
Vision Document

for

Bookstore Web-App

Version 1.0, Approved by Tran Dinh Phu

**Prepared by Nguyen Tien Dat, Tran Dinh Phu,
Doan Minh Quan, Bo Quoc Trung**

Group 13, 2324II INT2208E 23, VNU-UET

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Revision History

Name	Date	Reason For Changes	Version
Draft #1	2024-04-21	Initial Version	0.1
Version 1.0	2024-05-05	First complete version of the Vision Document	1.0

1. Introduction

1.1. Purpose

This document aims to present a detailed description of the **Bookstore Web-App software system**. It will describe the purpose and features of the system, its target audience, what it may do, its user interfaces and the constraint under which it may operate. It also defines how our client, team and audience see the product and use its functionality.

1.2. Scope

Bookstore Web-App is an online platform that facilitates the purchase of books over the Internet. Its primary purpose is to provide a convenient, easy-to-understand, user-friendly marketplace where users can easily browse, search and purchase books from a vast catalog spanning various genres and categories

The key goals of **Bookstore Web-App** are :

- Provide an efficient shopping experience
- Enable access to a wide variety of books from various publishers and authors

The essential key features of the E-Commerce include

- CRUD functionality for admin (Create, Read, Update, Delete), view and confirm book order
- Users can views book details and add, delete books from their shopping cart, checkout and the web-app will generate a confirmation order for them
- Guest users can view the details of books (Authors, Summary, Price, etc...)

1.3. Glossary

Database	Collection of all the information monitored by this system.
Stakeholder	Any person with an interest in the project who is not a developer.
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.

1.4. References

This Vision Document does not currently reference any external documents or resources. As the project progresses, additional resources may be identified and documented in this section.

2. Positioning

2.1. Business Opportunity

In an increasingly digital world, the traditional bookstore experience faces numerous challenges. While the demand for literature remains strong, the convenience and accessibility offered by online platforms are reshaping consumer preferences. However, existing solutions often lack the personal touch and curated experience that physical bookstores provide.

There exists a significant gap in the market for a comprehensive bookstore web application that seamlessly merges the convenience of online shopping with the immersive experience of browsing shelves in a physical store. Current e-commerce platforms lack the tailored recommendations and community engagement that book lovers crave.

Our bookstore web app aims to revolutionize how people discover, buy, and engage with literature online. By offering curated content, personalized recommendations, and interactive features, we'll create an immersive virtual bookstore experience. We'll develop a user-friendly platform with seamless navigation, payment integration, and responsive support. Continuous user feedback and strategic partnerships will drive platform enhancements and catalog expansion.

2.2. Problem Statement

The problem of	people having difficulty in navigating digital platforms, understanding search functionalities, and effectively locating desired books.
affects	users when accessing books online, particularly older adults and individuals with limited technological proficiency.
the impact of which is	difficulty communicating with other people and difficulty accessing help during critical situations
a successful solution would be	user-centric web application tailored for book enthusiasts of all ages and technological backgrounds. This application would boast intuitive navigation, a straightforward interface, and robust search capabilities, thereby facilitating seamless book exploration and selection.

2.3. Product Position Statement

For	all ages and technological backgrounds.
Who	loves books
Bookstore Web-app	is a software application
That	provides the ability for people to search, order books they want to read with ease

Unlike	existing platforms burdened with complex functionalities
Our product	provides a convenient, easy-to-understand, user-friendly marketplace where users can easily browse, search and purchase books from a vast catalog spanning various genres and categories

3. Stakeholder and User Descriptions

3.1. Market Demographics

In the world of digital literature, our bookstore web app targets bibliophiles aged 18-55. The users are anticipated to be comfortable using smartphones, tablets and computers for browsing and online purchases. This tech-savvy demographic, concentrated in areas with high internet penetration, enjoys a comfortable and exciting virtual online purchasing and reading experience. We cater to their diverse budgets with a curated selection of new releases, used books, and special editions, all accessible through a user-friendly and secure web app. By partnering with book influencers and offering unique features like personalized recommendations and loyalty programs, we aim to become a thriving player in the competitive online bookstore landscape.

