**Test Plan for nopCommerce Wishlist Functionality**

**Application URL: https://demo.nopcommerce.com/**

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**Date: 28/08/2025**

**1. Test Plan Identifier**

**TP-nopCommerce-Wishlist-2025-v1**

**2. Introduction**

**This test plan outlines the testing strategy for the Wishlist functionality, a key feature for enhancing user experience and driving sales by allowing customers to save items for future purchase. Testing will focus on the wishlist icon on the homepage product displays, the dedicated wishlist page, and the interaction between these components for both logged-in and anonymous users.**

**3. Test Items**

**Wishlist icon functionality on product boxes throughout the homepage**

**Behavior of the wishlist for registered/logged-in users.**

**Behavior of the wishlist for anonymous/guest users.**

**Navigation to the Wishlist page.**

**Content and layout of the Wishlist page.**

**Management of items within the Wishlist (update quantity, remove item).**

**Moving items from the Wishlist to the shopping cart.**

**4. Features to be Tested**

**Wishlist Icon (Homepage):**

**Clicking the wishlist heart icon on a product box adds the item to the wishlist.**

**Verification of a success notification message after adding an item.**

**the wishlist icon changes state (e.g., becomes filled) after adding an item.**

**Adding the same product multiple times (should update quantity, not add duplicate rows).**

**Wishlist Page:**

**Navigation to the wishlist page via the top menu link.**

**Verification that all added products are displayed correctly on the wishlist page.**

**Verification that product details are correct: Product name, image, unit price, quantity, and total price for the line.**

**For logged-in users, items persist after browser close and re-login.**

**For guest users, items are stored in browser cookies and persist during the session but are lost if cookies are cleared.**

**Wishlist Management:**

**Updating the quantity of a wishlist item and verifying the total price is recalculated.**

**Removing an item from the wishlist and verifying it disappears from the list.**

**Verifying the "Update wishlist" button functionality.**

**Verifying the message when the wishlist is empty.**

**Moving to Shopping Cart:**

**Successfully moving a single item from the wishlist to the cart via the "Add to cart" checkbox.**

**Successfully moving multiple items to the cart simultaneously.**

**Verification that items are successfully added to the shopping cart.**

**Verification that a success notification appears after adding to cart.**

**5. Features Not to be Tested**

**The "Email wishlist" functionality.**

**The backend database storage and retrieval mechanisms for wishlist items.**

**Performance or load testing of the wishlist feature.**

**6. ApproachManual Testing: Initial exploratory testing to understand the behavior for both user states (logged-in vs. guest).**

**Automation Testing (Primary): All test scenarios will be automated, with a focus on handling different user contexts.**

**Framework: Selenium WebDriver with Java.**

**Pattern: Page Object Model (POM) for maintainability. Key pages: HomePage.java, ProductPage.java, WishlistPage.java, ShoppingCartPage.java.**

**BDD: Scenarios will be written in Gherkin in .feature files, using tags like @wishlist, @guest**

**Execution: Tests will be executed using TestNG. Tests will be structured to handle state (e.g., using @BeforeMethod to setup login state).**

**Data-Driven Testing: Test data for products and user login credentials will be externalized.**

**Cross-Browser Testing: Automated tests will be run on Chrome, Firefox, and Edge browsers.**

**Reporting: Extent Reports will be generated after each execution cycle for analysis.**

**7. Item Pass/Fail Criteria**

**Pass: The actual result of the test case matches the expected result defined in the Gherkin scenario.**

**Fail: The actual result deviates from the expected result, the test script throws an unhandled exception, or a defect is found.**

**8. Suspension Criteria and Resumption Requirements**

**Suspension: Testing will be suspended if the nopCommerce demo environment is unavailable for more than 2 hours, if a critical bug prevents user login (blocking authenticated tests), or if a defect breaks the core "Add to wishlist" action for over 70% of test cases.**

**Resumption: Testing will resume once the environment is stable or a new build with the critical fix is deployed.**

**9. Test Deliverables**

**This Test Plan document.**

**Manual Test Cases.**

**Automated Test Assets:**

**Feature Files: wishlist.feature**

**Page Objects: HomePage.java, WishlistPage.java, LoginPage.java**

**TestNG XML files for different configurations (e.g., testng-guest.xml, testng-authenticated.xml).**

**Extent Reports.**

**Defect Reports in JIRA.**

**10. Environmental Needs**

**Application: nopCommerce Demo Website (https://demo.nopcommerce.com/)**

**Test OS: Windows 10/11.**

**Browsers: Chrome, Firefox, Edge**

**Automation Environment:**

**JDK 17.**

**Maven 3.8.11**

**IDE: Eclipse.**

**Selenium WebDriver & Browser Drivers.**

**Version Control: GitHub repository.**

**Project Management: JIRA for task and defect tracking.**

**11. Responsibilities**

**Product Owner (PO): Prioritize testing focus (e.g., guest user experience vs. logged-in).**

**Scrum Master (SM): Facilitate sessions to resolve technical challenges related to automated login/logout and state management.**

**Developers: Implement the automation scripts, focusing on robust handling of dynamic elements and user sessions.**

**Testers: Design test cases covering both user states, verify results, and log defects.**

**12. Schedule**

**Activity Timeline**

**Test Planning & Case Design Day 1**

**Automation Script Development Day 4-5**

**Test Execution & Bug Logging Day 8**

**Retest & Cross-Browser Execution Day 11**

**13. Risks and Contingencies**

**Risk: The demo site's products may go out of stock, causing "Add to wishlist/cart" actions to fail unexpectedly.**

**Contingency: Scripts will use a predefined set of stable test products known to be in stock, or include a check for stock status.**

**14. Approvals**

**Test Lead: John Doe**

**Product Owner: John Doe**