Test Plan

For

OpenCart

Version 1.0 - Mar 17, 2024

**Revision History**

| **Version** | **Date** | **Name** | **Description** |
| --- | --- | --- | --- |
| 1.0 | 18/03/2024 | SQA Manager | Initial Creation |
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# Introduction

### This test plan is for the E-Commerce Application OpenCart, version 1.0. The objective of this testing is to ensure that the application meets the requirements and is free of defects. This document serves as high level test planning document with details on the scope of the project, test strategy, test schedule, resource requirements and test deliverables.

# Test Items

### E-Commerce Application: OpenCart, version 1.0

# Features to be Tested

* Register
* Login & Logout
* Forgot Password
* Search
* Product Compare
* Product Display Page
* Add to Cart
* Wish List
* Shopping Cart
* Currencies
* Home Page
* Checkout Page My Account Page
* Order History Page
* Downloads Page Contact Us Page
* Menu Options
* Footer
* Category Page

As per our understanding, we believe above functional areas need to be tested.

# Features Not to be Tested

### Automation testing is not in scope

# Test Environment

### Operating System: Windows 10.

### Browser: Google Chrome, Firefox, Edge.

# Tools

### Following tools will be used in this project

### Bug Tracking Tool - Jira

### Word and Excel documents

# 7 Test Schedule

### Test Planning:

### Start Date (17/03/2024) - End Date (20/03/2024)

### Test Case Development:

### Start Date (21/03/2024) - End Date (25/03/2024)

### Test Execution:

### Start Date (26/03/2024) - End Date (30/03/2024)

### Test Closure: 31/03/2024

# Test Responsibilities

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibility** |
|  | Test Manager | * Develop and maintain the overall test strategy and test plans for the project. * Manage the testing team, including task assignment, performance evaluation, and career development. * Coordinate with other stakeholders to ensure testing aligns with project timelines and goals. * Track and report testing progress and quality metrics to project stakeholders. * Identify and mitigate risks related to testing activities. * Ensure adherence to testing standards, processes, and best practices. * Oversee the creation and maintenance of test documentation. |
|  | Test Lead | * Assist the test manager in developing test strategies and plans. * Coordinate testing activities within the team and across other project teams. * Assign tasks to test engineers and monitor their progress. * Review test plans, test cases, and test results. * Act as a liaison between the testing team and other project stakeholders. * Provide mentorship and guidance to junior members of the testing team. |
|  | Senior Test Engineer | * Design and develop test plans and test cases based on project requirements. * Execute test cases and report defects found during testing. * Participate in test automation efforts and maintain automated test scripts. * Perform exploratory testing to uncover defects not covered by existing test cases. * Analyze test results and provide feedback to the development team. * Assist in troubleshooting issues reported by customers or other stakeholders. |
|  | Test Engineer | * Develop and execute test cases based on test plans and project requirements. * Report defects found during testing and verify fixes provided by the development team. * Participate in test automation efforts under the guidance of senior team members. * Contribute to the improvement of testing processes and methodologies. * Collaborate with other team members to ensure comprehensive test coverage. * Document test results and communicate findings to relevant stakeholders. |
|  | Developer | * Design, develop, and maintain software applications according to project requirements. * Write clean, maintainable, and efficient code. * Participate in code reviews and provide feedback to peers. * Troubleshoot and debug issues reported by testers or customers. * Collaborate with testers to ensure software quality and reliability. * Stay updated on emerging technologies and best practices in software development. |
|  | Server Admin | * Install, configure, and maintain server hardware and software. * Monitor server performance and troubleshoot issues to ensure uptime and reliability. * Implement security measures to protect servers from unauthorized access and data breaches. * Perform routine backups and disaster recovery procedures. * Collaborate with other IT teams to ensure seamless operation of network services. * Stay updated on industry trends and best practices in server administration. |

# Test Approach/Strategy

### Manual testing will be used to test all the features/functionalities of the OpenCart application. As a part of functional testing, following approach will be followed.

### Step 1 - Creation of Test Scenarios and Test Cases for the different features in scope.

### We will apply several Test Designing techniques while creating Test Cases -

### Equivalence Class Partition

### Boundary Value Analysis

### Decision Table Testing

### State Transition Testing

### Use Case Testing

### We also use our expertise in creating Test Cases by applying the below -

### Error Guessing

### Exploratory Testing

### We prioritize the Test Cases

### Step 2 - Our Testing process, when we get an Application for Testing:

### Firstly, we will perform Smoke Testing to check whether the different and important functionalities of the application are working.

### We reject the build, if the Smoke Testing fails and will wait for the stable

### build before performing in depth testing of the application functionalities.

### Once we receive a stable build, which passes Smoke Testing, we perform in depth testing using the Test Cases created.

### Multiple Test Resources will be testing the same Application on Multiple Supported Environments simultaneously.

### We then report the bugs in the bug tracking tool and send dev. management of the defect found on that day in a status end-of-the-day email.

### As part of the Testing, we will perform the following types of Testing:

### Smoke Testing and Sanity Testing.

### Regression Testing and Retesting.

### Usability Testing.

### Functionality & UI Testing.

### We repeat Test Cycles until we get the quality product.

### Step 3 - We will follow the below best practices to make our Testing better:

### Context Driven Testing]- We will be performing Testing as per the context of the given application.

### Shift Left Testing - We will start testing from the beginning stages of the development itself, instead of waiting for the stable build.

### Exploratory Testing - Using our expertise we will perform Exploratory Testing, apart from the normal execution of the Test cases.

# Defect Reporting Procedure

### During the test execution -

### Any deviation from expected behavior/result by the application will be noted. If it can't be reported as a defect, it would be reported as an observation/issue or posed as a question.

### Any usability issues will also be reported.

### After discovery of a defect, it will be retested to verify reproducibility of the defect.

### Screenshots with steps to reproduce are documented.

### Every day, at the end of the test execution, defects encountered will be sent along with the observations.

### Note:

### Defects will be documented in excel.

### Test scenarios and Test cases will be documented in an excel document.

# 11 Entry & Exit Criteria of STLC Phase

|  |  |  |
| --- | --- | --- |
| STLC Phase | Entry | Exit |
| Requirement Analysis | Once the testing team receives the Requirements Documents or details about the Project. | List of Requirements are explored and understood by the Testing team. All Doubts are cleared. |
| Test Planning | Testable Requirements derived from the given Requirements Documents or Project details Doubts are cleared. | Test plan document signed off by the client. |
| Test Design | Test plan document signed off Test Scenarios and by the client. | Test Scenarios and Test Cases Documents are signed- off by the Client Application is ready for Testing. |
| Test Execution | Test Cases Documents are signed off by the Client. | The test Case Report and Defect Report are ready. |
| Test Closure | Test Case Reports, Defect reports are ready. | Test Closure Report. |

# Test Completion Criteria

### All the identified defects must be fixed and verified.

### All the test cases must be executed and passed.

### All the test deliverables must be completed and submitted.

### Performance test should pass the threshold limit.

# 13 Risk and Mitigations

### The following are the list of risks possible and the ways to mitigate them:

### Risk: Non-Availability of a Resource.

### Mitigation: Plan for backup resource.

### 2. Risk: Build URL is not working.

### Mitigation: Resources will work on other tasks.

# Approvals

### Following documents needs client's approval.

### Test Plan

### Test Scenarios

### Test Cases

### Reports

### Testing will only continue to the next steps once these approvals are done.

# 15 Test Deliverables

### Test cases

### Test reports

### Defect reports