Use Case : 6

Actor: User

Description: This use case allows the user to add products to their shopping cart from the product details page.

Description :

1) The user navigates to the product details page.

2) The user views the product details.

3) The user clicks the "Add to Cart" button.

4) The system checks if the product is available:

5) If the product is unavailable (exception 1), display an error message.

If the product is available, proceed to the next step.

The system checks if the user is logged in:

6) If the user is not logged in (exception 2), display a message prompting the user to log in or create an account.

If the user is logged in, proceed to the next step.

The system adds the product to the user's shopping cart.

7) The system updates the cart icon to display the updated count of items in the cart.

8) The system displays a notification confirming the addition of the product to the cart.

Exceptions:

Product Unavailability:

1) If the product is not available (e.g., out of stock or discontinued), the user cannot add it to the cart.

2) If the user is not logged in, they cannot add products to the cart.

3) In case of technical issues, such as server errors or network problems, the user may not be able to add

Pre-Conditions:

The user is logged in.

The user is on the product details page.

The product is available for purchase.

Post-Conditions:

The product is added to the user's shopping cart.

The cart icon displays the updated count of items in the cart.

A notification confirms the addition of the product to the cart.

Exceptions:

Product Unavailability:

1) If the product is not available (e.g., out of stock or discontinued), the user cannot add it to the cart.

2) the user is not logged in, they cannot add products to the cart.

3) In case of technical issues, such as server errors or network problems, the user may not be able to add products to the cart.

Use Case : 7

Use Case Name: Remove Products from Shopping Cart

Actor: User

Description :

1) The user navigates to the shopping cart view.

2) The user views the products in their shopping cart.

3) For each product in the cart, the user can see a "Remove" button.

4) The user clicks the "Remove" button next to the product they want to remove.

5) The system checks if the shopping cart is empty:

6) If the shopping cart is empty (exception 1), display a message indicating that the cart is empty, and there are no products to remove.

If the cart is not empty, proceed to the next step.

The system removes the selected product from the user's shopping cart.

7) The system updates the cart's total cost based on the remaining products in the cart.

8) The system displays a notification confirming the removal of the product from the cart.

Exceptions:

1) Description: If the user's shopping cart is empty, there are no products to remove.

2) Description: In case of technical issues, such as server errors or network problems, the user may not be able to remove products from the cart.

Pre-Conditions:

1) The user is logged in.

2) The user has items in their shopping cart.

Post-Conditions:

1) The selected product is removed from the user's shopping cart.

2) The cart's total cost is updated accordingly.

3) A notification confirms the removal of the product from the cart.

Use Case 8 :

Use Case Name: View Shopping Cart

Actor: User

Description :

1) The user is on any page of the website.

2) The user wants to view their shopping cart, so they initiate the action to access the cart page (e.g., by clicking on a cart icon in the navigation bar).

3) The system checks if the user is logged in:

4) If the user is not logged in, redirect them to the login or registration page and prompt them to log in or create an account.

If the user is logged in, proceed to the next step.

The system checks if the shopping cart is empty:

5) If the shopping cart is empty (exception 1), display a message indicating that the cart is empty, and there are no products to display.

If the cart is not empty, proceed to the next step.

The system displays the shopping cart page, listing the added products, including their names, quantities, and individual costs.

6) The system calculates and prominently displays the total cost of all items in the cart.

Exceptions:

1) Description: If the user's shopping cart is empty, there are no products to display.

2) Description: In case of technical issues, such as server errors or network problems, the user may not be able to access the shopping cart page.

Pre-Conditions:

1) The user is logged in.

Post-Conditions:

1) The user can view the shopping cart page.

2) The shopping cart page displays a list of added products, including their names, quantities, and individual costs.

3) The total cost of all items in the cart is prominently displayed.

Use Case 9 :

Use Case Name: Checkout Process

Actor: User

Description :

1) The user is on the cart page.

2) The user clicks the "Proceed to Checkout" button.

3) he system checks if the user is logged in:

4) If the user is not logged in, redirect them to the login or registration page and prompt them to log in or create an account.

If the user is logged in, proceed to the next step.

The system checks if the shopping cart is empty:

5) If the shopping cart is empty (exception 1), display a message indicating that the cart is empty, and there are no items to proceed to checkout.

If the cart is not empty, proceed to the next step.

The system guides the user through the checkout process, which includes the following steps:

a. Entering shipping information.

b. Selecting a shipping method.

c. Providing payment details.

6) After entering payment details, the user reviews their order summary.

7) The user confirms the purchase by clicking a "Confirm Order" button.

8) The system processes the payment and checks if the payment is successful:

9) f the payment is successful, proceed to the next step.

If the payment is declined (exception 3), display a message to the user, and the order is not confirmed.

