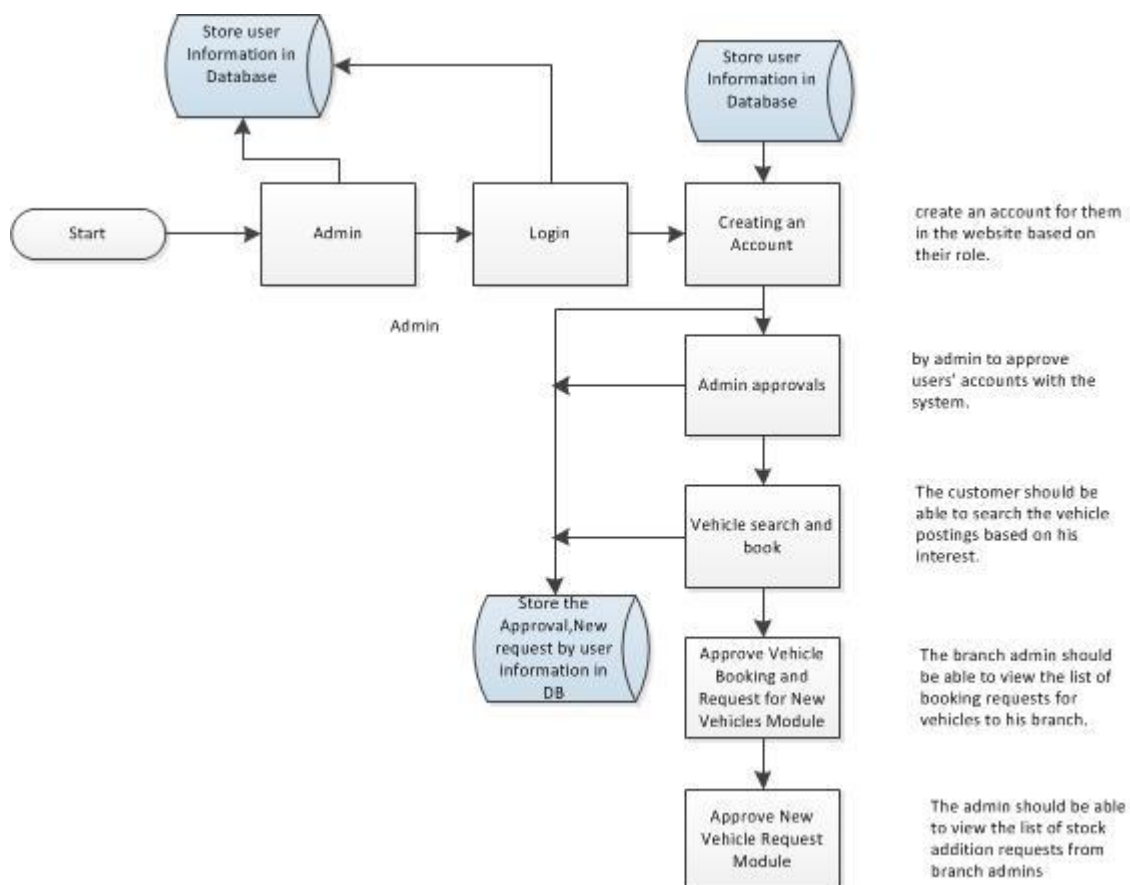
### 1.2.3 Exclusions

The system will operate only on the modules discussed above and will not include any additional functionality.

### 1.2.4 System Perspective

Online Vehicle Booking is an independent software system developed to manage the activities like OVB vehicle booking functions for customers, branch administrators and main administrators. Customers enter their information, vehicle requirements and gets through the required by using the Java/ Dotnet architecture.

### 1.2.5 System diagram



### 1.2.6 Architecture diagram

#### Physical Architecture:

A physical architecture is an arrangement of physical elements, (system elements and physical interfaces) that provides the designed solution for a product, service, or enterprise. It is intended to satisfy logical architecture elements and system requirements. Auto Identification Process follows a three layered architecture namely presentation layer, business logic layer and data access layer.

