System Requirements Statement (SRS) - E-Clothing Website

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1.	Introduction	3
2.	FUNCTIONAL REQUIREMENTS	4
	Admin Module	
2.2	Seller Module	11
2.3	Buyer Module	17
2 4	Use Case Diagram	22

1. Introduction

This document explains the system requirements and scope for developing Cloth Store web applications. The Clothing store could be divided into the three main parts, Buyer part, seller part, Admin part. This document describes the system requirement of the Account part.

2. Functional Requirements

The Account part of E-Clothing System has three modules which are divided into 13 processes described below.

No	BRS require ment ID	Description		
2.1 Admin Module				
2.1.1	F1	Login Process		
2.1.2	F2	Forgot Password Process		
2.1.3	F3	Change Password Process		
2.1.4	F4	Update Account Process		
2.1.5	F5	Report Generation		
2.1.6	F6	Account Management		
2.1.7	F7	Product Management		
2.1.8	F8	Approve Sellers Registration Request		
2.1.9	F9	Update Categories		
2.1.10	F10	View Transactions		
2.1.11	F11	Update brands		
2.2 Seller Module				
2.2.1	F12	Registration Process		
2.2.2	F13	Login Process		
2.2.3	F14	Forgot Password Process		
2.2.4	F15	Change Password Process		
2.2.5	F16	Update Account Process		
2.2.6	F17	Search Product		
2.2.7	F18	Upload Offers / Discounts		
2.2.8	F19	Update Stock		
2.2.9	F20	View Orders		
2.2.10	F21	Complete Order		
2.2.11	F22	Cancel Orders		
2.3 Buyer Module				
2.3.1	F24	Registration Process		
2.3.2	F25	Login Process		
2.3.3	F26	Forgot Password Process		
2.3.4	F27	Change Password Process		
2.3.5	F28	Update Account Process		
2.3.6	F29	Search Products		
2.3.7	F30	Browse Products		
2.3.8	F31	Manage Cart		
2.3.9	F32	Confirm Order		
2.3.10	F33	Track Order		
2.3.11	F34	Give Feedback		

2.1 Admin Module

Administrator should be responsible for following activities

2.1.1 Login Process

- Cloth Store System always compels user authentication before using itself except when a new account is successfully created.
- The user authentication demands UserID and Password. The UserID and the Password should be checked in three ways.
 - o First, The UserID and the Password should exist and be correct.
 - ✓ If The UserID and the Password are not equal to what the admin has registered, the Admin authentication cannot be provided.
 - Second, the User Type linked to the UserID should be "Admin".
 - ✓ When the User Type is "Admin", the user can be placed on "Admin Home".
 - o Finally, UserID should be available.
 - ✓ The Administrator can decide whether the UserID is available or suspended.
 - ✓ If a user is rejected, user authentication is not provided for system users.
- The Admin account should be alive for so long as the duration decided by Admin.
- Only when the three checks are successfully completed, Admin can be placed on a respected page.
- The "Admin Home" provides the items described as below.
 - 1. A trigger to logout
 - 2. A trigger to update Account
 - 3. A trigger to Change Password
 - 4. A trigger to Search Product
 - 5. A trigger to Publish Product for sale
 - 6. A trigger to Update Product Information
 - 7. A trigger to Delete Product
 - 8. A trigger to Browse existing Market price

2.1.2 Forgot Password Process

• When Admin loses their Password, the recovery method should be provided by the Cloth Store System.

The recovery method is described below.

- o First, Admin enters their UserID for the Cloth Store System.
- Admin will enter the E-mail id which was generated when the Account was created.
- Only when the E-mail Id is correct, Admin gets the new password by Email which also has been registered since when the Account was created.
- The new password is automatically generated by the Cloth Store System.
 - ✓ Of course, the new password should consist of more than or equal to 8 and less than or equal to 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.
- As a consequence, The Admin will get the Admin authentication using the new password.
 - Then, the Admin needs to change the new password manually.

