

## Raw requirement descriptions in dataset Web Store

No.	Requirement descriptions in Web Store
	<b>Product Features:</b> Account Management (AM) (High Priority): AM allows users to create, edit, and view accounts information. It also allows the user to login/out of the system. Search Engine (SE) (Medium Priority): SE is the tool that assists the user in finding a specific item in the database. It can receive search criteria, find search criteria, and return the results of the search. Product Management (PM) (High Priority): PM allows sales personnel to manage the product line shown on the web site. Shopping Cart (SC) (Medium Priority): SC is temporary storage for customers shopping on the web. Items from the inventory can be reserved in a virtual cart until the customer decides to purchase them. Purchasing and Payment (PP) (High Priority): PP is used to approve and transfer payment from buyers when purchasing items in the cart.
1	<b>User Classes:</b> System Administrator: Is generally the owner that takes care of maintenance for the Web Store system. The administrator will be in charge of assigning privileges of accounts. Suggested more than one individual can have administrator privilege to ensure advisability. Full documentation will be provided to the Administrator to assist with this process.
2	Sales Personnel: Is generally the owner of the Web Store tasked with updating inventory and product line descriptions. Once added, sales personnel can add, delete and change descriptions, pictures, prices, and when ready flag items for customers to buy. Customer: A customer is an individual wishing to purchase inventory from GAMMA-J's Web Store. The Web store will have a variety of clientele depending upon the inventory loaded on the Key. When creating a new account on Web Store it will default as a customer account. Later if the account needs to be upgraded the administrator can accomplish this via the administrator interface.
3	<b>Customer Accounts:</b> Customers will be able to create accounts to store their customer profiles, configure contact information, view their purchase history, and confirm orders. Customers will be able to register, log in, and log out of their accounts. Furthermore, Customer profiles will also include payment information, such as the ability to store credit card information, and address information.
4	<b>Inventory Management:</b> Products will be stored in multi-tiered categories; a category can contain sub categories or products. The inventory management will allow for administrators to update the categories, the products placed in categories, and the specific product details.
5	<b>Shopping Cart:</b> Customers will also be able to add products into the shopping cart. The shopping cart will clearly display the number of items in the cart, along with the total cost. The customer will also be able to add to or remove products from the shopping cart prior to checkout and order confirmation.
6	<b>Order Confirmation:</b> Customers will be able to confirm the order after checkout. If the order is incorrect, the customer will be able to revise and update their order. The customer will then receive a confirmation email with the specific order details.
7	<b>Interface:</b> Customers will be presented with an unambiguous interface to assist in browsing the categories and products. Customers will be able to search for products matching their search criteria. The interface will be compatible with all major web browsers such as Internet Explorer, Mozilla Navigator, Mozilla Firefox, Opera, and Safari.
8	<b>Plug-in API:</b> The system will implement an Application Interface to allow for various plug-ins to interact with the system. The plug-in API will be well documented and specifications will be provided to plug-in developers.
9	<b>patches:</b> The system hardware shall be fixed and patched via an internet connection.

## The use cases designed by a requirement engineer without LLM assistance (junior):

Use Case ID	01(Register Customer)
Intent	Create customer account and store profile data
Role	Customer

<b>Pre-conditions</b>	Registration page is accessible
<b>Post-conditions</b>	Customer profile is stored in the database
<b>Basic Flow</b>	
1. Open registration page. 2. Fills in the registration information, including personal details and contact information. 3. Validate email format and password strength. 4. Clicks the "Register" button. 5. Is redirected to the website's homepage.	
<b>Alternative Flow(s):</b>	
3a. Verification code does not exist. 3a1. Display error: "Invalid verification code". 3a2. Customer re-enters verification code. 4a. Duplicate registration causes failure. 4a1. System shows account exists, offers login/reset options. 4a2. Customer chooses to log in or reset password.	

<b>Use Case ID</b>	02(Login Customer)
<b>Intent</b>	The customer enters their credentials and authenticates to log in.
<b>Role</b>	Customer
<b>Pre-conditions</b>	The customer has already registered.
<b>Post-conditions</b>	The customer logs into the system.
<b>Basic Flow</b>	
1. The customer opens the login page. 2. The customer enters their username and password. 3. The customer submits the login request. 4. Verify identity. 5. The system redirects to the website's homepage.	
<b>Alternative Flow(s):</b>	
4a. Account or password error 4a1. System prompts login failure, requests re-entry. 4a2. Customer enters correct account and password. 4a3. System verifies identity.	

