

Functional Requirement Specification (FRS)

****Project:** Libri Online Bookstore**

****Version:** 1.0**

1. Introduction

This document outlines the functional requirements for the Libri Online Bookstore. It serves as the primary source of truth for QA and Development teams.

2. User Roles

*** **Customer:**** An authenticated user capable of browsing, adding items to cart, and purchasing.

*** **Admin:**** A user with privileges to manage inventory and view order history.

3. Functional Requirements

3.1 Authentication Module

****3.1.1 Login Logic****

*** System must allow access only to users with registered email and matching password.**

*** After 5 consecutive failed attempts, the account must be locked for 15 minutes.**

*** Session timeout occurs after 30 minutes of inactivity.**

****3.1.2 Password Reset & Security****

*** User can request a password reset via email link.**

*** **Complexity Rule:**** New passwords must be at least 8 characters long and contain at least 1 special character (e.g., !@\$%).

*** System must reject passwords that are identical to the previous 3 passwords used.**

3.2 Search and Shopping Cart

****3.2.1 Search Functionality****

- * Search bar must accept Book Title, Author, or ISBN.
- * Search results must be paginated (20 items per page).

****3.2.2 Inventory Management****

- * "Add to Cart" button must be disabled (grayed out) for items with `Inventory_Count = 0`.
- * System must display a "Notify Me" label for out-of-stock items.

****3.2.3 Cart Logic****

- * **Item Limit:** A single user cannot have more than 10 unique items in the cart at one time. Attempting to add an 11th item triggers an error toast message: "Cart limit reached."
- * Cart contents must persist across sessions if the user is logged in.

3.3 Checkout and Orders

****3.3.1 Payment Processing****

- * Supported methods: Credit Card, Debit Card, PayPal.
- * CVV validation is mandatory for all card transactions.
- * Transactions over \$500 require 2-Factor Authentication (OTP).

****3.3.2 Order Cancellation****

- * Customers can cancel an order only if the status is "Processing."
- * If status is "Shipped" or "Delivered," the "Cancel Order" button must be hidden.
- * Refunds for cancelled orders must be initiated immediately to the original payment source.