2.1.3 Change Password Process

- When Admin wants to change the Password, the measure should be provided by the Cloth Store System.
- Therefore, Cloth Store System should provide the function which is available after getting the Admin authentication.
- The function demands the current password and the new password.
 - Of course, the new password should consist of more than or equal to 8 and less than or equal to 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.
 - The current password and the new password are masked by using dummy characters.
 - The new password is demanded to enter twice to avoid a typing error.
- Only when the current password is correct, Admin can change his Password.
- When the current password is changed into a new password, Cloth Store System compels user authentication again.

2.1.4 Update Account Process

- The Cloth Store System should provide the function which makes the account updated for Admin.
- The information Admin could update is described below.
 - 1. Login information
 - 2. User information
 - 3. Security Question Information
- The Login information
 The updatable items as described below.
 - 4. First Name
 - 5. Last Name
 - 6. E-mail address
 - All items are compulsory, but updating is optional.
- The User information
 The updatable items as described below.
 - 7. User Name
 - 8. User Phone No
 - 9. E-mail address
 - 10. Permanent address
 - All items are compulsory, but updating is optional.
- The Security Question information
 The updatable items as described below.
 - 11. Selected Question
 - 12. Answer
 - o All items are compulsory, but updating is optional.

2.1.5 Record Generation

- Admin should be able to see all the records from any users.
- Daily report of enrollment to admin.
- Monthly report of enrollment as per the states to admin.

2.1.6 Seller Management

- Seller Authentication: Admins verify seller identities during registration.
- Seller Profile: Admins manage seller profiles, including contact information and store details.

2.1.7 Accounts Management

- Admin should able to manage all the accounts with following activities,
- 1. Enable accounts.
- 2. Disable accounts.
- 3. View Users.

2.1.8 Managing Content

- Admins can add new brands and update existing brands.
- They can add new categories and update existing category information.

2.1.9 Payment Handling

- Payment Gateway Integration: Admins receive payments for orders.
- Transaction Monitoring: Admins track successful and failed transactions.

2.1 Buyer Module

- Buyer is the user of the system who wants to buy the product.
- He is also able to view the market prices of products.

2.1.1 Account Creation Process

- Cloth Store Application requires you to create the account before using it. So, Cloth Store Application must provide the feature that allows the Buyer to create a new account.
- When Buyer creates a new account, the function demands two informations as described below.
 - 1. Login information
 - 2. Contact Details
- The Login information
 The Login information consists of some items described as below.
 - 1. UserID
 - 2. Password
 - 3. First Name
 - 4. Last Name
 - 5. E-mail address
 - 6. User Type
 - All items are compulsory demanded.
 - UserID
 - ✓ The UserID should be unique. If the UserID correspond with not case-sensitive to other which is previously registered, the UserID should not be registered as an account.
 - Password
 - ✓ The Password has constraints which makes the Password consists of more than or equal 8 and less than or equal 16 characteristics including characters described as below.
 - 1. Numeric figure (at least one)

- 2. Capital alphabet (A-Z)(at least one)
- 3. Small alphabet (a-z)(at least one)
- 4. Special character (#, \$, %, &, etc.) (at least one)
- ✓ The Password is masked by dummy characters. The re-entering Password is demanded.
- ✓ The Password must be encrypted in the Cloth store Management System.
- User Type

The User Type falls into three categories described as below.

- 1. Buyer
- 2. Seller
- 3. Admin
- ✓ The User Type defines also three types of user; "Buyer user", "Seller user", and "Admin user".
- ✓ In an Account Creation Process, the user can select Buyer.
- ✓ No one could select The Admin, because Admin is implemented to Cloth Store Management System in advance.
- Contact Details
- The Contact Detail consists of some items described as below.
 - 1. Permanent Address
 - 2. Contact Phone No
 - All items are compulsory demanded.
 - Permanent Address
 - ✔ Permanent Address should be filled.
 - ✔ But only the state should be selected from options.
- The Security Question information
 The Security Question information is needed when Buyer lost their Password. This information consists of two items described as below.
 - 1. Selected Question
 - 2. Answer
 - All items are compulsory demanded.