- **Presentation Tier** is the tier in which the users interact with an application.

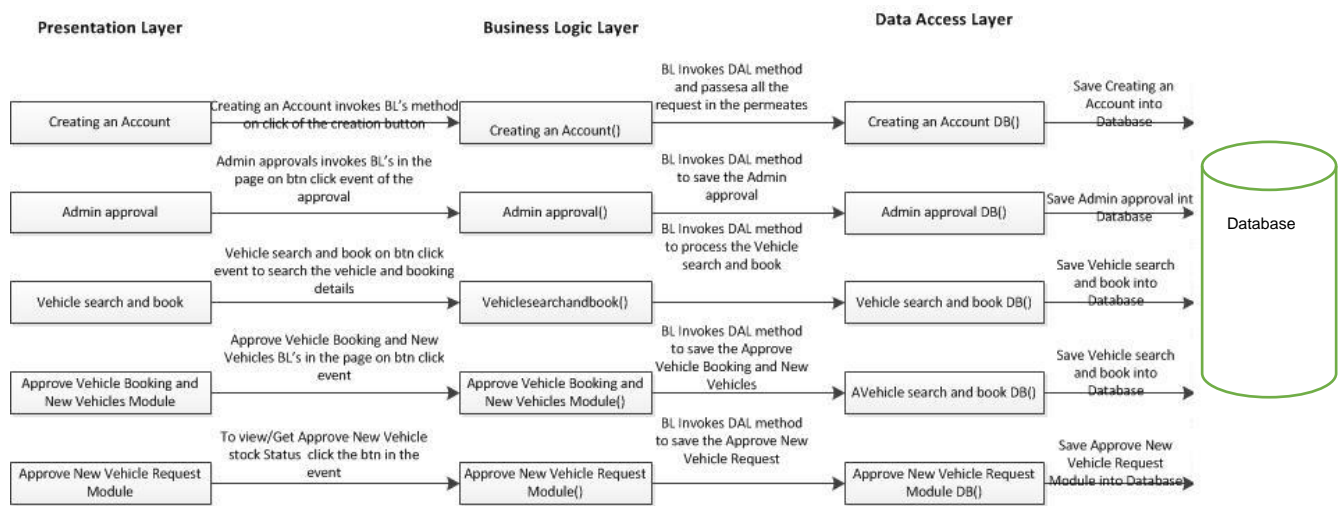
Presentation Tier contents Shared UI code, Code Behind and Designers used to represent information to user.

- **Business Tier** is mainly working as the bridge between Data Tier and Presentation Tier. All the Data passes through the Business Tier before passing to the presentation Tier. Business Tier is the sum of Business Logic Layer, Data Access Layer and Value Object and other components used to add business logic.
- **Data Tier** is basically the server which stores all the application's data. Data tier contents Database Tables, XML Files and other means of storing Application Data.

### Logical Architecture:

The Logical Architecture defines the Processes (the activities and functions) that are required to provide the required User Services. Many different Processes must work together and share information to provide a User Service. The Processes can be implemented via software, hardware, or firmware. The Logical Architecture is independent of technologies and implementations

### 3-Layered Architecture Logical Diagram



### 1.2.7 System Environment

The Online Vehicle Booking System application will be operated from the client server with parallel processor support. When a user connects to the Web Server, the Web Server will interact with the Database after processing the business logic to transfer data to and from a database.

- Java/J2EE or .NET Framework application deployment.
- My Sql/Sql server database for data storage

### 1.2.8 User Characteristics

The application should be user friendly; hence the user should not need any software

and hardware knowledge. The user may be new to the client products having never used them before.

The types of users likely to use the system are as follows,

- Client
- Delivery Assurance Group, Process Engineering group
- Developers, testers, other associates in the project

### 1.2.9 Impact of the System

This is a new product which is developed for internal users. Expected impact of the product is to automate existing manual processes in order to make them more efficient and cost effective.

