

BookNest: Where Stories Nestle	Team ID: LTVIP2026TMIDS24289
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Requirement Analysis - Data Flow Diagrams & User Stories

This document describes the data flow within the BookNest platform and lists all user stories for the product.

Data Flow Diagram (DFD) - Level 0 (Context Diagram)

The Level 0 DFD shows the overall flow of data between the main actors and the BookNest system:

Actor	Data Input to System	Data Output from System
User (Buyer)	Registration details, login credentials, order details, wishlist actions	Book listings, order confirmation, wishlist data
Seller	Registration details, book details (title, author, genre, price, image)	Book listing confirmation, order notifications
Admin	Login credentials, delete/manage requests	User list, seller list, book list, order list
MongoDB Database	Stored: Users, Sellers, Books, Orders, Wishlist	Retrieved data for all API responses

Data Flow Diagram (DFD) - Level 1

The Level 1 DFD breaks down the main processes within BookNest:

#	Process	Input	Output
P1	User Registration/Login	Name, email, password	User session stored in localStorage
P2	Browse Books	User request for book listings	List of all books from DB
P3	Manage Wishlist	User ID + Book ID	Updated wishlist saved in DB
P4	Place Order	User ID, Book ID, buyer details	Order saved in DB, confirmation shown
P5	Seller Add Book	Title, author, genre, price, image, seller ID	Book saved in DB, listed on platform
P6	Seller View Orders	Seller ID	List of orders for seller's books

P7	Admin Management	Admin delete/view requests	Updated user, seller, or book list
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User Stories

The following user stories define the expected behaviour of the BookNest platform from each user's perspective:

ID	Role	User Story	Acceptance Criteria
US01	User	As a user, I want to register an account so that I can access the platform	Registration form accepts name, email, password and saves to DB
US02	User	As a user, I want to login so that I can access my account and browse books	Valid credentials redirect user to home page
US03	User	As a user, I want to browse all available books so that I can find books to buy	All books listed on home page with image, title, price
US04	User	As a user, I want to view book details so that I can decide whether to buy it	Book detail page shows title, author, genre, description, price
US05	User	As a user, I want to add books to my wishlist so that I can save them for later	Wishlist saves book and displays in user wishlist page
US06	User	As a user, I want to remove books from my wishlist so that I can manage my saved books	Book is removed from wishlist in DB and UI updates
US07	User	As a user, I want to place an order so that I can purchase a book	Order is saved in DB with user and book details
US08	User	As a user, I want to view my orders so that I can track what I have purchased	Order history page lists all user orders
US09	Seller	As a seller, I want to register and login so that I can manage my book listings	Seller credentials saved separately and redirect to seller dashboard
US10	Seller	As a seller, I want to add books so that buyers can find and purchase them	Book form saves title, author, genre, price, image to DB
US11	Seller	As a seller, I want to view my listed books so that I can manage my inventory	Seller dashboard shows all books listed by that seller
US12	Seller	As a seller, I want to delete book listings so that I can remove unavailable books	Book is removed from DB and no longer visible to buyers

US13	Seller	As a seller, I want to view orders for my books so that I can fulfill them	Seller order page shows all orders for that seller's books
US14	Admin	As an admin, I want to view all users so that I can monitor the platform	Admin dashboard lists all registered users
US15	Admin	As an admin, I want to delete users or sellers so that I can maintain platform integrity	User/seller removed from DB and no longer visible
US16	Admin	As an admin, I want to view and delete all book listings so that I can control platform content	Admin can see all books and delete any listing

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