Objective: Evaluate the functionality, performance, and usability of the OpenCart demo e-commerce website.

1. Introduction

1.1 Brief Description of the Website: The OpenCart demo e-commerce website is a demonstration of an open-source platform designed to help users set up an online store. It provides a range of standard e-commerce features such as product management, customer management, order processing, and more. The demo site allows users to explore these functionalities and get a feel for how an online store built with OpenCart would operate.

1.2 Scope: This test plan covers the following aspects of the OpenCart demo website:

Functionality Testing

Performance Testing

Usability Testing

1.3 Test Objectives:

Validate that the core e-commerce functionalities (such as product browsing, adding to cart, and checkout) are working as expected.

Assess the website’s performance in terms of load times, responsiveness, and stability under varying conditions.

Evaluate the usability of the website, focusing on user experience, navigation, and accessibility.

2. Test Strategy

2.1 Testing Types:

Functionality Testing:

Verify that all features work according to specifications.

Ensure that user interactions with the website lead to expected outcomes.

Test different user roles (e.g., customer, admin) to ensure correct access and functionality.

Performance Testing:

Test the website's response time under normal and peak load conditions.

Assess the site’s behaviour during concurrent user access.

Evaluate the speed of different pages, including the homepage, product pages, and checkout process.

Usability Testing:

Evaluate the ease of navigation and user experience.

Assess the website’s layout, design, and accessibility.

Test the website’s compatibility with different devices (e.g., desktop, mobile, tablet) and browsers.

2.2 Test Scope:

In-Scope:

Core e-commerce features: product browsing, searching, adding to cart, checkout, user account management.

Payment gateway integration.

Admin functionalities: product management, order management, user management.

Out of Scope:

Integration with third-party plugins (unless part of the demo).

Security testing (focusing purely on functionality, performance, and usability).

3. Test Environment

3.1 Test Environment Setup:

URL: OpenCart Demo

Browsers: Chrome, Firefox, Safari, Microsoft Edge

Devices: Desktop, Laptop, Tablet, Smartphone

Network: Test on both high-speed and low-speed internet connections.

3.2 Tools:

Functional Testing: Manual testing, Selenium (for automation if required)

Performance Testing: Apache JMeter, Lighthouse

Usability Testing: UserTesting.com, Manual testing (with diverse user group)

4. Test Cases

4.1 Functionality Test Cases:

Homepage:

Verify that the homepage loads correctly and all UI elements are displayed properly.

Check the functionality of the search bar.

Test navigation links (e.g., categories, contact, login, register).

Product Browsing:

Verify that users can browse products by categories and subcategories.

Check that product images, descriptions, prices, and availability are displayed correctly.

Product Details:

Verify that clicking on a product displays the correct product details.

Test the functionality of the add to cart button.

Check for any related products and their correct display.

Shopping Cart:

Verify that items added to the cart are displayed correctly.

Test the functionality of updating quantities, removing items, and viewing the cart summary.

Checkout Process:

Verify that users can proceed to checkout with items in their cart.

Test the different payment methods available (if any).

Ensure that the order confirmation is sent to the user’s email.

User Account Management:

Test the registration process for new users.

Verify login functionality for existing users.

Check the user’s ability to update profile information, view order history, and manage addresses.

Admin Panel:

Verify that the admin can log in and access the dashboard.

Test the functionality of adding, updating, and deleting products.

Check the order management process from the admin side.

4.2 Performance Test Cases:

Page Load Time:

Measure the load time for key pages (e.g., homepage, product pages, checkout).

Stress Testing:

Test how the website performs under a heavy load of simultaneous users.

Scalability Testing:

Assess how the website scales with an increasing number of users or transactions.

4.3 Usability Test Cases:

Navigation:

Test the ease of navigating between pages and finding specific products.

Responsiveness:

Verify that the website is responsive and adjusts correctly across different devices.

User Experience:

Assess the overall user experience, including ease of use, design aesthetics, and error handling.

5. Test Execution Plan

5.1 Test Execution Schedule:

Phase 1: Functionality Testing (Week 1)

Phase 2: Performance Testing (Week 2)

Phase 3: Usability Testing (Week 3)

5.2 Test Schedule:

Start Date: [28.08.2024]

End Date: [30.08.2024]

Milestones:

Functionality Testing Completion: [28.08.2024]

Performance Testing Completion: [29.08.2024]

Usability Testing Completion: [30.08.2024]

Final Report Submission: [31.08.2024]

5.3 Roles and Responsibilities:

Test Manager: Oversee the entire testing process, ensure adherence to the test plan.

Test Engineers: Execute test cases, log defects, and report findings.

Performance Testers: Focus on performance-related test cases.

Usability Testers: Evaluate user experience and accessibility.

6. Risk Management

6.1 Potential Risks:

The demo environment may be limited in features, restricting the full scope of testing.

Load testing might not fully replicate real-world scenarios due to the demo nature of the website.

6.2 Mitigation Plan:

Clearly define in-scope functionalities and communicate with stakeholders.

Use alternative methods to simulate real-world scenarios for performance testing.

7. Reporting

7.1 Test Reporting:

Daily Status Reports: Provide updates on test execution progress, issues found, and any blockers.

Final Test Report: Summarize the overall test results, including passed/failed test cases, defect summaries, performance metrics, and usability feedback.

8. Approvals

8.1 Approval Signatures:

Test Manager:

Name: shiva kumar  
submitted by: bhavesh kamra

Submit date :31 august 2024