

Project Name: OpenCart (Frontend)

Test Plan

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|------------------------|-------------------------|--------------|-------------|
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1. Introduction

This document describes some test functionality of <u>OpenCart</u> website which is PHP-based, using a MySQL database and HTML components. It includes the objectives, scope, test responsibilities, entry and exit criteria, schedule of major milestones, approaches, risks, and acronyms.

2. Scope

2.1. In Scope

Register

- Well-organized menu.
- Ability to input "First Name," "Last Name," "E-Mail," "Telephone," "Password," etc. to create a new account.
- Should have a back option.

Login and Logout

- Well-organized menu.
- Ability to choose currency.
- Options for "Contact," "My Account," "Wish List," "Shopping Cart," "Checkout," and "Item."
- Forgot the password link.
- Should have a back option.

• Login and Logout

- Well-organized menu.
- Ability to input E-Mail address.
- Instruction text on top.
- Back and continue options.

Search

Organized Search bar

• Product Compare

- Allows comparing specifications, features, and prices of multiple products.
- Should have back and Show more/Show less options.
- Add to cart and remove options.

• Your Store Page

- Currency choice.
- Options for "Contact," "My Account," "Wish List," "Shopping Cart,""Checkout," and "Item."
- Clickable company logo on the top left.
- Search product feature.
- Organized by category.
- Show all features.
- "Show more/Show less" after product description.
- More product options.
- Clickable products.
- Clickable cart sign-on product view.
- "Wish list" and "compare" options.
- Navigation to OpenCart Homepage.
- Functional page numbers and next/previous buttons.
- The price displayed on products.
- Scrollbar on products.

• Product Detail Page

- Product image with alternate views.
- Product details: code, availability, price.
- Cart functionality: select quantity, add to cart, wish list, compare.
- Rating/Sharing: rate the product, and share on social media.
- Description and review tabs.

• Other features

- Add To Cart
- Wish List
- Shopping Cart
- Currencies
- Checkout page
- My Account Page
- Order History

- Download Page
- Contact Us Page
- Menu Option
- Footer Option
- Category option

2.2. Out of Scope

- Any feature added later
- Automation

3. Quality Objective

The objective of this Test Plan is to ensure reliability, system assurance, and optimal performance and capacity utilization. This test plan focuses on comparing the application's performance concerning end-user expectations with the current and new production environment, essentially enhancing and updating the existing system.

4. Testing Methodologies

4.1. Overview

This project will follow the Agile methodology, with work updated based on weekly iterations. The work is distributed according to a requirement-based strategy specified in this test plan. Each feature will be tested separately and together after each phase, with reports delivered according to the schedule. Test cases should be created during exploratory testing. Testing methodologies (In scope/Out of Scope) are given below:

4.2. Test Levels

In Scope

- **Functional Testing:** Black-box testing geared to the application's functional requirements.
- **Integration Testing:** Verify combined functionality after integration.
- Performance Testing: Check if the system meets performance requirements.
- Cross-browser Testing: Ensure system support across different browsers.
- **Security Testing (Payment):** Check application security against internal and external threats.
- UAT (User Acceptance Testing): From a tester's perspective.
- **Regression Testing:** Validate existing functionalities as part of regression tests (Cart, Checkout Flow).
- **Progression Testing:** Validate new functionalities.
- Fixed defects validation.

Out of Scope

- Database Testing
- API Testing
- Automation Testing

4.3. Test Strategy

Test case preparation and execution

- QA will be preparing test cases. This will cover all scenarios for requirements.
- Peer review will be conducted from time to time for test cases and test matrix by the QA Lead.
- The respective Author of the Test Case and Test Matrix will provide comments or suggestions on test cases and test coverage if needed.

- The author will re-work the suggestions/improvements that have been given on Test Cases/Matrix and will send them for approval. Re-worked enhancements will be reviewed and approved by the reviewer.
- Respective QA will execute Test Cases on the test site based on designed scenarios, test cases, and test data.
- (Actual Result with Expected Result-> Pass/Fail) Test results will be updated in the test case document.

Defect login and reporting

• QA will log the defects/bugs in the prospective management tool. After this, QA will inform the respective developer about the defects/bugs that have been logged.

Retesting

• Respective QA will re-test for fixed bugs after the respective developer resolves it. Bug/defect status will be updated accordingly. In certain cases, if it's required then regression testing will be done.

Deployment / Delivery

- Once all bugs/defects that have been reported after complete testing are fixed, afterward if no other bugs are found, the report will be deployed to the test site by PM.
- Once QA is done with the testing round on the test site and if it is required, the Report will be delivered along with sample output by email to the respective team member.
- QA will hand over the hard copy of the delivery documents to the respective developer.

4.4. Bug Triage

- Define the resolution type for each bug.
- Prioritize bugs and determine a schedule for all "To Be Fixed" bugs.

4.5. Suspension Criteria and Resumption Requirements

- Suspension criteria define when to suspend testing.
- Resumption criteria determine when testing can resume after suspension.

