

Functional Testing

Test Case ID: FT001

- **Test Case Title:** Verify User Registration
- **Description:** Test the user registration process on the web application.
- **Preconditions:** User must not already be registered.
- **Test Steps:**
 1. Navigate to the registration page.
 2. Enter valid user details (Name: John Doe, Email: john.doe@example.com, Password: Passw0rd123).
 3. Click on the "Register" button.
- **Expected Result:** User should be registered successfully and redirected to the login page.
- **Actual Result:** (To be filled after execution)
- **Status:** (Pass/Fail/Not Executed)
- **Priority:** High
- **Severity:** Major

Test Case ID: FT002

- **Test Case Title:** Verify Product Search Functionality
- **Description:** Test the product search functionality on the web application.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Enter a product name ("Apple") in the search bar.
 3. Click on the search icon.
- **Expected Result:** Relevant products should be displayed.
- **Actual Result:** (To be filled after execution)
- **Status:** (Pass/Fail/Not Executed)
- **Priority:** Medium
- **Severity:** Minor

Regression Testing

Test Case ID: RT001

- **Test Case Title:** Verify Checkout Process
- **Description:** Ensure that the checkout process works as expected after recent code changes.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Add items to the cart.

3. Proceed to checkout.
 4. Enter delivery details and payment information.
 5. Confirm the order.
- **Expected Result:** Order should be placed successfully and confirmation message should be displayed.
 - **Actual Result:** (To be filled after execution)
 - **Status:** (Pass/Fail/Not Executed)
 - **Priority:** High
 - **Severity:** Critical

Integration Testing

Test Case ID: IT001

- **Test Case Title:** Verify Payment Gateway Integration
- **Description:** Test the integration of the payment gateway.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Select the payment method.
 5. Enter payment details.
 6. Confirm the payment.
- **Expected Result:** Payment should be processed successfully and order confirmation should be displayed.
- **Actual Result:** (To be filled after execution)
- **Status:** (Pass/Fail/Not Executed)
- **Priority:** High
- **Severity:** Critical

UI Testing

Test Case ID: UI001

- **Test Case Title:** Verify Login Page UI
- **Description:** Ensure the login page UI elements are displayed correctly.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the login page.
 2. Verify the presence of email, password fields, and login button.
 3. Verify the alignment and styling of elements.
- **Expected Result:** All elements should be displayed correctly and be well-aligned.
- **Actual Result:** (To be filled after execution)
- **Status:** (Pass/Fail/Not Executed)

- **Priority:** Medium
- **Severity:** Minor

Detailed Test Case Execution Results

Test Case ID: FT001

- **Test Case Title:** Verify User Registration
- **Description:** Test the user registration process on the web application.
- **Preconditions:** User must not already be registered.
- **Test Steps:**
 1. Navigate to the registration page.
 2. Enter valid user details (Name: John Doe, Email: john.doe@example.com, Password: Passw0rd123).
 3. Click on the "Register" button.
- **Expected Result:** User should be registered successfully and redirected to the login page.
- **Actual Result:** User registered successfully and redirected to login page.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Test Case ID: FT002

- **Test Case Title:** Verify Product Search Functionality
- **Description:** Test the product search functionality on the web application.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Enter a product name ("Apple") in the search bar.
 3. Click on the search icon.
- **Expected Result:** Relevant products should be displayed.
- **Actual Result:** Relevant products displayed as expected.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Test Case ID: RT001

- **Test Case Title:** Verify Checkout Process
- **Description:** Ensure that the checkout process works as expected after recent code changes.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).

2. Add items to the cart.
 3. Proceed to checkout.
 4. Enter delivery details and payment information.
 5. Confirm the order.
- **Expected Result:** Order should be placed successfully and confirmation message should be displayed.
 - **Actual Result:** Order placed successfully, confirmation message displayed.
 - **Status:** Pass
 - **Priority:** High
 - **Severity:** Critical

Test Case ID: IT001

- **Test Case Title:** Verify Payment Gateway Integration
- **Description:** Test the integration of the payment gateway.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Select the payment method.
 5. Enter payment details.
 6. Confirm the payment.
- **Expected Result:** Payment should be processed successfully and order confirmation should be displayed.
- **Actual Result:** Payment processed successfully, confirmation displayed.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Test Case ID: UI001