3.2. Stakeholder Summary

Name	Description	Responsibilities
Requirements Engineers	This stakeholder works with customers and stakeholders to translate needs into requirements.	Specifies domain, non-functional, and functional requirements. Refines requirements as needed.
Software Architect	This stakeholder is a primary lead in the development of the HCPA.	Responsible for overall architecture of the system, and guides overall design and implementation of system.
Project Manager	This stakeholder leads development of the HCPA.	Plans, manages and allocates resources, decides priorities, coordinates interactions with customers and users, and keeps the project team focused.

3.3. User Summary

Name	Description	Responsibilities	Stakeholder
Avid Reader	Primary End user of the system	Search for books, access book details, place orders, manage shopping carts, complete transactions with various paying methods.	Self
Casual Reader	Secondary End user of the system	Search for books, access book details, place orders, manage shopping carts, complete transactions with various paying methods.	Self
Book Blogger	End user of the system/Partner	Search for books, access book details, place orders, manage shopping carts, complete transactions with various paying methods. Manage lists of recommended books, provide feedback.	Self
Author	End user of the system/Partner	Search for books, access book details, place orders, manage shopping carts, complete transactions with various paying methods. Interact with readers through book reviews, comments.	Self

3.4. User Environment

Users access the bookstore web app from various locations, utilizing a range of devices such as smartphones, tablets, laptops, and desktop computers. Remote access is facilitated through wireless connections, including cellular networks and Wi-Fi, while local access can be achieved via wired connections or local Wi-Fi networks. The app is compatible with multiple operating systems, including Windows, macOS, and Linux, ensuring broad accessibility across different devices. Additionally, it supports a variety of web browsers such as Google Chrome, Mozilla Firefox, Safari, Microsoft Edge, and Opera. The app's responsive design ensures usability across various screen sizes and resolutions, catering to mobile devices, tablets, and desktop computers. Accessibility features are incorporated to accommodate users with disabilities, adhering to accessibility standards for screen readers, keyboard navigation, and other accessibility tools. Security measures are implemented to safeguard user data and transactions, including HTTPS encryption, secure login mechanisms, and regular security updates to mitigate potential vulnerabilities.

3.5. Stakeholder Profiles

Avid Reader

Description	A passionate reader aged 18-55 who frequently purchases books.
Type	Primary User

Responsibilities	Utilizes the web app to search for books based on genre, author, title, or other criteria. Browses book descriptions, reviews, and ratings to make informed purchasing decisions. Places orders, manages their shopping cart, and completes transactions securely.
Success Criteria	The success is defined as the customers continuing to use our system.
Involvement	Beta testing, user feedback surveys, focus groups.
Deliverables	None
Comments / Issues	May require varying levels of technical support depending on experience.

Casual Reader

Description	Someone who enjoys reading occasionally and purchases books a few times a year.
Type	Secondary User
Responsibilities	Utilizes the web app to search for books based on genre, author, title, or other criteria. Browses book descriptions, reviews, and ratings to make informed purchasing decisions. Places orders, manages their shopping cart, and completes transactions securely.
Success Criteria	The success is defined as the customers continuing to use our system.
Involvement	Beta testing, user feedback surveys, focus groups.
Deliverables	None
Comments / Issues	Focus on a clear and intuitive design to cater to users with less experience.

Book Blogger/Influencer

Description	An individual who creates online content (blogs, social media) focused on books and recommendations.
Type	Partner

Responsibilities	Explores the web app to discover new book releases, bestsellers, and hidden gems across various genres. Promote the web app to their audience, review books, participate in marketing campaigns.
Success Criteria	Increased brand awareness and traffic to the web app through influencer marketing.
Involvement	Product reviews, co-marketing initiatives.
Deliverables	None
Comments / Issues	Identify influencers who align with your target audience and brand identity.