- Some questions which are difficult to answer for anyone else are prepared in advance.
 - E.g. which color do you like most?
- A question should be selected from options by the Buyer, and the Answer is registered by the Buyer.
- Login information should be entered on one screen, and then farmer information and Security Question information should be entered on another screen.

2.1.2 Login Process

- Cloth Store System always compels user authentication before using itself except when a new account is successfully created.
- The user authentication demands UserID and Password. The UserID and the Password should be checked in three ways.
 - First, The UserID and the Password should be existed and correct.
 - ✓ If The UserID and the Password are not equal to what the user has registered, the user authentication cannot be provided.
 - Second, the User Type linked to the UserID should be "buyer".
 - ✓ When the User Type is "Buyer", then user can be placed on "Buyer Home".
 - Finally, UserID should be available.
 - ✓ The Administrator can decide whether the UserID is available or suspended - Refer to the SRS of the Admin part.
 - ✓ If Buyer is rejected, user authentication is not provided for system user.
- The buyer account should alive for so long as the duration decided by Admin.
- Only when the three checks are successfully completed, Buyer can be placed on respected page.
- The "Buyer Home" provides the some items described as below.
 - 9. A trigger to logout
 - 10. A trigger to update Account
 - 11. A trigger to Change Password
 - 12. A trigger to Search Product
 - 13. A trigger to View Cart

- 14. A trigger to Browse existing Market price
- 15. A trigger to contact customer support

2.1.3 Forgot Password Process

• When system user lost their Password, the recovery method should be provided by Cloth Store system.

The recovery method is described as below.

- o First, system user enters their UserID for Cloth Store System.
- Next, Cloth Store System demands the Answer which has been registered since when the Account was created.
- Only when the Answer is correct, Buyer get the new password by E-mail which also has been registered since when the Account was created.
- The new password is automatically generated by Cloth Store System.
 - ✓ Of course, the new password should consist of more than or equal 8 and less than or equal 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.
- As a consequence, The Buyer could get the Buyer authentication using the new password.
 - Then, the Buyer had better change the new password manually.
- If the Answer is not correct, otherwise, the correct Answer is demanded for user again.
 - o In that case, Of course, Buyer couldn't get the new password.

2.1.4 Change Password Process

- When Buyer wants to change their Password, the measure should be provided by Cloth Store System.
- Therefore, Cloth Store System should provide the function which is available after getting the Buyer authentication.
- The function demands the current password and the new password.
 - Of course, the new password should consist of more than or equal 8 and less than or equal 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.

- The current password and the new password are masked by using dummy characters.
- The new password is demanded to enter twice to avoid a typing error.
- Only when the current password is correct, Buyer could change their Password.
- When the current password is changed into new password, Cloth Store System compels user authentication again.

2.1.5 Update Account Process

- Cloth Store System should provide the function which makes the account updated for Buyer.
- The information Buyer could update is described below.
 - 1. Login information
 - 2. User information
 - 3. Security Question Information
- The Login information
 The updatable items as described below.
 - 1. First Name
 - 2. Last Name
 - 3. E-mail address
 - All items are compulsory demanded, but updating is optional.
- The User information

The updatable items as described below.

- 1. User Name
- 2. User Phone No
- 3. E-mail address
- 4. Permanent address
- All items are compulsory demanded, but updating is optional.
- The Security Question information
 The updatable items as described below.
 - 1. Selected Question
 - 2. Answer

• All items are compulsory demanded, but updating is optional.

2.1.6 Search product

- Search conditions are described as below.
 - 1. Product category
 - 2. Price range

2.1.7 Browse Product

- Buyer can see product details in the following described format.
 - 1. Product category
 - 2. Price
 - 3. Product name
 - 4. Quantity
 - 5. Photos
- Buyer can Browse products by specific product category and brands.

