TEST PLAN – OPENCART FRONTEND

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1. Test Plan Identifier

TP_OC_FE_001

2. Introduction

This test plan describes the testing approach, scope, resources, schedule, and deliverables for testing the **OpenCart Frontend application**.
The objective is to validate that all customer-facing features function as per the Functional Requirements Specification (FRS) and provide a stable, usable e-commerce experience.

3. Application Overview

Application Name: OpenCart (Frontend)
Application Type: Web-based E-commerce Application
Users: Customers / Visitors
Environment: Browser-based (Chrome, Firefox, Edge)

4. Test Objectives

- Verify all frontend functionalities against the FRS

- Ensure smooth navigation across pages

- Validate shopping cart and checkout workflows

- Identify UI, functional, and integration defects

- Ensure system behaves correctly for valid and invalid user actions

5. Scope of Testing

5.1 In-Scope

The following modules will be tested:

1. Home Page

2. Header Section

3. Top Menu & Categories

4. Product Listing Page

5. Product Detail Page

6. Search Functionality

7. Shopping Cart

8. User Registration & Login

9. Checkout Process

10. Footer Links

5.2 Out of Scope

- Admin panel testing

- Payment gateway backend validation

- Performance testing

- Security testing

- Mobile application testing

6. Test Items

- Homepage UI components

- Product listings and product details

- Cart and checkout workflows

- User account creation and login

- Navigation links and redirects

7. Test Approach

7.1 Testing Types

- Functional Testing

- UI Testing

- Smoke Testing

- Regression Testing

- Integration Testing (Frontend flow level)

7.2 Test Design Techniques

- Equivalence Partitioning

- Boundary Value Analysis

- Positive and Negative Testing

8. Test Environment

Component	Details
OS	Windows 10
Browser	Chrome, Firefox
Server	Apache
Database	MySQL
Language	PHP
Tools	Manual Testing

9. Entry Criteria

- FRS document is approved

- Test environment is ready

- Test data is available

- Build is deployed successfully

10. Exit Criteria

- All planned test cases executed

- Critical and high-severity defects fixed

- Test summary report prepared

- Test execution completed

11. Test Deliverables

- Test Plan Document
- Test Scenarios
- Test Cases
- Defect Reports
- Test Summary Report

12. Roles and Responsibilities

Role	Responsibility
Test Engineer	Test case creation & execution
Test Lead	Test planning & review
Developer	Bug fixing
Manager	Approval

13. Test Scenarios (High-Level)

TS_01: Home Page

- Verify homepage loads successfully
- Verify featured products display correctly

TS_02: Header

- Verify logo redirects to home page
- Verify cart icon updates item count

TS_03: Product Search

- Search using valid product name
- Search using invalid keywords

TS_04: Product Details

- Verify product image, price, description
- Verify Add to Cart functionality

TS_05: Shopping Cart

- Add product to cart

- Update quantity and verify total price

TS_06: User Registration

- Register with valid details

- Validate error messages for invalid input

TS_07: Login

- Login with valid credentials

- Verify error message for invalid login

TS_08: Checkout

- Guest checkout flow

- Registered user checkout flow

14. Defect Management

- Defects will be logged with severity and priority

- Status: New, Open, Fixed, Retest, Closed

- Defects tracked using Excel / Jira (simulated)

15. Risks and Mitigation

Risk	Mitigation
Unstable build	Smoke testing
Requirement ambiguity	Clarify with FRS
Environment issues	Backup setup

16. Assumptions

- Application is stable for testing

- Payment gateway is mocked

- Test data is available

17. Approval

Name	Role	Signature
Buddana Naga Sri Nithya	Test Engineer	—