

Functional Requirements Specification (FRS)

Project Name: OpenCart – User Account Functionality

Module Name: Registration and Login

Prepared by: Komal A Kalkutkar Date: [5/1/2025]

**Version: 1.0**

1. Introduction
2. This Functional Requirements Specification (FRS) document defines the functional requirements for the User Registration and Login functionalities of the OpenCart platform. These features allow users to create an account and subsequently log in using valid credentials.
3. Scope

The scope of this document is limited to the following functionalities:

* User Account Registration
* User Login

This includes only the customer-side operations and does not cover admin or third-party integrations.

1. Assumptions and Dependencies

* The user has access to the OpenCart web application.
* Internet connectivity is available.
* Browser compatibility is assumed with modern browsers (Chrome, Firefox, etc.).
* The backend system is operational and supports API/database interactions.

4. Functional Requirement

4.1. User Registration

ID: TS\_001

Title: User Registration

Description: Allows a new user to create an account by entering required details.

Pre-condition: User is not logged in.

Input Fields: First Name, Last Name, Email, Telephone, Password, Confirm Password, Privacy Policy checkbox

Validations:

* All fields are mandatory
* Valid email format
* Password & Confirm Password must match

Post-condition: New user account is created and user is redirected to the success page or dashboard.

Error Scenarios:

* Fields left blank
* Invalid email format
* Passwords do not match

Acceptance Criteria: User should be registered successfully if all fields are valid and privacy policy is agreed.

Priority: High

4.2. User Login

ID: TS-002

Title: User Login

Description: Allows a registered user to log in using their credentials.

Pre-condition: User has already registered.

Input Fields: Email, Password

Validations:

* Email must be registered
* Password must match the registered account

Post-condition: User is redirected to their account dashboard on successful login.

Error Scenarios:

* Invalid email or password
* Empty fields

Acceptance Criteria: Login should be successful only for correct credentials.

Priority: High

1. Non-Functional Requirements

* The page should load within 5 seconds under normal conditions.
* Inputs must be secured (e.g., password fields masked).
* System must handle at least 100 concurrent registrations/logins.
* Data should be stored securely (encrypted password).

1. User Interface Requirements

* Registration and Login pages should follow a clean and responsive layout.
* Error messages must be user-friendly and context-specific.
* Privacy Policy checkbox must be clearly visible and linked.

1. Constraint

* Duplicate emails are not allowed.
* The system uses OpenCart's default MySQL database schema.

1. Future Enhancements (Out of Scope)

* Social media login integration (Google, Facebook)
* Multi-factor authentication
* Admin user management