

OpenCart Demo - Online Shopping Platform Project

1. Test Plan Identifier

Document ID:

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Application: OpenCart Demo - Online Shopping Platform

Version under test: Demo

2. Introduction

The purpose of this Test Plan is to define the **strategy, scope, objectives, resources, environment, schedule, and deliverables** for testing the OpenCart Demo - Online Shopping Platform

The system allows one main role:

- **Customer** – registration, product browsing, cart management, checkout
- **Manager** – checkout and admin workflows.

Testing will focus on **functional and UI validation** for both roles based on requirements.

3. Test Items

Test Item	Description	Related Modules
GP-UI	User Interface validation (input fields, navigation, forms)	All pages
GP-FUNC	Functional validation of all e-commerce process	<ul style="list-style-type: none">• registration• product browsing• cart management• Checkout• admin workflows.
GP-LOGIN	Login, Logout, and session management	Authentication
GP-DATA	Data validation and persistence	Database integrity
GP-SEC	Security testing	Passwords, access control

Test Item	Description	Related Modules
GP-REPORTS	A complete e-commerce system	Reporting

4. Features to be Tested

Feature	Description	Roles Involved	Related Validations
Registration	Verify that user can register	Customer	
Product browsing	Products are clear, not overlapped	Customer	
Cart Management	Add to cart, Cart items	Customer	
Checkout	Payment methods selection, System integrations	Manager, Customer	To be confirmed
Admin workflow	Validate order processing, inventory management and customer service	Manager	

5. Features Not to be Tested

- Stress or performance testing
- Cross-browser compatibility (only Chrome ≥ v27 supported)

- Non-functional requirements like scalability beyond SRS limits
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6. Test Approach

6.1. Testing Levels

1. **Unit Testing** – Conducted by developers for backend and UI modules.
2. **Integration Testing** – Validate interaction between modules like Checkout and bank
3. **System Testing** – End-to-end validation against full SRS.
4. **Acceptance Testing** – Executed with project sponsor for final approval.

6.2. Testing Techniques

Technique	Purpose
Equivalence Partitioning	To minimize test data and ensure coverage.
Boundary Value Analysis	For numeric fields (PIN, Amount, Mobile, etc.).
Error Guessing	For negative test cases (invalid inputs, empty fields).
UI Validation	Field alignments, mandatory fields, labels, buttons.

6.3. Entry Criteria

- Approved SRS (v3.0) available
- Test environment ready (database, URL, credentials)
- Unit tests passed

6.4. Exit Criteria

- 100% test case execution
 - 95% pass rate minimum
 - All critical defects resolved and retested
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7. Item Pass/Fail Criteria

- **Pass:** Actual result matches expected without deviation.

- **Fail:** Any deviation or unhandled error, even cosmetic, for major functionalities.
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8. Test Deliverables

Deliverable	Description
Test Plan	This document
Test Scenarios	List of test conditions derived from SRS
Test Cases	Detailed cases mapped to SRS IDs (T/F mappings)
Test Data	Data sheets for input combinations
Defect Report	Logged bugs with severity/priority
Test Summary Report	Final status after execution

G. Testing Tasks and Responsibilities

Role	Responsibilities
Team Leader	Prepare test plan, assign tasks, review results
Test Engineer	Design and execute test cases, log defects
Developer	Fix defects, provide support during integration
Project Manager	Approve test deliverables and timelines

10. Test Environment

Component Specification

Browser	Google Chrome v27+
OS	Windows 10 / macOS Ventura
Database	MySQL or equivalent

Component Specification

Server	Apache Tomcat or similar
Tools	Jira (defect tracking), Excel/TestLink (test case management)

11. Test Schedule (Indicative)

Phase	Duration	Activities
Test Planning	2 days	Prepare and review Test Plan
Test Case Design	10 days	Derive test cases from SRS
Environment Setup	2 day	Configure system and data
Test Execution	14 days	Run tests, log results
Defect Retesting	5 days	Verify fixes
Test Closure	5 days	Final report and sign-off

12. Risks and Mitigation

Risk	Impact	Mitigation
Late environment setup	Delay in execution	Preconfigure test data early
Unstable build	Rework	Version control and build verification
Incomplete SRS understanding	Missed coverage	Review sessions between QA and Dev
Resource unavailability	Execution delay	Cross-train backup testers

13. Suspension and Resumption Criteria

- Testing suspended if >30% of test cases are blocked due to environment or build issues.
- Resumed once blockers are resolved and retested successfully.

14. Test Tools

Tool	Purpose
Jira	Bug tracking
Excel	Test case management
Postman	API endpoint testing

15. Approval

Name	Role	Signature Date
Abdelrahman ayman	instructor	
ismail Nawar	technical support	