<b>Use Case ID</b>	03(Edit Customer Details)
<b>Intent</b>	Update customer information to ensure accuracy
<b>Role</b>	Customer
<b>Pre-conditions</b>	Customer is logged in and has permission to modify.
<b>Post-conditions</b>	Customer receives a notification of successful update
<b>Basic Flow</b>	
1. Customer navigates to the personal information page. 2. Customer selects the information field to edit (e.g., name, address, phone number). 3. Customer enters new information and submits.	

4. System validates the format and validity of the information.
5. System saves the updated information and notifies the customer.
<b>Alternative Flow(s):</b>
4a. Fail to update mobile number 4a1. System prompts: "This mobile number already exists. Please replace it." 4a2. Customer replaces the mobile number or contacts the original account holder to unbind.

<b>Use Case ID</b>	04(Login Customer)
<b>Intent</b>	Terminate current session to prevent unauthorized access.
<b>Role</b>	Customer
<b>Pre-conditions</b>	Customer must be logged in
<b>Post-conditions</b>	Session terminated and customer returns to login page.
<b>Basic Flow</b>	
1. Click logout button. 2. System confirms logout request. 3. System clears customer session information. 4. System redirects to login page or homepage.	
<b>Alternative Flow(s):</b>	
3a. Session is expired. 3a1. System redirects to login page, prompts session expired.	

<b>Use Case ID</b>	05(Add Item To Cart)
<b>Intent</b>	Customer manages pending purchases.
<b>Role</b>	Customer
<b>Pre-conditions</b>	Customer logs in, item is available.
<b>Post-conditions</b>	Update cart items, calculate selected item prices.
<b>Basic Flow</b>	
1. Navigate to product detail page. 2. Click "Add to Cart" button. 3. Update cart data and refresh interface. 4. Click cart to jump to cart interface. 5. Display updated cart summary	
<b>Alternative Flow(s):</b>	
2a. Customer is not logged in 2a1. System prompts "Please log in first". 2a2. Customer logs in. 2a3. Navigate to product detail page. 2b. Item is invalid 2b1. System refreshes detail page, cart button becomes read-only, and prompts item invalid. 5a. System encounters internal error 5a1. Prompt modification failure.	

5a2. Log error.
5a3. Provide customer service access.

<b>Use Case ID</b>	06(Checkout An Order)
<b>Intent</b>	Complete product transaction
<b>Role</b>	Customer
<b>Pre-conditions</b>	Customer selects items, shipping address, and payment method
<b>Post-conditions</b>	Prompt order success, display logistics status
<b>Basic Flow</b>	
1. Customer clicks "Proceed to Checkout" button on cart page. 2. Customer selects shipping address and payment method. 3. System generates order preview, displays item details, total price, and promotions. 4. Customer submits payment request. 5. Payment succeeds and redirects to order details page.	
<b>Alternative Flow(s):</b>	
1a. Insufficient inventory 1a1. System prompts insufficient inventory. 1a2. Customer can manually adjust cart. 5a. Payment fails 5a1. System prompts "Payment failed, please check balance or network". 5a2. Prompt customer to check payment method. 5b. Insufficient inventory 5b1. Display warning: "Items with insufficient stock were removed. Review cart." 5b2. System automatically removes items with insufficient inventory.	

<b>Use Case ID</b>	07(Login Administrator)
<b>Intent</b>	Verify administrator identity.
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Administrator has been assigned an account and permissions.
<b>Post-conditions</b>	Administrator is redirected to the management system homepage.
<b>Basic Flow</b>	
1. Administrator opens system login interface. 2. Administrator enters credentials. 3. Administrator submits login request. 4. System verifies identity. 5. Login successful, administrator is redirected to homepage.	
<b>Alternative Flow(s):</b>	
4a. Identity verification fails. 4a1. System prompts "Incorrect username or password. Please try again." 4a2. Administrator enters credentials. 4a3. Administrator submits login request.	

