

# # 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.