#### No. Requirement descriptions in Web Store

#### **Product Features:**

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.

#### **User Classes:**

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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.

- 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. **Customer Accounts:** 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
- 3 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.
- Inventory Management: 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.
- Shopping Cart: 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.
- **Order Confirmation:** 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.
- Interface: 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.

### The use cases designed by an expert-level requirement engineer:

Use Case ID	01(Register Customer)
Intent	Customer registers a new customer account with the system.
Role	Customer
Pre-conditions	Customer must provide necessary registration information.
Post-conditions	The Customer registers and creates a new customer account
	with the system.

- 1. Customer fills out his/her first name, last name, billing address, credit card information, shipping address, email address, and their password.
- 2. System verifies the customer's information.
- 3. System creates a new account for the Customer.
- 4. System saves the account.
- 5. System displays an account information to Customer.

# **Alternative Flow(s):**

- 2a. registration information is incomplete:
  - 2a1. Customer refills registration information.

Use Case ID	02(Login Customer)
Intent	Customer logins to a customer account with the system.
Role	Customer
Pre-conditions	Customer account must already be registered.
Post-conditions	The Customer is logged into the system.

#### **Basic Flow**

- 1. Customer fills out his/her email and password.
- 2. System verifies the email and password.
- 3. System displays the account information to Customer.

# **Alternative Flow(s):**

- 2a. Customer enters incorrect email account and password:
  - 2a1. Customer refills email account and password.
- 2b. Customer forgets password:
  - 2b1. System sends an email to the registered email address.
  - 2b2. Customer resets password.
  - 2b3. Go to Step 1 (Basic Flow).

Use Case ID	03(Edit Customer Details)
Intent	Customer edits the customer account details.
Role	Customer
Pre-conditions	Customer must be logged-in on the system.
Post-conditions	The Customer has changed the account details.

#### **Basic Flow**

- 1. Customer edits the account details.
- 2. System validates the account details.
- 3. System saves new account information.

- 2a. Customer enters incorrect information:
  - 2a1. Customer refills account details.

Use Case ID	04(Logout Customer)
Intent	Customer logouts the customer account on the system.

Role	Customer
Pre-conditions	Customer must be logged-in on the system.
Post-conditions	The Customer is logged out of the system.
Basic Flow	
1. Customer performs a logout operation.	
2. System displays logged out information.	
Alternative Flow(s):	

Use Case ID	05(Add Item To Cart)
Intent	Customer adds item(s) in the shopping cart
Role	Customer
Pre-conditions	Customer must be logged-in on the system.
Post-conditions	The Customer has added item(s) to the shopping cart.

- 1. Customer adds the product item(s) to the shopping cart.
- 2. System displays the number of product items in the shopping cart, along with the total cost.
- 3. Customer edits the quantity or remove product items from the shopping cart.
- 4. System saves the shopping cart.

## **Alternative Flow(s):**

- 1a. The product is out of stock:
  - 1a1. The system displays an error message.

Use Case ID	06(Checkout An Order)
Intent	Customer checkouts and confirms an order.
Role	Customer
Pre-conditions	Customer must be logged-in on the system.
	Customer must have item(s) in the shopping cart.
Post-conditions	The Customer has confirmed the order.

#### **Basic Flow**

- 1. System calculates the product items in the shopping cart.
- 2. System presents the customer with the account details and payment methods.
- 3. Customer confirms account details and payment methods.
- 4. Customer checks out the order.
- 5. System creates order.
- 6. Customer confirms order.
- 7. System saves order confirmation and order details.
- 8. System sends email confirmation to Customer.

- 1a. The product is out of stock.
  - 1a1. The system displays an error message.
- 4a. Payment fails.

- 4a1. Customer retries the payment or changes payment methods.
- 4b. The order is overdue.
  - 4b1. The system displays a notification that the order is no longer allowed.
  - 4b2. Go to Step 1 (Basic Flow).
- 6a. The order is incorrect.
  - 6a1. Customer modifies the order.
- 8a. E-mail delivery failure.
- 8a1. The system displays an error message and prompts the customer to check their email settings.

Use Case ID	07(Login Administrator)
Intent	Administrator logins to an Administrator account with the
	system.
Role	Administrator
<b>Pre-conditions</b>	Administrator account must already be registered.
Post-conditions	The Administrator is logged into the system.

- 1. Administrator fills out his/her email and password.
- 2. System verifies the email and password.
- 3. System displays the account information to Administrator.

# **Alternative Flow(s):**

- 2a. Administrator enters incorrect email account and password:
  - 2a1. Administrator refills email account and password.
- 2b. Administrator forgets his/her password:
  - 2b1. System sends an email to the registered email address.
  - 2b2. Administrator resets password.
  - 2b3. Go to Step 1 (Basic Flow).

Use Case ID	08(Logout Administrator)
Intent	Administrator logouts the Administrator account on the
	system.
Role	Administrator
<b>Pre-conditions</b>	Administrator must be logged-in on the system.
Post-conditions	The Administrator is logged out of the system.
Basic Flow	
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- 1. Administrator performs a logout operation.
- 2. System displays logged out information.

Use Case ID	09(Add User)
Intent	Administrator registers a new customer, sales person, or

	administrator account with the system.
Role	Administrator
<b>Pre-conditions</b>	
Post-conditions	A new User account is created within the system.

- 1. Administrator fills out first name, last name, username, email address, password, and privileges of the user.
- 2. System verifies new user information.
- 3. System creates a new account for the new user with desired privileges.
- 4. System displays the new user information to Administrator.