### 1.2.10 Assumptions, Dependencies, Risks / Constraints

#### Assumptions:

The Online Vehicle Booking Admin must possess transaction data along with their vehicle booking functions for customers, branch administrators and main administrators. Customers enter their information, vehicle requirements.

#### Dependencies:

If there is any similar Identification process required for other applications of the same client, this system should be able to accommodate such a reusability dependency.

#### Risks:

If there is any failure in identification processes, the system should be able to handle such a financial risk.

## Frameworks

- **SpringBoot Rest API for connecting to database**
- **Client App using Spring Framework/ Spring Boot**
- **Use RabbitMQ for sending the messages**

### 1.2.11 Design Constraints

Application should have single login feature. Login functionality should be the welcome feature for the application.

Only administrator can access the application.

None of the application features can be accessed without login.

# System Requirements

## 1.3 Functional Requirements

### 1.3.1 Online Vehicle Booking System - Creating a Account for all Role (Customer, Branch admin & Admin)

Online Vehicle Booking System Req-	Account Creation
<p>When the users enter the following link <b>http://localhost:8080/OnlineVehicleBookingSystem</b> in the browser, Home page appears which will have a short welcome message; a brief introduction to the purpose of the Online Vehicle Booking System, the user can choose appropriate options.</p> <p>Under home page, we need below interface and Home page Interface Requirements.</p> <p>Creating an account for a Customer, Branch admin &amp; Admin.</p> <p>This functionality will be invoked from login screen. Typically the Login screen has the user Id and password as input fields and under that 'New User registration' option. This use case starts when someone selects the 'New User Registration' option available in the login screen</p> <p>At any given point of time, the user can Deselect/Reset all or can go to home page by the clicking home.</p>	
<b>UI Interface Screen</b>	<p>User ID - The User ID should be filled by the user</p> <p>Password - The Customer Password should be filled by the user</p> <p>Role - The Customer Role should be filled by the user</p>
<b>Trigger</b>	When Customer / Branch admin / Admin wants to get registered to the portal.
<b>Pre-Conditions</b>	<p>The user should not have an account registered with the system.</p> <p>The user with 'admin' role has been already registered with the system</p>
<b>Post Conditions</b>	The user details get registered in the database successfully so that the new users can login into the system
<b>Success End Condition</b>	A success message should be displayed saying 'Your account has been created successfully! Your account will be activated once the system administrator approves your account'.



<b>Failed End Condition</b>	'Error in creating your account. Contact System Administrator' message should be displayed.
<b>Steps &amp; Actions</b>	<ol style="list-style-type: none"> <li>1. When the user selects the "New User Creation" option from the login screen, the system should allow the below inputs from the user. <ul style="list-style-type: none"> <li>○ User Id</li> <li>○ Password</li> <li>○ Role (Role should be either Customer or Branch admin)</li> </ul> </li> <li>2. Created Date should be taken from the system</li> <li>3. System should save the above details into the respective table in the database.</li> <li>4. System must check for validations which are given below.</li> </ol>
<b>Business Rules &amp; Validations</b>	<p>All fields are mandatory.</p> <p>User Id should be a number and must be 6 digits long.</p> <p>Password length should have minimum 8 chars and max 20 chars, at least 1 special chars and at least 1 number.</p> <p>Role cannot be admin.</p>

### 1.3.1.1. Creating a Account for all Role (Customer, Branch admin & Admin) - Login Page

Online Vehicle Booking System	Login Page
This is the home screen for the portal. Any user first lands into this screen to proceed further. This use case authenticates the users.	
<b>UI Interface Screen</b>	<p>User ID - The User ID should be filled by the user</p> <p>Password - The Customer Password should be filled by the user</p>
<b>Trigger</b>	When Customer / Branch admin / Admin wants to get inside the portal to book a vehicle or to approve a vehicle request
<b>Pre-Conditions</b>	The user should have a valid and activated account already with the system.
<b>Post Conditions</b>	On entering the correct user id and password, the system should take the user to respective functionality based on their roles (Customer, Branch admin & Admin)