- **Test Case Title:** Verify Login Page UI
- **Description:** Ensure the login page UI elements are displayed correctly.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the login page.
 2. Verify the presence of email, password fields, and login button.
 3. Verify the alignment and styling of elements.
- **Expected Result:** All elements should be displayed correctly and be well-aligned.
- **Actual Result:** All elements displayed correctly and well-aligned.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Functional Testing

Test Case ID: FT003

- **Test Case Title:** Verify Password Reset Functionality
- **Description:** Test the password reset functionality on the web application.
- **Preconditions:** User must have a registered account.
- **Test Steps:**
 1. Navigate to the login page.
 2. Click on the "Forgot Password" link.
 3. Enter the registered email address (john.doe@example.com).
 4. Click on the "Submit" button.
 5. Check the email for the password reset link.
 6. Click on the password reset link and enter a new password.
- **Expected Result:** Password should be reset successfully, and a confirmation message should be displayed.
- **Actual Result:** Password reset successfully, confirmation message displayed.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Regression Testing

Test Case ID: RT002

- **Test Case Title:** Verify Adding Items to Cart
- **Description:** Ensure that adding items to the cart works as expected after recent code changes.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Navigate to a product category.
 3. Add a product to the cart by clicking "Add to Cart" button.
 4. Verify the item is added to the cart by checking the cart icon.
- **Expected Result:** Item should be added to the cart successfully.
- **Actual Result:** Item added to the cart successfully.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Integration Testing

Test Case ID: IT002

- **Test Case Title:** Verify Integration with Inventory Management System

- **Description:** Test the integration between the web application and the inventory management system.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: john.doe@example.com, Password: Passw0rd123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Confirm the order.
 5. Check the inventory management system for updated stock levels.
- **Expected Result:** Stock levels in the inventory management system should be updated accordingly.
- **Actual Result:** Stock levels updated as expected.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

UI Testing

Test Case ID: UI002

- **Test Case Title:** Verify Product Detail Page UI
- **Description:** Ensure the product detail page UI elements are displayed correctly.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the product detail page of any product.
 2. Verify the presence of product image, name, description, price, and "Add to Cart" button.
 3. Verify the alignment and styling of elements.
- **Expected Result:** All elements should be displayed correctly and be well-aligned.
- **Actual Result:** All elements displayed correctly and well-aligned.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Performance Testing

Test Case ID: PT001

- **Test Case Title:** Verify Page Load Time
- **Description:** Test the load time of the homepage under normal load conditions.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the homepage.
 2. Measure the time taken for the page to load completely.
- **Expected Result:** Page should load within 3 seconds.

- **Actual Result:** Page loaded in 2.8 seconds.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Security Testing

Test Case ID: ST001

- **Test Case Title:** Verify SQL Injection Vulnerability
- **Description:** Test the application for SQL injection vulnerabilities on the login page.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the login page.
 2. Enter "' OR '1'='1" as the username and password.
 3. Click on the "Login" button.
- **Expected Result:** The application should not log in and should display an error message.
- **Actual Result:** Application displayed an error message and did not log in.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Functional Testing

Test Case ID: FT004

- **Test Case Title:** Verify Adding Product to Wishlist
- **Description:** Test the functionality of adding a product to the wishlist.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: jane.doe@example.com, Password: SecurePass123).
 2. Navigate to a product page.
 3. Click on the "Add to Wishlist" button.
 4. Navigate to the wishlist page.
- **Expected Result:** Product should be added to the wishlist and visible on the wishlist page.
- **Actual Result:** Product added to the wishlist and visible on the wishlist page.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Regression Testing

Test Case ID: RT003

- **Test Case Title:** Verify User Profile Update
- **Description:** Ensure that updating user profile information works as expected after recent code changes.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: jane.doe@example.com, Password: SecurePass123).
 2. Navigate to the profile page.
 3. Update user information (e.g., change phone number).
 4. Save the changes.
- **Expected Result:** User profile should be updated successfully, and a confirmation message should be displayed.
- **Actual Result:** User profile updated successfully, confirmation message displayed.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Integration Testing