The system generates an order confirmation email and sends it to the user's registered email address

Exceptions:

1) Description: If the user's shopping cart is empty, there are no items to proceed to checkout.

2) Description: In case of technical issues, such as server errors or network problems, the user may not be able to proceed with the checkout process.

3) Description: If the user's payment is declined during the checkout process, the order cannot be confirmed.

Pre-Conditions:

1) The user is logged in.

2) The user has items in their shopping cart.

3) The user is on the cart page.

Post-Conditions:

1) The user successfully completes the checkout process.

2) The user receives an order confirmation email.

Use Case 10:

Use Case Name: Choose Payment Method

Actor: User

Description:

1) The user is in the checkout process and reaches the payment step.

2) The system checks if there are any payment methods available:

3) If no payment methods are available (exception 1), display a message indicating that no payment methods are available, and the user cannot proceed with payment.

If payment methods are available, proceed to the next step.

The user is presented with multiple payment options (e.g., credit card, PayPal) and can select a preferred payment method.

4) The user provides the necessary information for the selected payment method.

5) The system securely processes the payment using encryption and authentication.

6)The system checks if the payment is successful:

7) If the payment is successful, proceed to the next step.

If the payment is declined (exception 3), display a message to the user, and the order is not confirmed.

After successful payment, the user is redirected to an order confirmation page

Exceptions:

1) Description: If there are no payment methods available during the checkout process, the user cannot proceed with payment.

2) Description: In case of technical issues, such as server errors or network problems, the user may not be able to choose a payment method or complete the payment.

3) Description: If the user's selected payment method results in a declined payment, the order cannot be confirmed.

Pre-Conditions:

1) The user is logged in.

2) The user is in the checkout process and has reached the payment step.

3) The user has items in their shopping cart.

Post-Conditions:

1) The user successfully selects a payment method.

2) The payment is securely processed.

3) After successful payment, the user is redirected to an order confirmation page.

Use Case 11:

Use Case Name: Access Order History

Actor: UserDescription :

1) The user is logged in and wants to access their order history.

2)The user navigates to their profile or a designated "Order History" section.

3) The system checks if the user has placed orders in the past:

4) If the user has no order history (exception 1), display a message indicating that there is no order history to display.

If the user has placed orders, proceed to the next step.

The system displays the order history page, listing the user's previous orders. Each order is represented with details such as order number, date, status, and total cost.

5) The user can click on a specific order to view its details.

6) The system displays the order details, including product names, quantities, and individual costs.

Exceptions:

1) If the user has not placed any orders in the past, there will be no order history to display.

2) In case of technical issues, such as server errors or network problems, the user may not be able to access their order history.

Pre-Conditions:

1) The user is logged in.

2) The user has placed orders in the past.

Post-Conditions:

1) The user successfully accesses their order history.

2) The order history page displays a list of the user's previous orders.

3) Clicking on an order displays its details, including product names, quantities, and individual costs.

Use Case 12 :

Use Case Name: Provide Product Reviews and Ratings

Actor: User

Description :

1) The user is on the product details page and wants to provide a review and rating for the product.

2) The user scrolls to the review section on the product details page.

3) The system checks if the user has purchased the product:

4) If the user has not purchased the product (exception 1), display a message indicating that they cannot review a product they haven't purchased.If the user has purchased the product, proceed to the next step.

The system provides a form for the user to write a review and rate the product.

5) The user writes a review, rates the product (e.g., with stars), and submits their feedback.

6) The system validates and stores the user's review and rating for the product.

7) The system displays the submitted review on the product's page, along with the user's username, date of submission, and rating.

8) The user receives a confirmation message indicating that their review has been successfully submitted.

Pre-Conditions:

Exceptions:

1) If the user has not purchased the product they want to review, they cannot submit a review.

2) In case of technical issues, such as server errors or network problems, the user may not be able to submit a review.

Notification: Display an error message informing the user of the technical issue and recommend they try again later.

The user is logged in.

1) The user has purchased the product they want to review.

2) The user is on the product details page.

Post-Conditions:

1) The user successfully submits a review and rating for the product.

2) The submitted review is visible to other users on the product's page.

3) The user receives a confirmation message upon successful submission.

Use Case 13 :

Use Case Name: Add New Electronic Products

Actor: Administrator

Description :

1) The administrator logs into the admin panel.

2) The administrator navigates to the dedicated "Add Product" section within the admin panel.

3) The system presents a form with fields for entering product details, including:

Product name

Description

Category

Images (upload or specify image URLs)

Specifications

Price

4) The administrator enters the required product information into the form.

5) The system validates the provided information to ensure completeness and correctness:

6) If there are validation errors (exception 1), the system displays error messages and highlights the problematic fields for correction.

