**System Requirements Specification (SRS) – Vehicle Selling by Escrow**

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**1. Introduction**

This document details the system requirements and scope for developing the Vehicle Selling by Escrow system. The system facilitates secure vehicle transactions by holding the payment in escrow until the transaction conditions are met, ensuring the security and satisfaction of both buyers and sellers.

**2. Functional Requirements**

The system is divided into three main modules:

|  |  |  |
| --- | --- | --- |
| **No** | **BRS requirement ID** | **Description** |
| **2.1** | **Buyer Module** | |
| **2.1.1** | **F1** | **Account Creation Process** |
| **2.1.2** | **F2** | **Dealer Verification As Buyers** |
| **2.1.3** | **F3** | **Login Process** |
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| **2.1.7** | **F8** | **Make Deal** |
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| **2.2** | **Seller Module** | |
| **2.2.1** | **F10** | **Account Creation Process** |
| **2.2.2** | **F11** | **Dealer Verification As Sellers** |
| **2.2.2** | **F12** | **Login Process** |
| **2.2.3** | **F13** | **Forgot Password Process** |
| **2.2.4** | **F14** | **Change Password Process** |
| **2.2.5** | **F15** | **List Vehicle For Sell** |
| **2.2.6** | **F16** | **List of Interested Buyers For Sellers** |
| **2.2.7** | **F17** | **Update Vehicle Listing** |
| **2.2.8** | **F18** | **Remove Vehicle Listing** |
| **2.3 Admin Module** | | |
| **2.3.1** | **F19** | **Login Process** |
| **2.3.2** | **F20** | **Manage Users** |
| **2.3.3** | **F21** | **View Report** |
| **2.3.4** | **F22** | **Manage System Settings** |
| **2.3.6** | **F23** | **Report Generation** |

**2.1 Buyer Module**

**2.1.1 Account Creation**

* **Description:** Buyers must create an account to use the system.
* **Inputs:** Username, Password, First Name, Last Name, Email, Address, Phone Number.
* **Constraints:** Unique Username, Password (8-16 characters, including numbers, uppercase and lowercase letters, and special characters).

**2.1.2 Dealer Verification Process As Buyers**

* **Description:** Verify if the buyer is a business (dealer) and then make them a user of the system.
* **Inputs:** Business registration details (business name, registration number, tax ID), business contact information (address, phone number, email), and supporting documents.
* **Outputs:** User verification status and account activation.

**2.1.3 Login Process**

* **Description:** Buyers log in using their credentials.
* **Inputs:** Username, Password.
* **Checks:** Validity of Username and Password, User Type (Buyer).

**2.1.4 Forgot Password Process**

* **Description:** Allows buyers to reset their password.
* **Inputs:** Username, Security Question Answer.
* **Outputs:** New password sent via email.

**2.1.4 Change Password Process**

* **Description:** Buyers can change their password to ensure account security.
* **Inputs:** Current password, new password, confirmation of new password.
* **Outputs:** Password change confirmation.

**2.1.5 Search Vehicles**

* **Description:** Buyers can search for available vehicles.
* **Inputs:** Vehicle Category, Price Range, Make, Model.
* **Outputs:** List of vehicles matching search criteria.

**2.1.6 Purchase Vehicle**

* **Description:** Buyers can initiate a vehicle purchase.
* **Inputs:** Vehicle ID, Payment Details.
* **Outputs:** Confirmation of payment initiation.

**2.1.7 Make Deal**

**2.1.8 Transaction Under Escrow**

**2.1.9 Feedback Option Process**

* **Description:** Buyers can provide feedback about their experience with the dealer.
* **Inputs:** Dealer ID, feedback rating (1-5 stars), feedback comments.
* **Outputs:** Feedback submission confirmation.

**2.2 Seller Module**

**2.2.1 Account Creation**

* **Description:** Sellers must create an account to list vehicles. Sellers can be Individual
* **Inputs:** Username, Password, First Name, Last Name, Email, Address, Phone Number.
* **Constraints:** Unique Username, Password (8-16 characters, including numbers, uppercase and lowercase letters, and special characters).

**2.2.2 Dealer Verification As Sellers**

* **Description:** Verify if the seller is a business (dealer) and then make them a user of the system.
* **Inputs:** Business registration details (business name, registration number, tax ID), business contact information (address, phone number, email), and supporting documents.
* **Outputs:** User verification status and account activation.

**2.2.3 Login Process**

* **Description:** Sellers log in using their credentials.
* **Inputs:** Username, Password.
* **Checks:** Validity of Username and Password, User Type (Seller).

**2.2.4 Forgot Password Process**

* **Description:** Allows sellers to reset their password.
* **Inputs:** Username, Security Question Answer.
* **Outputs:** New password sent via email.

**2.2.5 Change Password Process**

* **Description:** Sellers can change their password to ensure account security.
* **Inputs:** Current password, new password, confirmation of new password.
* **Outputs:** Password change confirmation.

**2.2.6 List Vehicle for Sale**

* **Description:** Sellers can list their vehicles for sale.
* **Inputs:** Vehicle Details (Category, Make, Model, Year, Price, Photos).
* **Outputs:** Vehicle listing confirmation.

**2.2.7 List of Interested Buyers For Sellers**

* **Description:** Sellers can view a list of buyers who have expressed interest in their listed vehicles.
* **Inputs:** Vehicle ID (identifier for the specific vehicle listing) and Seller authentication details (credentials to verify the seller's identity).
* **Outputs:** List of interested buyers including Buyer Name, Buyer Contact Information (email or phone number), Date of Interest, and Comments or Messages from Buyers.

**2.2.8 Update Vehicle Listing**

* **Description:** Sellers can update details of their listed vehicles.
* **Inputs:** Vehicle ID, Updated Details.
* **Outputs:** Confirmation of update.

**2.2.9 Remove Vehicle Listing**

* **Description:** Sellers can remove their vehicle listings.
* **Inputs:** Vehicle ID.
* **Outputs:** Confirmation of removal.

**2.3 Admin Module**

**2.4.1 Manage Users**

* **Description:** Admins manage user accounts (buyers, sellers, agents).
* **Inputs:** User Details (Create, Update, Delete).
* **Outputs:** Confirmation of user management actions.

**2.4.2 View Reports**

* **Description:** Admins can generate and view various system reports.
* **Inputs:** Report Criteria.
* **Outputs:** Generated reports.

**2.4.3 Manage System Settings**

* **Description:** Admins manage system settings and configurations.
* **Inputs:** System Settings Details.
* **Outputs:** Confirmation of settings update.

**3. Non-Functional Requirements**

**3.1 Security**

* Passwords must be encrypted.
* Sensitive data should be stored securely.
* Regular security audits must be performed.

**3.2 Performance**

* System should handle up to 10,000 concurrent users.
* Average response time should not exceed 2 seconds.

**3.3 Usability**

* User interface should be intuitive and user-friendly.
* Provide help and support documentation.

**4. Use Case Diagram**

(Work in progress)

**Changes to Be Made in SRS**

**4.Verification of User if it’s a Business(Dealer)**

**And then make them user of your System.**

**Added in SRS:**

* 1. **Add List of Interested Buyers for Sellers**
  2. **Registration can be done by**

**Individual person and Vehicle Dealers**

* 1. **Feedback Option for Buyer’s Experience**

**About the Dealer.**