

## **Functional Requirements Specification (FRS)**

**Project:** OpenCart Multi-Vendor / Multi-Seller E-commerce Platform

**Client:** OpenCart

**Reference Document:** FRS

**Created By:** Kishore Kumar R

**Creation Date:** January 15, 2025

**Test Scenario Creation Date:** January 15, 2025

**Version:** 1.0

**Status:** Draft / For Review

## **1. Introduction**

### **1.1 Purpose**

This document defines the functional requirements for the OpenCart-based e-commerce platform, including core customer features and multi-vendor (seller/partner) capabilities. It serves as the basis for development, testing, and acceptance.

### **1.2 Scope**

The system covers user account management, shopping experience, order processing, profile management, payment methods, showcase features, partner/seller program, and extension management.

It aims to support both single-vendor and multi-vendor (marketplace) operation.

### **1.3 References**

- Provided Requirement Traceability Matrix (Excel)
- OpenCart standard features + multi-vendor extensions

## 2. Functional Requirements

Requirements are classified by **Module, Sub Module, Priority** (P0 = Critical, P1 = High, P2 = Medium, P3 = Low/Optional), and include key validation/business rules.

Requirement ID	Module	Sub Module	Requirement Description	Validation / Business Rules	Priority	Status
FR-01	User Account	Registration	User should be able to register using name, email, and password	Validate email format and password complexity	P0	Approved
FR-02	User Account	Login	Registered users should be able to login securely with valid credentials	Allow login only with valid credentials	P0	Approved
FR-03	User Account	Logout	User should be able to logout and terminate session	Session should end across devices	P0	Approved
FR-04	User Account	Forgot Password	User should reset password using registered email	Reset link must be sent to email	P1	Approved

FR-05	Shopping	Product Search	User should search products using keywords	Display relevant results from title & description	P1	Approved
FR-06	Shopping	Cart & Checkout	User should add products to cart and place order	Correct price calculation and checkout flow	P0	—
FR-07	Shopping	Order History	User should view current and past orders	Orders should display correct status	P0	—
FR-08	Shopping	Downloads	User should access purchased digital downloads	Allow access only after successful purchase	P2	—
FR-09	Profile	Account Information	User should update personal information	Validate mandatory fields	P1	Approved

FR-10	Profile	Change Password	User should change password from profile	Old password validation required	P1	—
FR-11	Payments	Payment Methods	User should view and manage showcased payment methods	Secure storage and access	P1	—
FR-12	Account	Showcase	User should view showcased items	Display active showcase items only	P2	—
FR-13	Account	Partner Up	User should view/join Partner Up program	Optional feature	P3	—
FR-14	Extensions	Extension Management	Administrator should manage extensions	Install, enable, disable extensions	P3	—

#### Additional Requirements (Inferred from Test Scenarios & Modern Multi-Vendor Needs):

- **Seller / Vendor Registration & Management** (P3 – Partner Up / Apply to become a seller) Users (sellers) should be able to apply/register as sellers with separate

form/fields Admin should approve/reject seller accounts Approved sellers get access to seller dashboard for product upload, order management, etc.

- **Multi-Vendor Features** (Recommended enhancement for marketplace model) Sellers can manage their own products, prices, inventory Separate seller store pages Commission system (admin defines %) Seller payout management

### 3. Test Scenarios Overview

High-level test scenarios mapped to requirements for validation during QA phase.

Test Scenario ID	Reference	Test Scenario Description	Priority	Number of Test Cases
TS.01	FRS	Validate the working of Register Account Functionality	P0	14
TS.02	FRS	Validate the working of Login functionality	P0	18
TS.03	FRS	Validate the working of Logout functionality	P0	12
TS.04	FRS	Validate the working of Forgot Password functionality	P1	12
TS.05	FRS	Validate the working of search functionality	P1	—
TS.06	FRS	Validate the working of Account → Account Information functionality	P1	20

TS.07	FRS	Validate the working of Account → Change Password	P1	—
TS.08	FRS	Validate the working of Account → Payment Methods	P1	—
TS.09	FRS	Validate the working of Account → Showcase	P2	—
TS.10	FRS	Validate the working of Account → Partner Up	P3	—
TS.11	FRS	Validate the working of Purchases functionality	P0	—
TS.12	FRS	Validate the working of Purchases → Your Orders	P0	—
TS.13	FRS	Validate the working of Purchases → Your Downloads	P2	—
TS.14	FRS	Validate the working of Purchases → Rate Stores	P2	—
TS.15–17	FRS	Validate the working of Extensions / Manage Your Extensions	P3	—
TS.18–19	FRS	Validate the working of Apply to become a seller	P3	—

#### 4. Non-Functional Requirements (Recommended – to be added if needed)

- Security: HTTPS, secure password storage, protection against common attacks
- Performance: Page load < 3 seconds, support for X concurrent users
- Usability: Responsive design (mobile + desktop)
- Compatibility: Latest browsers + OpenCart supported PHP/MySQL versions

## 5. Approval

**Prepared by:** Kishore Kumar R

**Date:** January 19, 2026

**Reviewed & Approved by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

---