2.1.8 Manage Cart

- Buyer can Add Product to Cart with following contents.
 - 1. Product quantity
 - 2. Product Price
- Buyer can Remove Cart items from Cart and also he can increase or decrease Product Quantity.

2.1.9 Confirm Order

- To Complete the purchase, buyers proceed to checkout.
- During checkout, they review their cart, adjust quantities, and remove products if needed.
- The order completion process typically involves confirming the purchase and providing the necessary payment and shipping information.

2.1.10 Track Orders

- The "Track Orders" feature allows buyers to manage their orders efficiently. Buyers can see their order history and current order.
- Buyers have the option to cancel orders before they are shipped
- For convenience, buyers can quickly reorder items from their past orders without having to search for them again

2.1.11 Give Feedback

- Buyers can write reviews for individual products they have purchased. These reviews can include ratings (typically on a scale from 1 to 5 stars), written comments, and the option to upload photos or videos of the product
- Buyers can rate and review sellers based on their experience with the transaction. This
 includes evaluating the seller's communication, shipping speed, packaging quality, and
 overall service

2.2 Seller Module

1.2.1 Registration process

- Cloth Store System compels to create the account before using it. So, Cloth Store System should provide the function which makes buyers creates new account.
- When Seller creates new account, the function demands four information described as below.
- The Login information consists of some items described as below.
 - 1. Login information
 - 2. Contact Details
 - 3. Security Question Information
 - 4. Payment information.
 - 5.UserID
 - 6.Password
 - 7. First Name
 - 8.Last Name
 - 9.E-mail address
 - UserID
 - ✓ The UserID should be unique. If the UserID correspond with not case-sensitive to other which is previously registered, the UserID should not be registered as an account.
 - Password

- ✓ The Password has constrains which makes the Password consists of more than or equal 8 and less than or equal 16 characteristics including characters described as below.
 - 1. Numeric figure (at least one)
 - 2. Capital alphabet (A-Z)(at least one)
 - 3.Small alphabet (a-z)(at least one)
 - 4. Special character (#, \$, %, &, etc.) (at least one)
- ✓ The Password is masked by dummy characters. The re-entering Password is demanded.
- ✓ The Password must be encrypted in Cloth Store System.
- User Type

The User Type falls into three categories described as below.

- 1.Buyer
- 2.Seller
- 3.Admin
- ✓ The User Type defines also three types of user; "Buyer user", "Seller user", and "Admin user".
- ✓ In an Account Creation Process, the user can select Seller.
- ✓ No one could select The Admin, because Admin is implemented to Cloth Store System in advance.
- The Contact Detail consists of some items described as below.
 - 1.Permanent Address
 - 2. Contact Phone No
 - All items are compulsory demanded.
 - Permanent Address
 - ✔ Permanent Address should be filled.
 - ✔ But only the state should be selected from options.

• The Security Question information

The Security Question information is needed when sellers lose their Password. This information consists of two items described as below.

- 3. Selected Question
- 4. Answer
- All items are compulsory demanded.
- Some questions which are difficult to answer for anyone else are prepared in advance.
 - E.g. which color do you like most?
- A question should be selected from options by the seller, and the Answer is registered by the seller.
- Login information should be entered on one screen, and then Wholesaler information and Security Question information should be entered on another screen.

1.2.2 Login Process

- Cloth Store System always compels seller authentication before using itself except when a new account is successfully created.
- The user authentication demands UserID and Password. The UserID and the Password should be checked in three ways.
 - First, The UserID and the Password should be existed and correct.
 - ✓ If The UserID and the Password are not equal to what the user has registered, the user authentication cannot be provided.
 - Second, the User Type linked to the UserID should be "user".
 - ✓ When the User Type is "Seller", user can be placed on "Seller Home".
 - Finally, UserID should be available.
 - ✓ The Admin can decide whether the UserID is available or suspended Refer to the SRS of the Admin part.
 - ✓ If user is rejected, user authentication is not provided for Wholesaler.
- The seller account should alive for so long as the duration decided by Admin.
- Only when the three checks are successfully completed, seller can be placed on respected page.
- The "Seller Home" provides the some items described as below.
 - 16. A trigger to logout
 - 17. A trigger to update Account

