**Test plan for OpenCart**

**Test Plan for OpenCart eCommerce Application**

**1. Introduction**

**1.1 Project Overview**

OpenCart is an open-source eCommerce platform that provides a user-friendly interface for managing online stores. This test plan aims to ensure that OpenCart functions correctly and meets user requirements.

**1.2 Objective**

The objective of this test plan is to outline the testing strategy for the OpenCart application, ensuring that all functionalities work as expected, the application is secure, and the user experience is satisfactory.

**1.3 Scope**

This test plan covers functional, usability, performance, security, and compatibility testing for the OpenCart application.

**2. Test Objectives**

**2.1 Functional Testing**

- Verify the functionality of product catalog management.

- Test the shopping cart and checkout process.

- Validate user registration and authentication.

- Ensure proper order management and processing.

- Test payment gateway integration.

**2.2 Usability Testing**

- Evaluate the user interface for ease of use.

- Test the navigation and layout for user friendliness.

**2.3 Performance Testing**

- Assess the application’s response time under various load conditions.

- Test the application’s behavior under stress.

**2.4 Security Testing**

- Verify the application’s security against common vulnerabilities.

- Ensure that user data is protected and transactions are secure.

**2.5 Compatibility Testing**

- Test the application across different browsers and devices.

**3. Test Scope**

**3.1 In-Scope**

- Product catalog and search functionality.

- User account creation and management.

- Shopping cart operations.

- Checkout process and payment gateway integration.

- Order management and processing.

- Reporting and analytics features.

- User interface and experience.

**3.2 Out-of-Scope**

- Third-party module integrations not provided by OpenCart.

- Performance testing on large-scale enterprise configurations.

**4. Test Approach**

**4.1 Testing Levels**

- Unit Testing

- Integration Testing

- System Testing

- User Acceptance Testing

**4.2 Testing Types**

- Black-Box Testing

- Manual Testing

- Automated Testing

-Functional Testing

- Retesting

- Regression Testing

**4.3 Test Environment**

- Hardware: Servers, client machines, mobile devices

- Software: Various operating systems, browsers (Chrome, Firefox, Safari, Edge)

**5. Test Resources**

5.1 Personnel

- QA Manager: Oversees the testing process.

- Test Engineers: Execute test cases.

- Developers: Fix defects and support testing.

- Business Analysts: Provide requirements and clarifications, client requirement.

**5.2 Tools**

- Selenium with java for automation

- JIRA for bug tracking

- Apache JMeter for performance testing

**6. Test Schedule**

**6.1 Milestones**

- Test Plan Approval: [Date]

- Test Case Development: [Start Date] to [End Date]

- Test Execution: [Start Date] to [End Date]

- Bug Fixing and Re-testing: [Start Date] to [End Date]

- Final Testing: [Start Date] to [End Date]

**6.2 Timeline**

A detailed timeline with start and end dates for each phase of testing will be provided.

**7. Test Deliverables**

7.1 Documents

- Test Plan

- Test Cases

- Test Scripts

- Test Summary Report

7.2 Reports

- Daily Status Reports

- Defect Reports

- Final Test Report

**8. Test Environment Requirements**

8.1 Hardware

- Servers

- Client machines

- Mobile devices (iOS, Android)

8.2 Software

- Operating systems: Windows, macOS, Linux

- Browsers: Chrome, Firefox, Safari, Edge

8.3 Data

- Test data for various scenarios, including valid and invalid data sets.

**9. Risk Management**

**9.1 Risks**

- Delayed development and code delivery

- Resource availability and scheduling conflicts

- Technical challenges and environmental issues

**9.2 Mitigation**

- Regular status meetings

- Backup resources and cross-training

- Contingency planning for technical issues

**10. Test Criteria**

10.1 Entry Criteria

- Test environment setup completed

- Test data prepared

- Test cases reviewed and approved

10.2 Exit Criteria

- All critical and major defects resolved

- Test cases executed and passed

- Final test report reviewed and approved

**11. Defect Management**

11.1 Defect Tracking

- Defects will be logged and tracked using JIRA.

- Each defect will be categorized by severity and priority.

11.2 Severity and Priority

- Severity levels: Critical, Major, Minor

- Priority levels: High, Medium, Low

**12. Communication Plan**

12.1 Meetings

- Kickoff meeting

- Daily stand-ups

- Weekly status meetings

- Test review meetings

12.2 Reporting

- Daily status updates to stakeholders

- Weekly summary reports

**13. Appendices**

13.1 Glossary

- Definitions of terms used in the test plan.

13.2 References

- OpenCart documentation

- Requirement specification documents.