<b>Success End Condition</b>	Users in appropriate screens
<b>Failed End Condition</b>	<p>Appropriate error message should be displayed. If invalid id or password is given, then the message 'Error in authorizing you. Contact System Administrator' should be displayed.</p> <p>If the account is not approved, then the message 'Your account is not activated. Contact System Administrator' should be displayed</p>
<b>Steps &amp; Actions</b>	<ol style="list-style-type: none"> <li>1) When the user enters the valid user id and password, the system should check that against the corresponding table and allow them into the system.</li> <li>2) If the user role is customer, the system should allow the user to access Customer home Screen.</li> <li>3) If the user role is branch admin, the system should allow the user to access Branch admin screen.</li> <li>4) If the user role is admin, the system should allow the user to access admin home screen.</li> </ol>
<b>Business Rules &amp; Validations</b>	<p>User Id and Password fields are mandatory.</p> <p>Invalid user id and / or password should not allow the user to get into the system.</p> <p>Users with not activated accounts should not be allowed to enter into the system.</p>

### 1.3.1.2. Creating a Account for all Role (Customer, Branch admin & Admin) – Customer Home Screen

Online Vehicle Booking System	Customer Home Screen
If the user is a valid user and registered as customer then he should be redirected to Customer home screen once he is authenticated by the login screen.	
<b>UI Interface Screen</b>	<p>Customer Name - The Customer Name should be filled by the user</p> <p>Date of Birth - The Customer Date of Birth should be filled by the user</p> <p>Address - The Customer Address should be filled by the user</p> <p>Phone Number - The Customer Phone Number should be filled by the user</p> <p>Email - The Customer Email should be filled by the user</p> <p>Occupation - The Customer Occupation should be filled by the user</p>

<b>Trigger</b>	Customer wants to get into the portal
<b>Pre-Conditions</b>	The user should have a valid and activated account already with the system.
<b>Post Conditions</b>	None
<b>Success End Condition</b>	User should be able to perform his designated functions with the system.
<b>Failed End Condition</b>	None.
<b>Steps &amp; Actions</b>	<ol style="list-style-type: none"> <li>1) The user should be able to enter his/her profile details as mentioned below. <ol style="list-style-type: none"> <li>a. Login Id ( non-editable – get it from the database )</li> <li>b. Customer Name</li> <li>c. Date Of Birth</li> <li>d. Address</li> <li>e. Mail id</li> <li>f. Phone</li> <li>g. Occupation</li> </ol> </li> <li>2) While saving this info to DB, the row with the given Login Id should be updated in the respective Profile table.</li> <li>3) The screen should have option to view 'Vehicle Search' Screen.</li> </ol>
<b>Business Rules &amp; Validations</b>	<ul style="list-style-type: none"> <li>• Customer Name should not contain numeric or special characters</li> <li>• Date of Birth should not be today's Date, system should be able to find the age and the age should be greater than 20 on current date.</li> <li>• Phone number has to be formatted with STD codes example (011 – 2239920).</li> <li>• Email should be validated.</li> <li>• All the fields are mandatory.</li> </ul>

### 1.3.1.3. Creating a Account for all Role (Customer, Branch admin & Admin) - Branch Admin Home Screen

Online Vehicle Booking System	Branch Admin Home Screen
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If the user is a valid user and registered as Branch Admin then he should be redirected to this screen once he is authenticated by the login screen.	
<b>UI Interface Screen</b>	Branch Location - The Branch Location should be filled by the Branch Admin  Address - The Address should be filled by the Branch Admin  Phone Number - The Customer Phone Number should be filled by the Branch Admin  Email - The Customer Email should be filled by the Branch Admin
<b>Trigger</b>	Branch admin wants to get into the portal
<b>Pre-Conditions</b>	The user should have a valid and activated account already with the system.
<b>Post Conditions</b>	None
<b>Success End Condition</b>	User should be able to perform his designated functions with the system.
<b>Failed End Condition</b>	None
<b>Steps &amp; Actions</b>	<ol style="list-style-type: none"><li>1. The user should be able to enter his/her profile details as mentioned below.<ul style="list-style-type: none"><li>○ Login Id ( non-editable – get it from the database )</li><li>○ Branch Location</li><li>○ Address</li><li>○ Mail id</li><li>○ Phone</li></ul></li><li>2. While saving this info to DB, the row with the given Login Id should be updated in the respective Branch Admin Profile table.</li><li>3. The screen should have an option to view 'Approve/Create vehicle requests' screen.</li></ol>
<b>Business Rules &amp; Validations</b>	Branch Location should not contain special characters  Phone number has to be formatted with STD codes example (011 – 2239920).  Email should be validated.