- 18. A trigger to Change Password
- 19. A trigger to Search Product
- 20. A trigger to Publish Product for sale
- 21. A trigger to Update Product Information
- 22. A trigger to Delete Product
- 23. A trigger to Browse existing Market price

1.2.3 Forgot Password Process

• When seller lost their Password, the recovery method should be provided by Cloth Store system.

The recovery method is described as below.

- First, seller enters their UserID for Cloth Store System.
- Next, Cloth Store System demands the Answer which has been registered since when the Account was created.
- Only when the Answer is correct, seller get the new password by E-mail which also has been registered since when the Account was created.
- The new password is automatically generated by Cloth Store System.
 - ✓ Of course, the new password should consist of more than or equal 8 and less than or equal 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.
- As a consequence, The seller could get the user authentication using the new password.
 - Then, the Seller had better change the new password manually.
- If the Answer is not correct, otherwise, the correct Answer is demanded for Wholesaler again.
 - o In that case, Of course, seller couldn't get the new password.

1.2.4 Change Password Process

- When seller wants to change their Password, the measure should be provided by Cloth Store System.
- Therefore, Cloth Store System should provide the function which is available after getting the seller authentication.
- The function demands the current password and the new password.
 - Of course, the new password should consist of more than or equal 8 and less than or equal 16 characteristics including at least a numeric figure, a capital alphabet, a small alphabet, and a special character.

- The current password and the new password are masked by using dummy characters.
- The new password is demanded to enter twice to avoid a typing error.
- Only when the current password is correct, seller could change their Password.
- When the current password is changed into new password, Cloth Store System compels seller authentication again.

1.2.5 Update Account Process

- Cloth Store System should provide the function which makes the account updated for seller .
- The information seller could update as described below.
 - 1. Login information
 - 2. User information
 - 3. Security Question Information
- The Login information
 The updatable items as described below.
 - 4. First Name
 - 5. Last Name
 - 6. E-mail address
 - o All items are compulsory demanded, but updating is optional.
- The User information
 The updatable items as described below.
 - 7. User Name
 - 8. User Phone No
 - 9. E-mail address
 - 10. Permanent address
 - All items are compulsory demanded, but updating is optional.
- The Security Question information The updatable items as described below.
 - 1. Selected Question
 - 2. Answer
 - All items are compulsory demanded, but updating is optional.

1.2.6 Search Product

- Search conditions are described as below.
- 1. Product category
- 2. Price range
- As the result of searching Requirements, seller could see the list of products which are available for sale.
- 1. Product name
- 2. Price
- 3. Quantity
- 4. Photos

1.2.7 Update Stock

1. Add new Product

- sellers to add new products to the Cloth Store system.
- Sellers must provide detailed information about the product, including category, price, quantity.

Product Details:

- **Product Name:** A unique name for the product.
- **Product Category**: Select a category from predefined options (e.g., Men's Clothing, Women's Clothing, Kids' Clothing, Accessories).
- Price: Enter the price of the product.
- Quantity: Enter the available quantity for sale.
- **Description**: A detailed description of the product, highlighting its features and benefits.

2. Update Product Information

- After entering all required and optional information, the seller submits the form.
- The system validates the information to ensure all required fields are completed and data formats are correct.

3. Delete Product

• This process describes how a seller can delete an existing product from the Cloth Store.

• This allows sellers to remove products that are no longer available.