4a4. System verifies identity.

<b>Use Case ID</b>	08(Login Administrator)
<b>Intent</b>	Safely terminate administrator's current session.
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Administrator has successfully logged into the system.
<b>Post-conditions</b>	System redirects to login page.
<b>Basic Flow</b>	
1. Administrator clicks "Logout" button. 2. System submits logout request. 3. Session is terminated. 4. System redirects to login page.	
<b>Alternative Flow(s):</b>	
1a. Logout fails. 1a1. System prompts "Internal error. Please contact technical support." 1a2. System logs error. 1a3. Administrator clears browser cache and closes browser.	

<b>Use Case ID</b>	09(Add User)
<b>Intent</b>	Create a new admin account
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with add permissions
<b>Post-conditions</b>	User account is granted admin privileges.
<b>Basic Flow</b>	
1. Search user. 2. Assign admin privileges. 3. Submit addition request. 4. System verifies information. 5. Display addition result.	
<b>Alternative Flow(s):</b>	
4a. System verification fails. 4a1. System prompts that the user's email format is incorrect. 4a2. Admin contacts user to correct the error. 4a3. Re-verify.	

<b>Use Case ID</b>	10(Remove User)
<b>Intent</b>	Remove an admin account.
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with remove permissions
<b>Post-conditions</b>	User account has been removed from admin privileges
<b>Basic Flow</b>	
1. Select user.	

2. Remove admin privileges.
3. Submit removal request.
4. System verifies removal.
5. Display removal result.
<b>Alternative Flow(s):</b>
4a. System verification failed. 4a1. System prompts: "User is an approver and cannot be removed."

<b>Use Case ID</b>	11(Change User Properties)
<b>Intent</b>	Edit an admin account
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with edit permissions
<b>Post-conditions</b>	User permission level has been changed.
<b>Basic Flow</b>	
1. Select user.	
2. Modify permissions.	
3. Submit modification request.	
4. System verifies modification.	
5. Display modification result.	
<b>Alternative Flow(s):</b>	
4a. System verification fails. 4a1. System prompts: "You do not have permission to modify this user's settings."	

<b>Use Case ID</b>	12(Install Plug-ins)
<b>Intent</b>	Install system plug-ins
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with installation permissions
<b>Post-conditions</b>	Plug-in is installed and activated
<b>Basic Flow</b>	
1. Select plug-in file	
2. Upload plug-in	
3. System checks compatibility	
4. Install plug-in	
5. Display installation success	
<b>Alternative Flow(s):</b>	
3a. System detects incompatibility. 3a1. Display error: "Plug-in is incompatible."	
4a. Plug-in already exists. 4a1. Display warning: "Plug-in is already installed."	

<b>Use Case ID</b>	13(Remove Plug-ins)
<b>Intent</b>	Uninstall system plug-ins
<b>Role</b>	Administrator

<b>Pre-conditions</b>	Admin logs into the system with installation permissions
<b>Post-conditions</b>	Plug-in is removed and deactivated
<b>Basic Flow</b>	
1. Select plug-in 2. Confirm removal 3. System verifies dependencies 4. Remove plug-in 5. Display removal success	
<b>Alternative Flow(s):</b>	
3a. System detected dependent components. 3a1. Display error: "Plug-in is required by other modules." 4a. Plug-in is not found. 4a1. Display warning: "Plug-in does not exist."	

<b>Use Case ID</b>	14(Manage Plug-in Options)
<b>Intent</b>	Configure plug-in settings
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with management permissions
<b>Post-conditions</b>	Plug-in settings are updated
<b>Basic Flow</b>	
1. Select plug-in 2. Open settings menu 3. Adjust parameters 4. Save changes 5. System applies new settings	
<b>Alternative Flow(s):</b>	
4a. Invalid parameter value. 4a1. Display error: "Invalid input. Check allowed ranges." 4b. Save operation fails. 4b1. Display warning: "Failed to save settings. Retry?"	