Test Case ID: IT003

- **Test Case Title:** Verify Email Notification Integration
- **Description:** Test the integration of email notifications for order confirmations.
- **Preconditions:** User must be logged in and place an order.
- **Test Steps:**
 1. Log in with valid credentials (Email: jane.doe@example.com, Password: SecurePass123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Confirm the order.
 5. Check the email inbox for order confirmation.
- **Expected Result:** Order confirmation email should be received.
- **Actual Result:** Order confirmation email received successfully.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

UI Testing

Test Case ID: UI003

- **Test Case Title:** Verify Navigation Bar UI
- **Description:** Ensure the navigation bar UI elements are displayed correctly on the homepage.
- **Preconditions:** None.
- **Test Steps:**

1. Navigate to the homepage.
 2. Verify the presence of navigation bar elements (e.g., Home, Categories, Offers, Cart).
 3. Verify the alignment and styling of navigation bar elements.
- **Expected Result:** All navigation bar elements should be displayed correctly and be well-aligned.
 - **Actual Result:** All navigation bar elements displayed correctly and well-aligned.
 - **Status:** Pass
 - **Priority:** Medium
 - **Severity:** Minor

Performance Testing

Test Case ID: PT002

- **Test Case Title:** Verify Load Time Under Heavy Load
- **Description:** Test the load time of the homepage under heavy load conditions.
- **Preconditions:** None.
- **Test Steps:**
 1. Simulate heavy load using performance testing tools.
 2. Navigate to the homepage.
 3. Measure the time taken for the page to load completely.
- **Expected Result:** Page should load within 5 seconds under heavy load.
- **Actual Result:** Page loaded in 4.9 seconds.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Security Testing

Test Case ID: ST002

- **Test Case Title:** Verify Cross-Site Scripting (XSS) Vulnerability
- **Description:** Test the application for XSS vulnerabilities on the search bar.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the homepage.
 2. Enter "<script>alert('XSS')</script>" in the search bar.
 3. Click on the search icon.
- **Expected Result:** The application should sanitize input and prevent XSS attacks.
- **Actual Result:** Input sanitized, XSS attack prevented.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Functional Testing

Test Case ID: FT005

- **Test Case Title:** Verify Adding Multiple Products to Cart
- **Description:** Test the functionality of adding multiple products to the cart.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to different product pages.
 3. Add multiple products to the cart.
 4. Verify the cart contents.
- **Expected Result:** All selected products should be added to the cart and visible in the cart summary.
- **Actual Result:** All selected products were added to the cart and visible in the cart summary.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Regression Testing

Test Case ID: RT004

- **Test Case Title:** Verify Order History Display
- **Description:** Ensure that the order history is displayed correctly after recent code changes.
- **Preconditions:** User must be logged in and have previous orders.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the order history page.
 3. Verify that previous orders are displayed correctly.
- **Expected Result:** Previous orders should be displayed correctly with accurate details.
- **Actual Result:** Previous orders displayed correctly with accurate details.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Integration Testing

Test Case ID: IT004

- **Test Case Title:** Verify Integration with Delivery Tracking System
- **Description:** Test the integration between the web application and the delivery tracking system.
- **Preconditions:** User must be logged in and have placed an order.

- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Place an order.
 3. Navigate to the order tracking page.
 4. Verify that the delivery status is updated correctly.
- **Expected Result:** Delivery status should be updated correctly in real-time.
- **Actual Result:** Delivery status updated correctly in real-time.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

UI Testing

Test Case ID: UI004

- **Test Case Title:** Verify Responsiveness of Checkout Page
- **Description:** Ensure that the checkout page is responsive and displays correctly on different devices.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the checkout page on a desktop browser.
 2. Verify the layout and elements.
 3. Navigate to the checkout page on a mobile browser.
 4. Verify the layout and elements.
- **Expected Result:** Checkout page should be responsive and display correctly on both desktop and mobile devices.
- **Actual Result:** Checkout page is responsive and displays correctly on both desktop and mobile devices.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Performance Testing

Test Case ID: PT003

- **Test Case Title:** Verify Load Time for Product Search
- **Description:** Test the load time for searching a product under normal load conditions.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the homepage.
 2. Enter a product name in the search bar and initiate the search.
 3. Measure the time taken for search results to load.
- **Expected Result:** Search results should load within 2 seconds.
- **Actual Result:** Search results loaded in 1.8 seconds.

- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Security Testing

Test Case ID: ST003

- **Test Case Title:** Verify CSRF Protection
- **Description:** Test the application for Cross-Site Request Forgery (CSRF) vulnerabilities.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Attempt to perform a sensitive action (e.g., changing password) using a CSRF attack vector.
- **Expected Result:** The application should prevent the CSRF attack and display an error message.
- **Actual Result:** CSRF attack prevented, error message displayed.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Functional Testing

Test Case ID: FT006

- **Test Case Title:** Verify Guest Checkout Functionality
- **Description:** Test the functionality of checking out as a guest user.
- **Preconditions:** User must not be logged in.
- **Test Steps:**
 1. Add items to the cart.
 2. Proceed to checkout.
 3. Select the "Checkout as Guest" option.
 4. Enter guest details (Name: Guest User, Email: guest.user@example.com, Address: 123 Guest Lane).
 5. Confirm the order.
- **Expected Result:** Order should be placed successfully, and a confirmation email should be sent to the guest user's email.
- **Actual Result:** Order placed successfully, confirmation email received.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Regression Testing

Test Case ID: RT005

- **Test Case Title:** Verify Wishlist Functionality Post-Update
- **Description:** Ensure that adding products to the wishlist works as expected after recent updates.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to a product page.
 3. Add the product to the wishlist.
 4. Navigate to the wishlist page.
- **Expected Result:** Product should be added to the wishlist and be visible on the wishlist page.
- **Actual Result:** Product added to the wishlist and visible on the wishlist page.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Integration Testing

Test Case ID: IT005

- **Test Case Title:** Verify Integration with Third-Party Review System
- **Description:** Test the integration between the web application and a third-party review system.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to a product page.
 3. Submit a review for the product.
 4. Check the third-party review system for the new review.
- **Expected Result:** Review should be submitted successfully and appear in the third-party review system.
- **Actual Result:** Review submitted successfully and appeared in the third-party review system.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

UI Testing

Test Case ID: UI005

- **Test Case Title:** Verify Product Grid Layout

- **Description:** Ensure that the product grid layout displays correctly on the product listing page.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the product listing page.
 2. Verify the presence and alignment of product images, names, prices, and "Add to Cart" buttons.
 3. Resize the browser window to different dimensions and verify the responsiveness of the grid layout.
- **Expected Result:** Product grid layout should display correctly with all elements aligned and responsive.
- **Actual Result:** Product grid layout displayed correctly with all elements aligned and responsive.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Performance Testing

Test Case ID: PT004

- **Test Case Title:** Verify Checkout Process Load Time
- **Description:** Test the load time for the entire checkout process under normal load conditions.
- **Preconditions:** User must be logged in and have items in the cart.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Measure the time taken for each step of the checkout process.
- **Expected Result:** Each step of the checkout process should load within 2 seconds.
- **Actual Result:** Each step of the checkout process loaded within 1.9 seconds.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Security Testing

Test Case ID: ST004

- **Test Case Title:** Verify Data Encryption in Transit
- **Description:** Test the application for encryption of sensitive data during transmission.
- **Preconditions:** User must be logged in.
- **Test Steps:**

1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Initiate a sensitive transaction (e.g., payment processing).
 3. Use network monitoring tools to inspect the data transmitted.
- **Expected Result:** Sensitive data should be encrypted during transmission.
 - **Actual Result:** Sensitive data was encrypted during transmission.
 - **Status:** Pass
 - **Priority:** High
 - **Severity:** Critical

Functional Testing

Test Case ID: FT007

- **Test Case Title:** Verify Applying Multiple Discount Codes
- **Description:** Test the ability to apply multiple discount codes during checkout.
- **Preconditions:** User must be logged in, and discount codes must be valid.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Apply the first discount code (e.g., DISC10).
 5. Apply the second discount code (e.g., SAVE5).
- **Expected Result:** Both discount codes should be applied, and the total amount should be adjusted accordingly.
- **Actual Result:** Both discount codes applied, and the total amount adjusted.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Test Case ID: FT008

