<E-Commerce Web Application For Selling Digital Products>

Version <1.7>

Revision History

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# Use-Case View Products

## View products

### Brief Description

As an ecommerce application, one of the most necessary features is viewing products. Customers would like to view a list of products in order to interact with these products.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User accesses the products page via clicking on “product icon” on the home page of the application. | 1. System change route to products page then displays the static lists of products, based on recommendation for user, trending,... Each product including image, price and product name on the products page. |

## Special Requirements

None

## Preconditions

* The ecommerce web is up and running.
* Customer must have access to a web browser with an internet connection.

## Postconditions

* Customer may choose to add products to cart, favorites or continue browsing..
* Customer may click on any specific products to view details.

## Extension Points

None

# Use-Case Search Products

## Search products

### Brief Description

This use case allows the users to find their desirable products by searching by product name or filtering the products on different categories.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User enters keywords or phrases into the search bar on the products page. Then the user clicks on the “search” button to perform a searching process. | 1. Based on the user’s query, the system finds the corresponding products on the database, then displays them including image, price and product name on the search results page. [Exception flow 2a] |

### Alternative Flows

Search returns no result:

2a. System displays a message indicating “No result found” on the search results page.

3a. System offers a link that redirects user back to the products page to retry the search.

Use case continues on step 1 of basic flow.

## Special Requirements

* Search functionality should be user-friendly, fast response and support auto-completion and typos.
* Product listings should be visually appealing and provide essential information for informed decisions.

## Preconditions

* The ecommerce web is up and running.
* Customer accesses the web with the internet connection.
* Customer has a basic understanding of how to use a search bar.
* The product searching functionality is functioning correctly.

## Postconditions

* Customer may click on any products on the search results page to view for details.
* Customer may add products to cart, favorites or continue browsing.

## Extension Points

### Product filtering based on price range, published date

Location: After step 2 of basic flow.

# Use-Case View Product Detail

## View product detail

### Brief Description

This use case allows the log users to view detail information such as description, company, etc of a product when they click on a particular product on the products page or on the search results page.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User clicks on a product from the list from the search results page or the products page to navigate to that product detail page. | 1. System retrieves and displays the product detail page for the selected product. The page includes: image, product name, description, price, option to add to cart or add to favorites. |

### Alternative Flows

None

## Special Requirements

User-friendly interface. Products will be quickly present in page

## Preconditions

* The ecommerce web is up and running.
* Customer accesses the web with the internet connection.
* There are lists of products available to choose which product that user wants to view in detail.

## Postconditions

* Customer may add products to cart, favorites or continue browsing.

## Extension Points

### View related products:

System recommend some related products with the current chossing product for user as an option to decide

Location: After step 2 of basic flow.

# Use-Case Add/Remove Products to Cart

## Add/remove products to cart

### Brief Description

The feature allows users to quickly add products to their shopping cart based on their preferences, browsing history, or previous purchases. This personalized recommendation system enhances the shopping experience by suggesting items that are likely to be of interest to the user.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User clicks on a add button under the product image in homepage (shopping area) or in the detail route of presenting the product’s detail to add product into cart 2. User clicks on a remove button in the cart next to the product to remove product in cart | 1. System displays the cart contains images, quantity, short description about product. 2. System update the quantity of product in cart or remove product after adding and removing |

### Alternative Flows

None

## Special Requirements

User-friendly interface. Products will be quickly updated on the product list in the cart after being added or deleted.

## Preconditions

* User has already logged-in
* The ecommerce web is up and running.
* Customer accesses the web with the internet connection.

## Postconditions

* The feature is successfully added to the product's specifications or characteristics.
* The product continues to operate as intended without the removed feature.

## Extension Points

### Update quantity

Allow users to easily update the quantity of products in their cart without needing to remove and re-add the item.

Location: After step 1 and 2 of basic flow.

# Use-Case View Orders

## View orders (order information, shipping status)

### Brief Description

This feature will allow users to access detailed information about their orders, such as order status, shipping details, and tracking information. Users can easily track the progress of their orders, view estimated delivery dates, and monitor any updates or changes to their shipping status.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User clicks to notification to view current order information (bill and shipping status)   4. User clicks to setting, then go to order history to view the orders history. | 1. System retrieves and displays the product detail for order. 2. System update shipping status for each order   5. System display the history of order details (status, products in that order, payment…) |

### Alternative Flows

If no current order, the notification will present “No order exists”

If there is no order in history, the system will show the order history with sentence "There are no existing orders."

## Special Requirements

User-friendly interface. The orders will be updated after changing status of order, payment or shipping and response quickly for the customer.

The order history will be present as clearly as possible for user checking

## Preconditions

* The ecommerce web is up and running.
* Customer accesses the web with the internet connection.
* The system must have up-to-date information on the user's orders and shipping status.

## Postconditions

* The user can view detailed information about their orders, including order status, shipping details, and tracking information.
* The user can track the progress of their orders, view estimated delivery dates, and monitor any updates or changes to their shipping status.
* The system has updated the shipping status for each order in the user's order history.

## Extension Points

### Order filtering

Allow users to filter and sort their order history based on criteria such as date making it easier to find specific orders.

Location: after step 5 of basic flow

### Order details expansion

Provide the option for users to view more detailed information about each order, including individual product details, pricing breakdown, and payment method.

Location: After step 1 of basic flow.