If there are no validation errors, proceed to the next step.

The administrator submits the product details.

7) The system adds the new electronic product to the website's product catalog.

8) The system ensures that the new product is immediately visible on the user side, making it accessible to users browsing the website.

Exceptions:

1) If the administrator provides incomplete or invalid information while adding a product, such as missing product details or an incorrect price format, the system cannot proceed.

2) In case of technical issues, such as server errors or database problems, the system may not be able to add the new product.

Pre-Conditions:

1) The administrator is logged into the admin panel.

2) The admin has access to the "Add Product" section in the admin panel.

Post-Conditions:

A new electronic product is successfully added to the website and is immediately visible to users.

Use Case 14 :

Use Case Name: Update Existing Product Information

Actor: Administrator

Description :

1) The administrator logs into the admin panel.

2) The administrator navigates to the product management section within the admin panel, which provides options for updating product information.

3) The system displays a list of existing products that can be edited.

4) The administrator selects the product they wish to update.

5) The system presents a form or interface with fields for editing the product's information, including:

Product name

Description

Price

Availability status

6) The administrator modifies the relevant product details.

7) The system validates the provided information to ensure completeness and correctness:

8) f there are validation errors (exception 1), the system displays error messages and highlights the problematic fields for correction.

If there are no validation errors, proceed to the next step.

9) The administrator submits the updated product information.

10) The system applies the changes to the selected product in the website's product catalog.

11) The system ensures that the updated product information is immediately reflected on the user side, making it accessible to users browsing the website

Exceptions:

1) If the administrator provides incomplete or invalid information while updating a product, such as missing details or an incorrect price format, the system cannot proceed.

2) Description: In case of technical issues, such as server errors or database problems, the system may not be able to update the product information.

Pre-Conditions:

1) The administrator is logged into the admin panel.

2) The admin has access to the product management section within the admin panel.

Post-Conditions:

1) The product's information is successfully updated.

2) The updated product details are immediately reflected on the user side.

Use Case 15:

Use Case Name: Remove Products from Website

Actor: Administrator

Description :

1) The administrator logs into the admin panel.

2) The administrator navigates to the product management section within the admin panel, where a list of products is available for management.

3) The system displays a list of existing products, each accompanied by a "Remove" button.

4) The administrator selects the product they wish to remove by clicking the "Remove" button next to it.

5) The system prompts the administrator for confirmation before proceeding with the deletion of the product.

6) The administrator can choose to confirm the removal or cancel the operation:

7) If the administrator cancels the confirmation (exception 1), no action is taken, and the product remains on the website.

If the administrator confirms the removal, proceed to the next step.

The system removes the selected product from the website's product catalog.

8) The system ensures that the removed product is no longer visible to users, making it inaccessible when users browse the website.

Exceptions:

1) If the administrator decides to cancel the confirmation prompt and does not proceed with the removal, the product should not be deleted.

2) In case of technical issues, such as server errors or database problems, the system may not be able to complete the product removal process.

Pre-Conditions:

1) The administrator is logged into the admin panel.

2) The admin has access to the product management section within the admin panel.

3) There are products listed on the website that the administrator wants to remove.

Post-Conditions:

The selected product is successfully removed from the website and is no longer visible to users.

Use Case 16 :

Use Case Name: Generate Sales Reports and Analytics

Actor: Administrator

Description :

1) The administrator logs into the admin panel.

2) The administrator navigates to the dedicated "Reports" section within the admin panel, where options for generating sales reports and analytics are available.

3) The system provides a user-friendly interface for the administrator to specify the parameters of the report:

4) Select the time period (e.g., specific dates or a date range).

Choose product categories or leave it blank for an overall report.

Select the desired format for the report export (e.g., PDF or CSV).

The administrator configures the report parameters according to their requirements.

5) The system generates the sales report based on the specified parameters, including:

6) Total revenue for the selected time period.

Total number of orders for the selected time period.

A breakdown of sales by product categories for the selected time period.

The system displays the generated report and analytics in a user-friendly format within the admin panel.

7) The administrator has the option to export the report in common formats (e.g., PDF or CSV) for further analysis or sharing.

Exceptions:

1) If there is no sales data available for the selected time period or category, the system cannot generate a report.

2) Description: In case of technical issues, such as server errors or data retrieval problems, the system may not be able to generate the requested report.

Pre-Conditions:

1) The administrator is logged into the admin panel.

2) The admin has access to the dedicated "Reports" section within the admin panel.

3) There is sales data available for analysis.

Post-Conditions:

1) The system generates and displays the requested sales report and analytics.

2) The administrator can export the reports in common formats (e.g., PDF or CSV) for further analysis and sharing.