- **Test Case Title:** Verify Maximum Cart Limit
- **Description:** Test the cart's ability to handle the maximum number of items.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart until the maximum limit is reached (e.g., 100 items).
 3. Attempt to add one more item.
- **Expected Result:** The system should prevent adding more items and display a relevant message.
- **Actual Result:** System prevented adding more items and displayed a message.
- **Status:** Pass
- **Priority:** Medium

- **Severity:** Major

Regression Testing

Test Case ID: RT006

- **Test Case Title:** Verify System Behavior After Session Timeout
- **Description:** Ensure that the system handles session timeouts gracefully.
- **Preconditions:** User must be logged in, and session timeout setting should be known (e.g., 30 minutes).
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Perform some actions (e.g., browsing products).
 3. Wait for the session to timeout.
 4. Attempt to perform another action (e.g., add an item to the cart).
- **Expected Result:** The system should redirect the user to the login page and prompt to log in again.
- **Actual Result:** System redirected to login page and prompted to log in.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Integration Testing

Test Case ID: IT006

- **Test Case Title:** Verify Loyalty Points Integration
- **Description:** Test the integration with the loyalty points system.
- **Preconditions:** User must be logged in and have loyalty points.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Apply loyalty points to the purchase.
- **Expected Result:** Loyalty points should be deducted, and the total amount should be adjusted.
- **Actual Result:** Loyalty points deducted, total amount adjusted.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

UI Testing

Test Case ID: UI006

- **Test Case Title:** Verify Dark Mode UI
- **Description:** Ensure the UI elements display correctly in dark mode.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the homepage.
 2. Switch to dark mode.
 3. Verify the visibility and alignment of all UI elements.
- **Expected Result:** All UI elements should be visible, properly aligned, and consistent with dark mode design guidelines.
- **Actual Result:** All UI elements displayed correctly in dark mode.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Performance Testing

Test Case ID: PT005

- **Test Case Title:** Verify Load Time for Bulk Order Processing
- **Description:** Test the load time for processing bulk orders under normal load conditions.
- **Preconditions:** User must be logged in, and bulk order data should be available.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Place a bulk order (e.g., order with 100 items).
 3. Measure the time taken to process the order.
- **Expected Result:** Order processing should complete within an acceptable time frame (e.g., 10 seconds).
- **Actual Result:** Order processed in 9.5 seconds.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Security Testing

Test Case ID: ST005

- **Test Case Title:** Verify Brute Force Attack Prevention
- **Description:** Test the application's ability to prevent brute force login attempts.
- **Preconditions:** None.
- **Test Steps:**
 1. Attempt multiple login attempts with incorrect credentials (e.g., 50 attempts).
- **Expected Result:** The system should lock the account after a certain number of failed attempts and notify the user.
- **Actual Result:** Account locked after 5 failed attempts, user notified.
- **Status:** Pass

- **Priority:** High
- **Severity:** Critical

Edge Cases and Corner Cases

Test Case ID: EC001

- **Test Case Title:** Verify Handling of Special Characters in User Inputs
- **Description:** Test the system's ability to handle special characters in user inputs (e.g., name, address).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the profile page.
 3. Update the name and address fields with special characters (e.g., Name: !@#%&*(), Address: 123 Main St. #4B).
 4. Save the changes.
- **Expected Result:** The system should save the inputs correctly without any errors or data corruption.
- **Actual Result:** Inputs saved correctly without errors.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Test Case ID: EC002

- **Test Case Title:** Verify System Behavior with Maximum Input Length
- **Description:** Test the system's ability to handle inputs at the maximum allowed length (e.g., name, address).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the profile page.
 3. Update the name and address fields with maximum allowed length characters (e.g., 255 characters).
 4. Save the changes.
- **Expected Result:** The system should save the inputs correctly without any errors or data truncation.
- **Actual Result:** Inputs saved correctly without errors.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Test Case ID: EC003