	All the fields are mandatory
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### 1.3.2 Admin Approvals Module

Online Vehicle Booking System	Admin Approvals Module
The Admin approves or rejects the account creation requests made by the users.	
<b>UI Interface Screen</b>	
<b>Trigger</b>	Admin wants to approve the account creation.
<b>Pre-Conditions</b>	There are account creation requests available in the system.
<b>Post Conditions</b>	Approved accounts status should be turned to 'Activated' and rejected accounts status to 'Rejected'.
<b>Success End Condition</b>	The status change should get reflected in the database.
<b>Failed End Condition</b>	Show error saying 'Contact Administrator for further assistance'.
<b>Steps &amp; Actions</b>	<ol style="list-style-type: none"> <li>1. The Admin should be able to view this screen once he selects Account Approvals option from his home screen.</li> <li>2. The page should by default show all the account creation requests pending for approval from different users. He should view the following details</li> <li>3. The Admin should have an option to view the entire account creation requests irrespective of the role or he can choose requests by giving the role.</li> <li>4. The Admin should have an option to view the entire requests irrespective of all statuses or he can choose status. Status values can be Pending/Approved/Rejected.</li> <li>5. The above table is sortable by created date, status, and role.</li> <li>6. All the changes should get saved in the database.</li> </ol>
<b>Business Rules &amp; Validations</b>	<ul style="list-style-type: none"> <li>• From this page, the Admin can navigate to 'Approve/request vehicles screen.</li> </ul>

### 1.3.3 Vehicle Search and Booking Module

Online Vehicle Booking System	Vehicle Search and Booking Module
<p><b><u>Vehicle Search</u></b></p> <p>The customer should be able to search the vehicle postings based on his interest.</p> <p><b><u>Booking Module</u></b></p> <p>The customer should be able to see the booking status for the vehicles booked by him.</p>	
<b>UI Interface Screen</b>	<p>Manufacturer Name - The Manufacturer Name should be filled by the customer</p> <p>Price Range - The Price Range should be filled by the customer</p> <p>Color - The Color should be filled by the user</p> <p>Seating Capacity - The Seating Capacity should be filled by the customer</p> <p>Branch Location - The Branch Location should be filled by the customer</p>
<b>Trigger</b>	<p><b><u>Vehicle Search</u></b> - Customer wants to search for a vehicle</p> <p><b><u>Booking Module</u></b> - Customer wants to see the status of booking</p>
<b>Pre-Conditions / Assumptions</b>	<p><b><u>Vehicle Search</u></b> - There are vehicles available in the system.</p> <p><b><u>Booking Module</u></b> - There are bookings made by the customer already.</p>
<b>Post Conditions</b>	<p><b><u>Vehicle Search</u></b> Customer should be able to get vehicles based on his search condition.</p> <p><b><u>Booking Module</u></b> Customer should be able to see the status of his bookings.</p>
<b>Success End Condition</b>	<p><b><u>Vehicle Search</u></b> Customer should be able to get vehicles based on his search condition</p> <p><b><u>Booking Module</u></b> Customer should be able to see the status of his bookings.</p> <p>Show error saying 'Contact System Administrator for further</p>