<b>Use Case ID</b>	15(Install patch process)
<b>Intent</b>	Apply system patches
<b>Role</b>	Administrator
<b>Pre-conditions</b>	Admin logs into the system with patch permissions
<b>Post-conditions</b>	Patch is installed and system updated
<b>Basic Flow</b>	
1. Select patch file 2. Upload patch 3. System validates integrity 4. Apply patch 5. Display installation success	
<b>Alternative Flow(s):</b>	

3a. Invalid patch format. 3a1. Display error: "Patch file is corrupted."
4a. Patch conflicts with existing components. 4a1. Display warning: "Confirm rollback?"

<b>Use Case ID</b>	16(Login Sales Person)
<b>Intent</b>	Authenticate sales account
<b>Role</b>	Sales Person
<b>Pre-conditions</b>	Sales Person has valid credentials
<b>Post-conditions</b>	User gains system access
<b>Basic Flow</b>	
1. Enter username 2. Enter password 3. Submit credentials 4. System verifies account 5. Redirect to dashboard	
<b>Alternative Flow(s):</b>	
4a. Invalid credentials. 4a1. Display error: "Username or password incorrect." 4b. Account is locked. 4b1. Display warning: "Account locked. Contact admin."	

<b>Use Case ID</b>	17(Logout Sales Person)
<b>Intent</b>	Terminate user session
<b>Role</b>	Sales Person
<b>Pre-conditions</b>	User is logged in
<b>Post-conditions</b>	Session ends and returns to login screen
<b>Basic Flow</b>	
1. Click logout button 2. Confirm action 3. System clears session data 4. Display logout confirmation	
<b>Alternative Flow(s):</b>	
3a. Session termination fails. 3a1. Display error: "Logout failed. Retry?"	

<b>Use Case ID</b>	18(Add Product)
<b>Intent</b>	Create new product entry
<b>Role</b>	Sales Person
<b>Pre-conditions</b>	Sales Person is logged in with product management permissions
<b>Post-conditions</b>	Product is added to the catalog
<b>Basic Flow</b>	



<ol style="list-style-type: none"> <li>1. Select "Add Product" option</li> <li>2. Fill product details</li> <li>3. Submit form</li> <li>4. System validates input</li> <li>5. Display "Product added successfully"</li> </ol>
<b>Alternative Flow(s):</b>
<ol style="list-style-type: none"> <li>4a. Missing required fields. <ol style="list-style-type: none"> <li>4a1. Display error: "Complete all mandatory fields."</li> </ol> </li> <li>4b. Duplicate product name. <ol style="list-style-type: none"> <li>4b1. Display warning: "Product name already exists."</li> </ol> </li> </ol>

<b>Use Case ID</b>	19(Remove Product)
<b>Intent</b>	Delete product from catalog
<b>Role</b>	Sales Person
<b>Pre-conditions</b>	Product exists in the system
<b>Post-conditions</b>	Product is removed from the catalog
<b>Basic Flow</b>	
<ol style="list-style-type: none"> <li>1. Search product</li> <li>2. Select "Delete" action</li> <li>3. Confirm removal</li> <li>4. System checks for active orders</li> <li>5. Remove product</li> <li>6. Display "Product removed successfully"</li> </ol>	
<b>Alternative Flow(s):</b>	
<ol style="list-style-type: none"> <li>4a. Active orders is linked to product. <ol style="list-style-type: none"> <li>4a1. Display error: "Product cannot be deleted. Active orders exist."</li> </ol> </li> <li>5a. Product is not found. <ol style="list-style-type: none"> <li>5a1. Display warning: "Product does not exist."</li> </ol> </li> </ol>	

<b>Use Case ID</b>	20(Update Product)
<b>Intent</b>	Modify product information
<b>Role</b>	Sales Person
<b>Pre-conditions</b>	Product exists in the system
<b>Post-conditions</b>	Product details are updated
<b>Basic Flow</b>	
<ol style="list-style-type: none"> <li>1. Search product</li> <li>2. Select "Edit" action</li> <li>3. Update fields</li> <li>4. Save changes</li> <li>5. System validates new data</li> <li>6. Display "Update successful"</li> </ol>	
<b>Alternative Flow(s):</b>	

5a. Invalid price format.

5a1. Display error: "Enter a valid numeric value for price."

5b. Saving operation fails.

5b1. Display warning: "Failed to save changes. Retry?"