Publisher/Author

Description	Publishing companies or individual authors who want to sell their books through the web app.
Type	Partner
Responsibilities	Creates and manages their author profile on the web app, including uploading book covers, author bio, and other relevant information. Updates book listings with new releases, book signings, and promotional events.
Success Criteria	Increased book sales through the web app platform.
Involvement	Integration with publishing platforms, sales reporting, author marketing initiatives.
Deliverables	Book information, digital assets, pricing data.
Comments / Issues	None

3.6. User Profiles

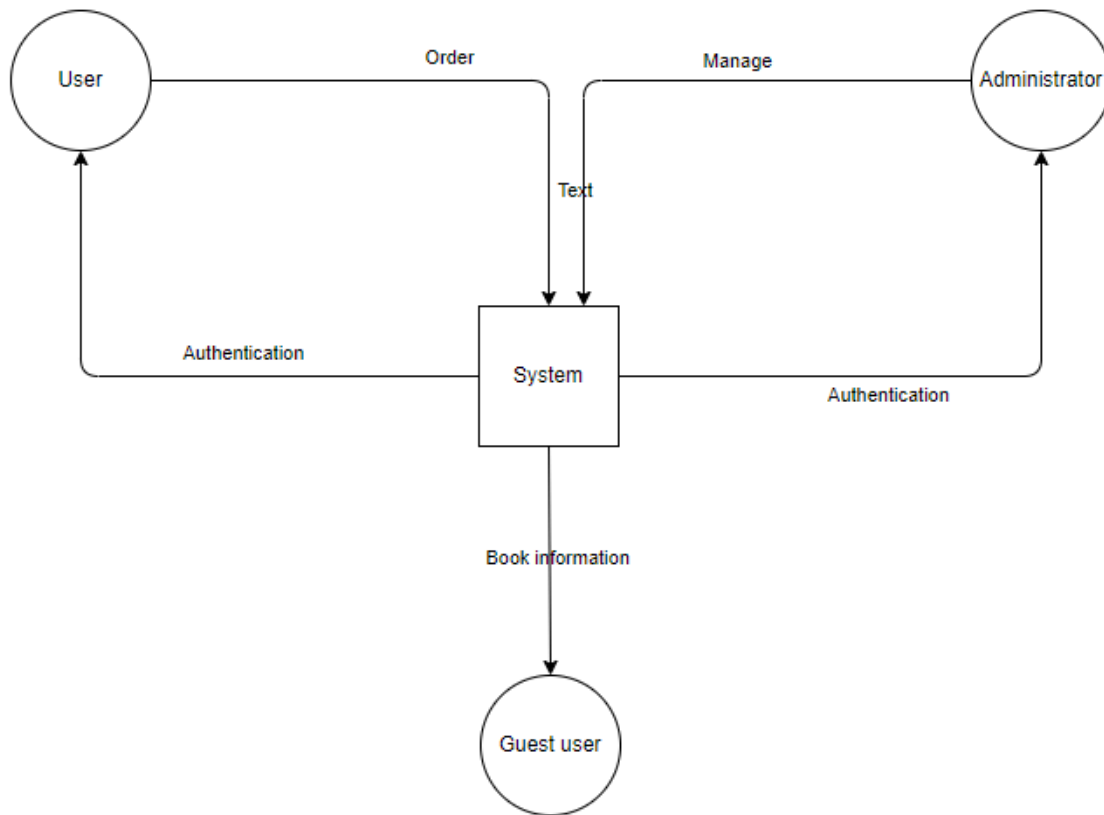
See Previous Section.

3.7. Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Easy to use	High	Ability for users with little to no previous web browsing experience to search for books easily	Basic searching interfaces	Redesign UI/UX with clear navigation paths, intuitive search features.
Responsive	Moderate	Fast response times	Reliance on local servers	Utilize content delivery networks (CDNs) and caching mechanisms to optimize data delivery and minimize latency.
Flexible	Moderate	Ability to provide a truly customized user experience	Limited customization options	Introduce user preferences and settings to allow customization of layout, theme, and content presentation according to individual preferences.

