Test Plan (demo.opencart.com)

Objective

The objective of this test plan is to ensure that the e-commerce platform meets all the functional requirements, provides a user-friendly experience, is secure, and performs well under various load conditions.

Scope

The scope of this test plan includes the following areas:

Login and registration functionality
Add to cart and checkout functionality
Payment gateway functionality
Order management and fulfillment functionality
Performance testing of the platform

The criteria that will be used to evaluate the success of the testing, such as the number of defects found, the time taken to complete the testing, and user satisfaction ratings.

The roles and responsibilities of the team members involved in the testing, such as the test lead, testers, and developers.

The schedule and milestones for the testing, including the start and end dates, and the planned testing activities.

The tools and equipment that will be used for testing, such as testing software, hardware, and documentation templates.

Inclusions

The following items are included in this test plan:

Test strategy document
Test cases document
Test execution report
Defect report
Performance test report

Test Environments

The following test environments will be used:

- Development environment
- Test environment
- Production environment

The **operating systems** and versions that will be used for testing, such as Windows 10, macOS, or Linux.

The browsers and versions that will be tested, such as Google Chrome, Mozilla Firefox, or Microsoft Edge.
The device types and screen sizes that will be used for testing, such as desktop computers, laptops, tablets, and smartphones.

The network connectivity and bandwidth that will be available for testing, such as Wi-Fi, cellular, or wired connections.

The hardware and software requirements for running the test cases, such as a specific processor, memory, or storage capacity.

The security protocols and authentication methods that will be used to access the test environment, such as passwords, tokens, or certificates.

The access permissions and roles of the team members who will be using the test environment, such as testers, developers, or stakeholders.

Windows 10 – Chrome, Firefox and Edge
• Mac OS – Safari Browser
• Android Mobile OS – Chrome
• iPhone Mobile OS - Safari

Defect Reporting Procedure

The criteria for identifying a defect, such as deviation from the requirements, user experience issues, or technical errors.

The **steps for reporting a defect**, such as using a designated template, providing detailed reproduction steps, and attaching screenshots or logs.

The **process for triaging and prioritizing defects, s**uch as assigning severity and priority levels, and assigning them to the appropriate team members for investigation and resolution.

The **tools and systems** that will be used for tracking and managing defects, such as a defect tracking software or a project management tool.

The **roles and responsibilities of the team members** involved in the defect reporting process, such as testers, developers, and the test lead.

The **communication channels a**nd frequencies for updating stakeholders on the progress and status of defects.

The metrics and metrics that will be used to measure the effectiveness of the defect reporting process, such as the number of defects found, the time taken to resolve them, and the percentage of defects that were successfully fixed.

Defect Process	POC
New Frontend	yash
Backend	yash
Dev Ops	yash

Tools - JIRA

Test Strategy

Component	Description
Objectives	List the overall goals and objectives of the testing process.
Test Levels	Specify the testing levels (unit, integration, system, acceptance) and their respective purposes, scopes, and objectives.
Test Types	List the types of testing to be conducted (functional, non-functional, regression) and their purposes and scopes.
Test Techniques	Detail the testing techniques to be used for each test type (black-box, white-box, grey-box) and whether manual, automated, or a combination of both approaches will be employed.
Test Deliverables	List the test artifacts to be produced during the testing process (test plans, test cases, test scripts, test reports).

Test Environment	Describe the hardware, software, and network configurations required for testing, including target browsers, devices, and operating systems, as well as any tools or frameworks to be used.
Test Schedule	Provide an estimate of the time needed for each testing phase, taking into account resource availability, dependencies, and project deadlines.
Resource Allocation	Identify team members responsible for different testing tasks and outline their roles and responsibilities.
Risk Management	List potential risks and challenges that may arise during the testing process, along with contingency plans to address them.
Test Exit Criteria	Define the criteria that must be met before testing can be considered complete, such as a specific percentage of test cases executed, a certain level of test coverage, or a maximum number of unresolved defects.

The first step is to create test scenarios and test cases for the various features in Scope.

While developing test cases, we'll use a number of test design techniques.
o Equivalence Class Partition
o Boundary Value Analysis
o Decision Table Testing
o State Transition Testing

o Use Case Testing

 We also use our expertise in creating Test Cases by applying the below:
o Error Guessing
o Exploratory Testing
• We prioritize the Test Cases

Step 2: Our testing procedure when we receive a request for testing:

• First, we'll conduct smoke testing to see if the various 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 bug tracking tool and send dev. management
the defect found on that day in a status end of the day email.

As part of the Testing, we will perform the below types of Testing:
o Smoke Testing and Sanity Testing
o Regression Testing and Retesting
o Usability Testing, Functionality & UI Testing
• We repeat Test Cycles until we get the quality product.

Step3 – 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** – <mark>We will start testing from the beginning stages of the development itself,</mark> 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.

• **End to End Flow Testing** – We will test the end-to-end scenario which involve multiple functionalities to simulate the end user flows.

Test Schedule

Following is the test schedule planned for the project –
Task Time Duration

Task	Dates
▪ Creating Test Plan	
▪ Test Case Creation	
▪ Test Case Execution	
▪ Summary Reports Submission Date	

2 Sprints to Test the Application

Test Deliverables.

The following are to be delivered to the client:

Deliverables	Description	Target Completion Date
Test Plan	Details on the scope of the Project, test strategy, test schedule, resource requirements, test deliverables and schedule	Date
Functional Test Cases	Test Cases created for the scope defined	Date
Defect Reports	Detailed description of the defects identified along with screenshots and steps to reproduce on a daily basis.	NA
Summary Reports	Summary Reports – Bugs by Bug#, Bugs by Functional Area and Bugs by Priority	Date

Entry and Exit Criteria

The below are the entry and exit criteria for every phase of Software Testing Life Cycle:
Requirement Analysis

Entry Criteria:

• Once the testing team receives the Requirements Documents or details about the Project

Exit Criteria:

• List of Requirements are explored and understood by the Testing team
• Doubts are cleared

Test Execution

• Test Scenarios and Test Cases Documents are signed-off by the Client
• Application is ready for Testing

• Test Case Reports, Defect Reports are ready

Test Closure

Entry Criteria:

• Test Case Reports, Defect Reports are ready

Exit Criteria:

• Test Summary Reports

Tools

The following are the list of Tools we will be using in this Project:
• JIRA Bug Tracking Tool
• Mind map Tool
• Snipping Screenshot Tool
• Word and Excel documents

Risks and Mitigations

The following are the list of risks possible and the ways to mitigate them:
Risk: Non-Availability of a Resource
Mitigation: Backup Resource Planning
Risk: Build URL is not working
Mitigation: Resources will work on other tasks
Risk: Less time for Testing
       Mitigation: Ramp up the resources based on the Client needs dynamically

Approvals

Team will send different types of documents for Client Approval like below:
• Test Plan
• Test Scenarios
• Test Cases
• Reports
Testing will only continue to the next steps once these approvals are done