4.6. Test Completeness

- 100% test coverage.
- All manual test cases are executed.
- All open bugs are fixed or will be fixed in the next release.

5. Roles and Responsibility

| Roles | Contact Name and Information | Responsibilities |
|---------|------------------------------|---|
| PM | X pm@opencart.com | The primary contact for the development and QA team. Participate in Test Scenarios. Participate in Test Cases review. Responsible for the Project schedule and the overall success of the project Verify sign-on Requirements, Test Scenarios, and Test Cases |
| QA Lead | Y qal@opencart.com | Participation in the project plan creation/update process. Planning and organization of the test process for the release. |

| | | 3. Coordinate with QA analysts/engineers on any issues/problems encountered during testing. 4. Report progress on work assignments to the Project manager. 5. Monitor quality metrics and performance throughout each testing phase. 6. Monitor QA burn-down rate and status |
|----|-------------------|---|
| QA | Z qa@opencart.com | Understand the features requirements. Writing and executing Test cases. Preparing RTM(Requirement traceability matrix). Reviewing Test cases, RTM with PM, QA Lead. Preparation of Test Data Log in to Defects and keep tracking. Retesting and regression testing. Bug Review meeting. Provide and monitor the Testing Schedule to team members. Coordinate with the QA Lead for any issues or problems encountered during test preparation /execution/defect handling. |

6. Entry and Exit Criteria

6.1. Entry Criteria

- QA resources have completely understood the requirements and completed the FRS Document.
- QA resources have sound knowledge of functionality.
- Test Scenarios & Test Cases Approved.
- Test Plan
- All the necessary documentation, design, and requirements information should be available that will allow testers to operate the system and judge the correct behavior.
- Unit Test cases should pass
- Application Smoke Test Completed (If Applicable)

6.2. Exit Criteria

- Test Cases Execution Completed.
- A certain level of requirements coverage has been achieved.
- Outstanding Severity 1 & 2 Defects Completed
- No high priority is left outstanding.
- Completion of planned test case execution
- UAT Test Evidence Collected
- Test Closure Memo completed and signed off

7. Test Deliverables

• Before Testing phase

- FRS document.
- Test plans document.
- Test scenario.
- Test cases documents.
- Test design specifications.

• During Testing

- Test tool simulators.
- Test data.
- Test Traceability Matrix.
- Error logs and execution logs.

• After Testing Cycles

- Test results/reports.
- Defect report.
- Installation/test procedures guidelines.
- Release notes.

8. Resources & Environment Needs

8.1. Resources

• Description

- Database server with MySQL.
- Web server with Apache.
- LAN with at least 5 Mb/s speed.

Network

- Windows 10, 4GB RAM, 3.4GHz CPU.

8.2. Testing Tools

- **Test Case creation:** Microsoft Excel.
- **Test Case Tracking:** Microsoft Excel.
- **Test Case Execution:** Manual.
- **Test Case Management:** Microsoft Excel.
- **Defect Management:** Jira.
- **Test Reporting:** Microsoft Excel & Jira.

8.3. Configuration Management

- Github

8.4. Test Environment

• Support Level (Browsers)

Windows 10: Edge, Chrome (latest), Firefox (latest), Safari (latest).

9. Test Schedule

| Task Name | Start | Finish | Done by | Estimated Time |
|---|-------|--------|--------------|----------------|
| FRS | 05/29 | 05/39 | Ganga Pandey | 1 day |
| Test Planning | 06/03 | 06/03 | Ganga Pandey | 1 day |
| Review Requirements documents | 06/08 | 06/08 | Ganga Pandey | 2 day |
| Create test basis | 06/05 | 06/14 | Ganga Pandey | |
| Staff and train new test resources | - | - | | |
| First deploy to QA test environment | - | - | | |
| Functional Testing: Iteration 1 | - | - | | |
| Iteration 2 deploy to QA test environment | - | - | | |
| Functional testing - iteration 2 | - | - | | |
| System Testing | - | | | |
| Regression Testing | - | - | | |
| UAT | - | - | | |

| Resolution of final defects and final build testing | - | - | |
|---|---|---|--|
| Deploy to the staging environment | - | - | |
| Performance testing | - | - | |
| Release to Production | - | - | |

10. Risk & Assumptions

• Risks:

- Payment methods may fail with internet fluctuations.
- The system may fail to load on old/no-updated browsers with JavaScript disabled.

• Assumptions:

- For some optimization of resources, the test plan may fail.
- Maintain backup resources.
- Availability of test tools.
- Skill level of resources.

11. Terms/Acronyms

| Terms/Acronyms | Definition | |
|----------------|-----------------------------------|--|
| API | Application Programming Interface | |
| PM | Project Manager | |
| QA | Quality Assurance | |
| RTM | Requirement Traceability Matrix | |

| UAT | User Acceptance Testing |
|-----|-------------------------|
|-----|-------------------------|

12. Approvals

| Approved By | Approval Title | Date | Attachment |
|-------------|-----------------|---------------|------------|
| X | Project Manager | 30 June, 2024 | None |
| у | QA Lead | 30 June 2024 | None |