2.2.8 View Orders

- sellers can view their orders on the Cloth Store.
- This feature allows sellers to see the details of orders placed by buyers, including order status, product details, buyer information, and more.
- The detailed order view includes:
 - Order ID
 - Order Date
 - Buyer Information (Name, Contact Details)
 - Shipping Address
 - List of Products Ordered (Product Name, Quantity, Price)
 - o Order Status (e.g., Pending, Shipped, Delivered, Canceled)
 - Payment Status
 - Any notes or special instructions from the buyer

2.2.9 Complete order

- The processes for completing and dispatching an order are crucial for maintaining an efficient workflow and ensuring customer satisfaction.
- Order Confirmation: Upon customer checkout, confirm the order details including items, quantities, shipping address, and payment information.
- Payment Processing: Verify payment details.
- **Delivery Confirmation:** Upon delivery, update order status to "delivered" and notify customer.
- Inventory Management: Update inventory to reflect purchased items.

2.2.10 Cancel Order

- Before paying Seller can cancel the order in following condition
 - 1. If the product does not fulfill the requirement.
 - 2. If price goes out of his budget.
 - 3. Browse existing product Price
- Sellers could see the information of existing products.

2.5 Use Case Diagram

Admin:

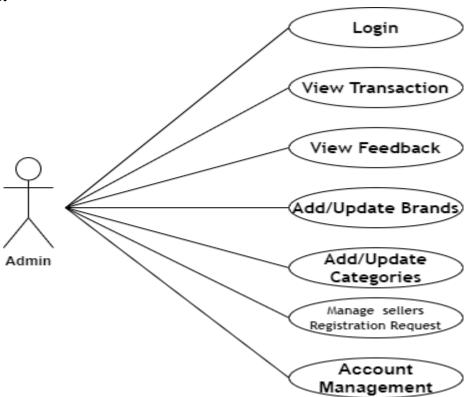


Fig. Use case diagram for admin

- 1. In the Admin use case diagram Admin is the Actor.
- 2. Admin can handle following use cases:
 - a. Login.
 - b. View Transaction
 - c. View Feedback
 - d. Add/Update
 - e. Add/Update Categories
 - f. Manage Sellers Registration Request
 - g. Account Management
 - h. Report Generation

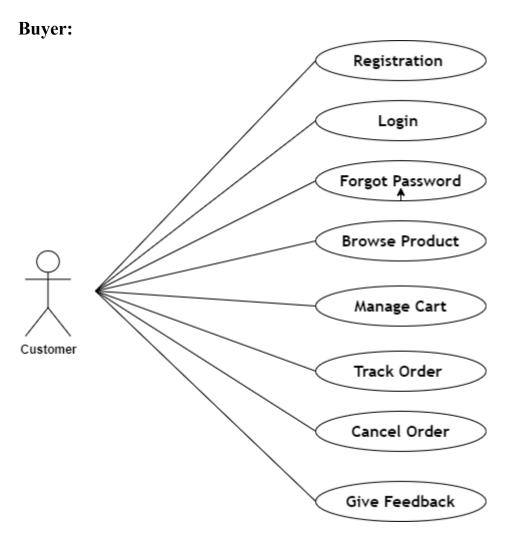


Fig. Use case diagram for Byer

- 1. In the buyer use case diagram buyer
- 2. Buyer can handle following use cases:
 - a. Register
 - b. Login
 - c. Forget Password
 - d. Browse Product
 - e. Manage Cart
 - f. Conform Order
 - g. Cancel Order
 - h. Give Feedback

Seller:

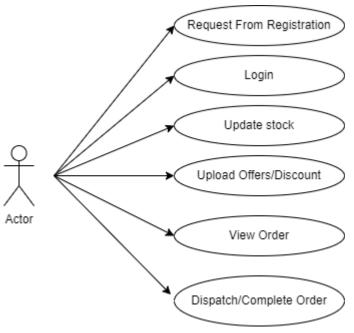


Fig. Use case diagram for Seller

- 1. In the Seller use case diagram Seller
- 2. Wholesaler can handle following use cases:
 - a. Request for Register
 - b. Login
 - c. Update Stock
 - d. Upload Offer/Discount
 - e. View Order
 - f. Dispatch/Complete Order
 - g. Cancel Order