	assistance'
<b>Failed End Condition</b>	Show error saying 'Contact System Administrator for further assistance'.
<b>Steps &amp; Actions</b>	<p><b><u>Vehicle Search</u></b></p> <ol style="list-style-type: none"><li>1. The Customer should be able to view this screen from 'Customer Profile' screen.</li><li>2. The system should provide him/her the option of viewing the vehicles by below search conditions. The customer can mix and match the conditions to do the filtering.<ul style="list-style-type: none"><li>○ Manufacture's Name</li><li>○ Price range</li><li>○ Colour</li><li>○ Seating Capacity</li><li>○ Branch Location</li></ul></li><li>3. The customer should get the details as displayed below with an option to Book for a Vehicle</li></ol> <p><b><u>Booking Module</u></b></p> <ol style="list-style-type: none"><li>1. The Customer should be able to view this screen from the 'Customer Profile' screen.</li><li>2. The system should bring all vehicle bookings.</li><li>3. The data should be sortable by Booking confirmed date</li><li>4. In the comments column, the customer should be able to see the tentative delivery details and other delivery related details of the booked vehicle.</li></ol>
<b>Business Rules &amp; Validations</b>	<p>All Search criteria are Mandatory.</p> <p><b><i>**Note: Once all the details are updated for vehicle booking then only it will be processed for booking. The Customer can also flush/clear the values entered for re updating.</i></b></p>

### 1.3.4 Approve Vehicle Booking and Request for New Vehicles Module

Online Vehicle Booking System	Approve Vehicle Booking and Request for New Vehicles Module
<p><b><u>Vehicle Booking</u></b></p> <p>The branch admin should be able to view the list of booking requests for vehicles to his branch.</p> <p><b><u>Request More Vehicles</u></b></p> <p>The branch admin should be able to request more vehicles from main admin to add to the branch's stock according to the demand.</p>	
<b>UI Interface Screen</b>	<p><b><u>Request More Vehicles Screen</u></b></p> <p>Vehicle Id - The Vehicle Id should be filled by the Branch Admin</p> <p>Manufacturer Name - The Manufacturer Name should be filled by the Branch Admin</p> <p>Ex-Showroom Price - The Ex-Showroom Price should be filled by the Branch Admin</p> <p>Color - The Color should be filled by the Branch Admin</p> <p>Number of Vehicles in Stock - The Number of Vehicles in Stock should be filled by the Branch Admin</p> <p>Branch - The Branch should be filled by the Branch Admin</p>
<b>Trigger</b>	<p><b><u>View vehicle bookings page</u></b> - Branch admins want to see vehicle bookings came in his branch.</p> <p><b><u>Request More Vehicles-</u></b> Branch admin wants to add more vehicles to branch's stock according to the request.</p>
<b>Pre-Conditions / Assumptions</b>	<p><b><u>View vehicle bookings page</u></b> - There are vehicles available in the system and customers have booked for Vehicles based on their requirements.</p> <p><b><u>Request More Vehicles-</u></b> There are vehicles available with the main admin so that branch admins can request for those.</p>
<b>Post Conditions</b>	<p><b><u>View vehicle bookings page</u></b> - Branch admin should be able to confirm the booking and also should be able to add the</p>



	<p>delivery related details of the vehicle.</p> <p><b><u>Request More Vehicles-</u></b> Branch admin should be able to request more vehicles.</p>
<b>Success End Condition</b>	<p><b><u>View vehicle bookings page</u></b> - Branch admin should be able to see all the vehicle booking request came to his branch.</p> <p><b><u>Request More Vehicles-</u></b> Branch admin should be able to request more vehicles.</p>
<b>Failed End Condition</b>	<p><b><u>View vehicle bookings page</u></b> - Show error saying 'Contact System Administrator for further assistance'.</p> <p><b><u>Request More Vehicles-</u></b> Show error saying 'Contact System Administrator for further assistance'.</p>
<b>Steps &amp; Actions</b>	<p><b><u>View vehicle bookings page</u></b> -</p> <ol style="list-style-type: none"><li>1. The branch admin should be able to view this screen from Branch admin's home screen when he selects 'Show vehicle bookings' option.</li><li>2. The branch admin should be displayed with all the vehicle booking requests.</li><li>3. By selecting the vehicles code the branch admin should be able to view the complete vehicle details in the screen.<ul style="list-style-type: none"><li>○ Vehicle Name</li><li>○ Manufactures Name</li><li>○ Colour</li><li>○ Ex showroom price</li><li>○ Stock lasts till.</li></ul></li><li>4. When the branch admin selects the 'Approve Booking' for any vehicle code, the system should allow him to input</li></ol>