- **Test Case Title:** Verify System Behavior with No Input
- **Description:** Test the system's behavior when required fields are left empty.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the profile page.
 3. Attempt to save changes without entering any data in required fields (e.g., name, address).
- **Expected Result:** The system should prompt the user to fill in the required fields and prevent saving.
- **Actual Result:** System prompted the user to fill in the required fields and prevented saving.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Test Case ID: EC004

- **Test Case Title:** Verify System Behavior with Invalid Date Formats
- **Description:** Test the system's ability to handle invalid date formats in date fields (e.g., DOB, delivery date).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to a form with date fields (e.g., profile, checkout).
 3. Enter an invalid date format (e.g., 31/31/2020) in the date fields.
 4. Attempt to save or submit the form.
- **Expected Result:** The system should display an error message indicating the invalid date format and prevent submission.
- **Actual Result:** System displayed an error message and prevented submission.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Test Case ID: EC005

- **Test Case Title:** Verify System Behavior with Network Interruption
- **Description:** Test the system's behavior when there is a network interruption during an operation (e.g., checkout, profile update).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Initiate an operation (e.g., adding items to the cart).

3. Simulate a network interruption.
 4. Restore the network connection and attempt to resume the operation.
- **Expected Result:** The system should handle the interruption gracefully, allowing the user to resume or restart the operation without data loss.
 - **Actual Result:** System handled the interruption and allowed resuming the operation without data loss.
 - **Status:** Pass
 - **Priority:** High
 - **Severity:** Critical

Functional Testing

Test Case ID: FT009

- **Test Case Title:** Verify Multiple Payment Methods
- **Description:** Test the functionality of using multiple payment methods (e.g., split payment between credit card and gift card).
- **Preconditions:** User must be logged in, and both payment methods must be available.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart.
 3. Proceed to checkout.
 4. Select to pay partially with a gift card and partially with a credit card.
 5. Enter payment details for both methods.
- **Expected Result:** The order should be processed successfully using both payment methods, with the appropriate amounts charged to each.
- **Actual Result:** Order processed successfully using both payment methods.
- **Status:** Pass
- **Priority:** High
- **Severity:** Major

Test Case ID: FT010

- **Test Case Title:** Verify Subscription Management
- **Description:** Test the functionality of managing subscriptions for regular deliveries.
- **Preconditions:** User must be logged in, and subscription service must be enabled.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the subscription management page.
 3. Create a new subscription for a product.
 4. Modify the delivery frequency and address.
 5. Cancel the subscription.
- **Expected Result:** The user should be able to create, modify, and cancel subscriptions successfully.

- **Actual Result:** Subscription created, modified, and canceled successfully.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Regression Testing

Test Case ID: RT007

- **Test Case Title:** Verify Account Deactivation
- **Description:** Ensure that deactivating an account works as expected after recent updates.
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to the account settings page.
 3. Deactivate the account.
 4. Attempt to log in with the deactivated account.
- **Expected Result:** The account should be deactivated successfully, and the user should not be able to log in.
- **Actual Result:** Account deactivated successfully, and login was prevented.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Integration Testing

Test Case ID: IT007

- **Test Case Title:** Verify Social Media Integration
- **Description:** Test the integration with social media platforms for sharing products.
- **Preconditions:** User must be logged in and have linked social media accounts.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Navigate to a product page.
 3. Share the product on a linked social media account (e.g., Facebook, Twitter).
- **Expected Result:** The product should be shared successfully on the selected social media platform.
- **Actual Result:** Product shared successfully on social media.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

UI Testing

Test Case ID: UI007

- **Test Case Title:** Verify Localization Support
- **Description:** Ensure the UI elements display correctly in different languages.
- **Preconditions:** None.
- **Test Steps:**
 1. Navigate to the homepage.
 2. Change the language setting to a different language (e.g., Spanish, Arabic).
 3. Verify the visibility and alignment of all UI elements.
- **Expected Result:** All UI elements should be correctly translated and displayed properly in the selected language.
- **Actual Result:** UI elements translated and displayed correctly.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Minor

Performance Testing

Test Case ID: PT006

- **Test Case Title:** Verify Scalability Under Load
- **Description:** Test the system's scalability by simulating high traffic and multiple concurrent users.
- **Preconditions:** None.
- **Test Steps:**
 1. Use a performance testing tool to simulate 1000 concurrent users.
 2. Perform common actions (e.g., browsing products, adding to cart, checkout).
 3. Measure the response times and system performance.
- **Expected Result:** The system should handle the load without significant degradation in performance.
- **Actual Result:** System handled the load with acceptable performance.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Security Testing

Test Case ID: ST006

- **Test Case Title:** Verify Security of Third-Party Integrations
- **Description:** Test the security of data transmitted to and from third-party integrations (e.g., payment gateways, social media).
- **Preconditions:** User must be logged in and using third-party integrations.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).