# **Alternative Flow(s):**

- 2a. registration information is incomplete:
  - 2a1. Administrator refills registration information.

Use Case ID	10(Remove User)
Intent	Administrator removes a user from the system.
Role	Administrator
Pre-conditions	
Post-conditions	An account has been deleted from the system.

#### **Basic Flow**

- 1. Administrator searches a user.
- 2. Administrator selects a user.
- 3. System displays user information.
- 4. System confirms deletion operation.

# **Alternative Flow(s):**

Use Case ID	11(Change User Properties)
Intent	Administrator alters properties such as passwords and
	privileges of the user.
Role	Administrator
Pre-conditions	
Post-conditions	An account has been altered within the system.

### **Basic Flow**

- 1. Administrator searches a user.
- 2. Administrator selects a user.
- 3. System displays user properties.
- 4. Administrator changes the user properties.
- 5. System saves user properties.

Use Case ID	12(Install Plug-ins)
Intent	Administrator installs a new plug-in to the application.
Role	Administrator
Pre-conditions	
Post-conditions	A new plug-in is installed in the application.
Rosic Flow	

- 1. Administrator uploads a Plug-in module.
- 2. System installs plug-in.
- 3. System validates changes.
- 4. System displays plug-in options to the Administrator.

# **Alternative Flow(s):**

- 2a. Incompatible with the current system
  - 2a1. Installation is aborted.

Use Case ID	13(Remove Plug-ins)
Intent	Administrator removes a plug-in from the application.
Role	Administrator
<b>Pre-conditions</b>	
Post-conditions	A plug-in is removed from the application.
Basic Flow	

- 1. Administrator selects a Plug-in module.
- 2. System removes plug-in.
- 3. System validates changes.

# **Alternative Flow(s):**

Use Case ID	14(Manage Plug-in Options)
Intent	Administrator makes changes to an installed plug-in.
Role	Administrator
Pre-conditions	
Post-conditions	A plug-in's options have successfully been changed.
Resic Flow	·

- 1. Administrator selects a plug-in module.
- 2. Administrator changes plug-in options.
- 3. System confirms changes with the Administrator.

Use Case ID	15(Install patch process)
Intent	Administrator installs patches or software updates to the web
	store.

Role	Administrator
Pre-conditions	
Post-conditions	The web store was successfully updated.

- 1. Administrator uploads the patch.
- 2. System automatically installs patches
- 3. System initializes the application.
- 4. System displays that patch has been successfully installed.

# **Alternative Flow(s):**

Use Case ID	16(Login Sales Person)
Intent	Sales Person logins to a Sales Person account with the system.
Role	Sales Person
Pre-conditions	Sales Person account must already be registered.
Post-conditions	The Sales Person is logged into the system.

#### **Basic Flow**

- 1. Sales Person fills out his/her email account and password.
- 2. System verifies the account and password.
- 3. System displays the account information to Sales Person.

# **Alternative Flow(s):**

- 2a. Sales Person enters incorrect email account and password
  - 2a1. Sales Person refills email account and password.
- 2b. Sales Person forgets his/her password
  - 2b1. System sends an email to the registered email address.
  - 2b2. Sales Person resets password.
  - 2b3. Go to Step 1 (Basic Flow).

Use Case ID	17(Logout Sales Person)
Intent	Sales Person logouts the Sales Person account on the system.
Role	Sales Person
Pre-conditions	Sales Person must be logged-in on the system.
Post-conditions	The Sales Person is logged out of the system.

#### **Basic Flow**

- 1. Sales Person performs a logout operation.
- 2. System displays logged out information.

Use Case ID	18(Add Product)
Intent	Sales Person adds a product to the system.

Role	Sales Person
Pre-conditions	Sales Person must be logged-in on the system.
Post-conditions	A new product is created within the system.

- 1. Sales Person fills out product name, product id, product description, product price, upload a product image, number of product items in inventory, and availability of product.
- 2. System validates the new product attributes.
- 3. System saves the new product attributes.
- 4. System creates a new product page.
- 5. System displays the newly created product page.

#### **Alternative Flow(s):**

- 2a. The product attributes are incorrect:
  - 2a1. Sales Person refills product attributes.

Use Case ID	19(Remove Product)
Intent	Sales Person removes a product from the system.
Role	Sales Person
Pre-conditions	Sales Person must be logged-in on the system.
Post-conditions	A product is deleted from the system.

#### **Basic Flow**

- 1. Sales Person searches a product.
- 2. Sales Person selects a product.
- 3. System displays the product attributes.
- 4. System removes the product attributes from the application.
- 5. System removes the product page.

# **Alternative Flow(s):**

- 4a. The product has active orders.
  - 4a1. System will ask if you want to force the order to be removed.

Use Case ID	20(Update Product)
Intent	Sales Person updates product attributes within the system.
Role	Sales Person
Pre-conditions	Sales Person must be logged-in on the system.
Post-conditions	The product attributes have been updated.
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#### **Basic Flow**

- 1. Sales Person searches a product.
- 2. Sales Person selects a product.
- 3. System displays the editable product attributes, including the product name, product id, product description, product price, update the product image, product availability, and/or the number of product items in the inventory.
- 4. System validates the product attributes.
- 5. System updates the product attributes.
- 6. System displays the updated product page.

- 4a. The product attributes are incorrect:
  - 4a1. Sales Person refills product attributes.