	<p>the comments as mentioned in the above table.</p> <ol style="list-style-type: none"><li>Once he approves the booking by selecting save option, one count of the said vehicle should be reduced from the branch's stock.</li><li>Enable pagination by displaying 5 vehicle bookings on selection of each option available for paging.</li></ol> <p><b><u>Request More Vehicles-</u></b></p> <ol style="list-style-type: none"><li>The branch admin should be able to view to this screen from 'View Vehicle Bookings', by selecting '<b>Request More Vehicles</b>' option.</li><li>The 'Request More Vehicles' screen should get the list of vehicles - no of vehicles currently available in stock.</li><li>On selecting the item, the screen should display the information in the following format</li><li>On selecting the Request option it should display the selected Vehicle id and Branch, where in user is capable of selecting colours and inputting No of vehicles requested and finally submitting the request.</li><li>On selecting Submit option the following data should be inserted into the respective Request table:<ul style="list-style-type: none"><li>Vehicle Id</li><li>Colour</li><li>No of vehicles requested</li><li>Branch</li></ul></li></ol>
<b>Business Rules &amp; Validations</b>	<p><b><u>Request More Vehicles-</u></b></p> <ul style="list-style-type: none"><li>All the fields are mandatory.</li><li>For each colour separate request has to be made</li><li>No of vehicles requested should be an Integer value</li></ul>

### 1.3.5 Approve New Vehicle Request Module

Online Vehicle Booking System	Approve New Vehicle Request Module
<p><b><u>Approve New Vehicle Request</u></b></p> <p>The admin should be able to view the list of stock addition requests from branch admins.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>The admin should be able to add newly launched vehicles to the main stock.</p>	
<p><b>UI Interface Screen</b></p>	<p><b><u>Approve New Vehicle Request Screen</u></b></p> <p>Approve New Vehicle Request Screen- The No of vehicles approved should be filled by the Admin</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock Screen</u></b></p> <p>Manufacturer Name - The Manufacturer Name should be filled by the Admin</p> <p>Ex-Showroom Price - The Ex-Showroom Price should be filled by the Admin</p> <p>Color - The Color should be filled by the Admin</p> <p>Seating Capacity - The Seating Capacity should be filled by the Admin</p> <p>Number of Vehicles available - The Number of Vehicles available should be filled by the Admin</p> <p>Branch Location - The Branch Location should be filled by the Admin</p> <p>Vehicle Code - The Vehicle Code should be filled by the Admin</p> <p>Stock Lasts Till - The Stock Lasts Till should be filled by the Admin</p>
<p><b>Trigger</b></p>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>Admins want to see the stock addition requests.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>Admin wants to add newly launched vehicles to main stock.</p>

<b>Pre-Conditions / Assumptions</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>There are vehicles available in the system and branch admins have requested for more stock.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>There are newly launched vehicles available so that the admin can add those to the system.</p>
<b>Post Conditions</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>Admin should be able to confirm the stock addition request and also should be able to add newly delivered vehicles to the system.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>Admin should be able to add newly launched vehicles.</p>
<b>Success End Condition</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>Admin should be able to confirm the stock addition request and also should be able to add the newly delivered vehicles to the system.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>Admin should be able to add newly launched vehicles.</p>
<b>Failed End Condition</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>Show error saying 'Contact System Administrator for further assistance'.</p> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <p>Show error saying 'Contact System Administrator for further assistance'.</p>
<b>Steps &amp; Actions</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <ol style="list-style-type: none"><li>1. The admin should be able to view this screen from Admin's home screen by selecting '<b>Show stock addition requests</b>' option.</li><li>2. The admin should be displayed with all the stock addition requests</li><li>3. By selecting a vehicle code the branch admin should be</li></ol>