2. Perform actions involving third-party integrations (e.g., make a payment, share on social media).
 3. Monitor the data transmitted for security vulnerabilities (e.g., man-in-the-middle attacks).
- **Expected Result:** Data transmitted should be secure and not vulnerable to interception.
 - **Actual Result:** Data transmitted securely, no vulnerabilities found.
 - **Status:** Pass
 - **Priority:** High
 - **Severity:** Critical

Edge Cases and Corner Cases

Test Case ID: EC006

- **Test Case Title:** Verify System Behavior with Maximum Concurrent Sessions
- **Description:** Test the system's behavior when a single user attempts to log in from multiple devices simultaneously.
- **Preconditions:** User must have multiple devices available.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123) on one device.
 2. Attempt to log in with the same credentials on multiple other devices simultaneously.
- **Expected Result:** The system should handle multiple concurrent sessions gracefully, potentially limiting the number of active sessions.
- **Actual Result:** System handled multiple concurrent sessions, limiting active sessions as expected.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Test Case ID: EC007

- **Test Case Title:** Verify System Behavior with Rapid Successive Inputs
- **Description:** Test the system's behavior when rapid successive inputs are provided (e.g., quickly adding/removing items from the cart).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Rapidly add and remove items from the cart (e.g., 10 items within a few seconds).
- **Expected Result:** The system should handle rapid successive inputs without crashing or showing inconsistent states.
- **Actual Result:** System handled rapid successive inputs without issues.
- **Status:** Pass
- **Priority:** Medium

- **Severity:** Major

Test Case ID: EC008

- **Test Case Title:** Verify System Behavior with Invalid Payment Details
- **Description:** Test the system's behavior when invalid payment details are provided (e.g., expired credit card, incorrect CVV).
- **Preconditions:** User must be logged in and attempting a purchase.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart and proceed to checkout.
 3. Enter invalid payment details (e.g., expired credit card, incorrect CVV).
 4. Attempt to complete the purchase.
- **Expected Result:** The system should reject the invalid payment details and display an appropriate error message.
- **Actual Result:** System rejected invalid payment details and displayed error message.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical

Test Case ID: EC009

- **Test Case Title:** Verify System Behavior with Edge Case Delivery Addresses
- **Description:** Test the system's ability to handle edge case delivery addresses (e.g., very long addresses, special characters).
- **Preconditions:** User must be logged in.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart and proceed to checkout.
 3. Enter a delivery address with edge cases (e.g., very long address, special characters).
 4. Attempt to complete the purchase.
- **Expected Result:** The system should handle the edge case addresses without errors and process the order successfully.
- **Actual Result:** System handled edge case addresses and processed the order successfully.
- **Status:** Pass
- **Priority:** Medium
- **Severity:** Major

Test Case ID: EC010

- **Test Case Title:** Verify System Behavior with Interrupted Payment Process

- **Description:** Test the system's behavior when the payment process is interrupted (e.g., closing the browser, losing internet connection).
- **Preconditions:** User must be logged in and attempting a purchase.
- **Test Steps:**
 1. Log in with valid credentials (Email: test.user@example.com, Password: TestPass123).
 2. Add items to the cart and proceed to checkout.
 3. Initiate the payment process.
 4. Simulate an interruption (e.g., close the browser, disconnect from the internet).
 5. Reconnect and attempt to resume or restart the payment process.
- **Expected Result:** The system should handle the interruption gracefully, allowing the user to resume or restart the payment process without data loss.
- **Actual Result:** System handled the interruption and allowed resuming the payment process without data loss.
- **Status:** Pass
- **Priority:** High
- **Severity:** Critical