# Use-Case Add/Remove Admin

## Add/remove admin

### Brief Description

This use case allows the admins to add or remove admin from the website.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. Admin has to login and then go the admin mode route 2. Admin clicks on the add or remove button to add or remove other admins. | 1. System check is that admin account or user account 2. System display a window for confirm deleting or adding if that is admin account 3. System adds and removes admins according to what the admin used. |

### Alternative Flows

4a. If admin choose option “Cancel”, the system will return to the admin mode page at beginning

## Special Requirements

User-friendly interface. The account will be deleted quickly and cannot use the feature just for admin

## Preconditions

* The ecommerce web is up and running.
* Admin accesses the web with the internet connection.
* There are lists of admins available to view in detail.
* Admin has to login

## Postconditions

* Admin may use other functions that admin has.

## Extension Points

*None*

# Use-Case Add/Remove Customer Account

## Add/remove customer account

### Brief Description

This use case allows the admins to add or remove customer accounts from the website.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. Admin has to login and then go the admin mode route 2. Admin clicks on the add or remove button to add or remove customer accounts. | 1. System check is that admin account or user account 2. System displays a window for confirming deletion or adding if that is a customer account. 3. System adds and removes customer account according to what the admin used. |

### Alternative Flows

4a. If admin choose option “Cancel”, the system will return to the admin mode page at beginning

## Special Requirements

User-friendly interface. The account will be deleted quickly and cannot use the feature just for customer.

## Preconditions

* The ecommerce web is up and running.
* Admin accesses the web with the internet connection.
* There are lists of customer accounts that the admin wants to view in detail.
* Admin had logged in.

## Postconditions

* Admin may use any functions that admin has.

## Extension Points

*None*

# Use-Case Checkout

## Checkout

### Brief Description

This use case allows the users to checkout their cart to pay for their products which then get transferred to orders related functions.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User presses the checkout button. 2. Then choose their voucher. 3. Then finally choose the type of payment. | 1. System check is that admin account or user account. 2. System displays a window for choosing the payment type. 3. System calculates the total cost of the products in the cart then shows the final cost. |

### Alternative Flows

2a. System calculates the price without the voucher.

4a. If customer chooses option “Cancel”, the system will return to the cart page at beginning

## Special Requirements

* Search functionality should be user-friendly and support auto-completion and typos.
* Product listings should be visually appealing and provide essential information for informed decisions.

## Preconditions

* The ecommerce web is up and running.
* Customer access the web with the internet connection.
* Customer had logged in.
* Customer has entered the cart.
* The checkout functionality is functioning correctly.

## Postconditions

* Customer may click on order to view their orders .
* Customer may leave the checkout section of the cart.
* The order status is updated to “Processing” or “Pending” in the system.
* The customer is notified of the successful checkout.

## Extension Points

*None*

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# Use-Case Registering account

## Registering account

### Brief Description

This use case allows the users to register their account on the website so that they can start using the website to buy products.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User presses the register button. 2. User enters their account’s name and password. | 1. System check is that admin account or user account. 2. System displays a window for entering the name and password. 3. System checks to see if their account’s name and password is valid. If valid then the system has them enter the shop with the account. If not then it will tell them to enter a new name and password. |

### Alternative Flows

2a. User presses the login button instead.

## Special Requirements

Registering account functionality should be user-friendly and tell you if the name had been taken..

## Preconditions

* The ecommerce web is up and running.
* Customer access the web with the internet connection.
* Customer had logged in.
* Customer has knows how to register an account.
* The registering account functionality is functioning correctly.

## Postconditions

* Customer may use any interactable button on the website that fits their needs.
* The customer receives an email to verify their account creation. The account is successfully created only when the customer activates it through the verification email.

## Extension Points

*None*

# Use-Case Login

## Login

### Brief Description

This use case allows the users to log into their account on the website so that they can start using the website to buy products.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. User presses the login button. 2. User enters their account’s name and password. | 1. System displays a window for entering the name and password. 2. System checks to see if their account’s name and password is valid. If valid then the system has them enter the shop with the account. If not then it will tell them to enter the correct name and password. |

### Alternative Flows

2a. User presses the register button instead.

## Special Requirements

Login functionality should be user-friendly and tell you if the name or password is incorrect..

## Preconditions

* The ecommerce web is up and running.
* Customer accesses the web with the internet connection.
* Customer has an account.
* The login functionality is functioning correctly.

## Postconditions

* Customer may use any interactable button on the website that fits their needs.

## Extension Points

*None*

# Use-Case Update Product Details

## Update product details

### Brief Description

This use case allows the admins to update the product details on the website so that the product details can stay up to date with its name, price, etc..

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. Admin uses json files to update the product's details in the database of the website. | 1. The system updates the database with the new details so that it can be shown on the website. |

### Alternative Flows

1a. Admin can press cancel to cancel the update.

## Special Requirements

Update product details functionality should be user-friendly and tell you if the name had been taken..

## Preconditions

* The ecommerce web is up and running.
* Admins access the web with the internet connection.
* Admin has logged into their account.
* The update product details functionality is functioning correctly.

## Postconditions

* Admin may use any interactable button on the website that fits their needs.

## Extension Points

*None*

# Use-Case View Customer Account Information

## View customer account information

### Brief Description

This use case allows the admin to view the user accounts information like their name, etc.

## Flow of Events

### Basic Flow

| **Actor’s actions** | **System response** |
| --- | --- |
| 1. Admin click on the user account to view their information.. | 1. The system shows the information of that customer account.. |

### Alternative Flows

None

## Special Requirements

View customer account information functionality should be user-friendly and support auto-completion and typos.

The information presented should be easy to look at and clear.

## Preconditions

* The ecommerce web is up and running.
* Admin accesses the web with the internet connection.
* Admin had logged in.
* The customer account does exist.
* The view customer account information functionality is functioning correctly.

## Postconditions

* Admin may click on order to view the customer’s orders .
* Admin may leave the information area of the customer account.

## Extension Points

*None*