	<p>able to view the complete vehicle details in the screen.</p> <ol style="list-style-type: none"> <li>4. Vehicle Name</li> <li>5. Manufactures Name</li> <li>6. Ex showroom price</li> <li>7. Stock lasts till.</li> <li>8. When the admin selects the 'Approve stock addition requests' option for a vehicle code, he should get an option to input "No of vehicles approved" where he can enter how many vehicles can be given to the corresponding branch.</li> <li>9. Once he selects the save option after entering, one count of the mentioned vehicle should be reduced from the main branch and one count should be added to the corresponding branch's stock.</li> <li>10. Enable pagination with 5 stock addition requests in the screen.</li> </ol> <p><b><u>Add Newly Launched Vehicles to the Main Stock</u></b></p> <ol style="list-style-type: none"> <li>1. The admin should be able to view this page from his home screen, by selecting 'Add newly launched vehicles' option.</li> <li>2. The 'Add newly launched vehicles' screen should input the below mentioned details from the admin             <ol style="list-style-type: none"> <li>a. Manufactures Name</li> <li>b. Vehicle Code</li> <li>c. Ex Showroom Price</li> <li>d. Colour</li> <li>e. No Vehicles available</li> <li>f. Seating capacity</li> <li>g. Stock lasts till</li> <li>h. Branch Location</li> </ol> </li> <li>3. On savings this, a row with the entered details should be inserted into the respective Vehicle Details table.</li> </ol>
<b>Business Rules &amp; Validations</b>	<p><b><u>Approve New Vehicle Request</u></b></p> <p>If there is no stock available in main branch, then admin should not be able to approve the stock request. When he saves the request, an appropriate error message should be shown.</p>

## 1.4 Nonfunctional Requirements

### 1.4.1 UI Requirements: Inn

1. The front end should be user-friendly and pleasant
2. Any error message or exception displayed to the user should be user-readable (and not technical)
3. All entered values should be validated
4. The UI screens are designed with any theme color along with the logo of the company.
5. Exceptions should not be shown on console.
6. No debug message should come on console.
7. All the errors and exceptions should be logged to log file.
8. Log file path should be configurable.
9. Database connections should be configurable.
10. It should not be hard coded.
11. Requirements involving UI features should be taken care in console accordingly

### 1.4.2 Performance Requirements: Pnn

1. All front-end pages should be served up in less than 5 seconds post click when up to 1000 users are on the application concurrently.
2. Since it's a financial operations application, transactions should be safe and fast.

### 1.4.3 Installation, Deployment & Operational Requirements: Onn

1. Application Java and J2EE deployment with My SQL database or SQL Server database for persistence  
Or  
Application .NET Framework deployment with SQL Server database for persistence
2. This system must be up 24X7

### 1.4.4 Maintainability & Portability Requirements: MPnn

1. If the allocated memory space for the existing application needs to be increased then it should be possible without any impact to performance

### 1.4.5 Security Requirements Snn:

1. No unauthorized users should be able to log on to the system
2. User Id/Login Id should have combination of letter and numeric values, none of the special characters are allowed (#,@,\$,%,&).
3. Validate the user id/login id and password, accordingly to the user it will redirect to the appropriate page.

## 1.0 Requirements / Use Case Summary Table

Business Requirement ID	Software Requirement s ID	Short Description	Requirement Provider (Originator)	Priority	Complexity	Requirement type	Remarks
BR001	SR001	Creating Account Module	Client	High	Medium	UI screen & backend processing	-
BR002	SR002	Admin Approvals Module	Client	Medium	Medium	UI screen & backend processing	-
BR003	SR003	Vehicle Search and Booking Module	Client	High	Medium	UI screen & backend processing	-

BR004	SR004	Approve Vehicle Booking and Request for New Vehicles Module	Client	Medium	Medium	UI screen & backend processing	-
BR005	SR005	Approve New Vehicle Request Module	Client	High	High	UI screen & backend processing	-