4. Product Overview

4.1. Product Perspective



The Bookstore Web-App is envisioned as a comprehensive online platform designed to provide users with an effortless and enriching book discovery and buying experience. It stands as an independent, full-featured e-commerce service that caters to a vast selection of books across various genres and formats.

4.2. Summary of Capabilities

Customer Benefit	Supporting Features
Straightforward process	Clear process like real life process
A quality-assurance from customers	Review and ratings

4.3. Assumptions and Dependencies

In using the Web-app, it is assumed that the user is literate and can type.

The default language for the Bookstore Web-app shall be US English. It is assumed that users who cannot speak and write in English will not be using the app properly.

It is also assumed that the network on the user's portable device (Laptop) will be available.

5. Product Features

5.1. System Features

ID	Features
1	Access to website
2	Product Catalog
3	User Registration and Authentication
4	Search for books
5	Add to cart
6	Order Summary
7	Checkout
8	Recommend 5 random books
9	Delete from cart
10	Payment (Paypal, Credit Card)
11	Wishlist
12	Account Management
13	Change user's information
14	Change book's information
15	Add/remove book currently for sale

5.2. Communication Features

16	Reviews and Ratings
17	Notification

6. Precedence and Priority

Priority	Feature (By Number Above)
High	1,2,3,4,5,6,7,8
Medium	9,10,11,12,13,14
Low	12,13,14,16,17

7. Constraints

7.1. Usability

Intuitive User Interface (UI) Design: The UI should be clean, uncluttered, and visually appealing. Users should be able to easily understand the layout, find desired features, and complete tasks without confusion.

Clear Navigation: A clear and consistent navigation system is crucial. Implement a logical hierarchy, with easily identifiable menus, breadcrumbs, and search functionality to allow users to navigate the bookstore efficiently.

7.2. Performance

Fast Loading Times: Users expect a quick and responsive experience. Optimize images, code, and leverage caching mechanisms to ensure fast page load times across different internet connection speeds.

Scalability: The platform should be able to handle a growing user base and increased traffic without performance degradation. Consider a cloud-based infrastructure to handle scalability needs.

7.3. Security

Data Security: User data, including payment information and account details, must be protected. Implement robust security measures like HTTPS encryption, secure login protocols, and regular security updates.

Payment Processing: Securely handle online transactions using a reputable payment gateway that adheres to industry standards (PCI DSS).

8. Other Product Requirements

8.1. Applicable Standards

E-Commerce Regulations: Ensure compliance with relevant e-commerce regulations regarding product information, consumer protection, and data privacy.

Web Content Accessibility Guidelines (WCAG): Adhere to WCAG guidelines to ensure accessibility for users with disabilities.

Payment Card Industry Data Security Standard: PCI DSS sets security standards for handling credit card information. Compliance with PCI DSS is necessary for apps that process online payments to ensure the security of users' payment data.

Internationalization Standards: Using Unicode character encoding ensures support for a wide range of languages and characters, facilitating internationalization and localization efforts.

8.2. System Requirements

Responsive Design: The web app should be responsive and adapt to different screen sizes and devices.

Browser Compatibility: Support for major web browsers like Chrome, Firefox, Safari, Edge, and Opera.

8.3. Performance Requirements

Page Load Time: The average page load time for all pages of the Bookstore Web App should be less than 3 seconds.

Response Time: The server response time for user requests should be less than 200 milliseconds on average.

Concurrency: The system should be able to handle concurrent user sessions efficiently, supporting a minimum of 100 simultaneous user sessions without significant degradation in performance.

Database Performance: Database queries should be optimized to ensure efficient data retrieval and processing, avoiding unnecessary joins or complex operations.

8.4. Environmental Requirements

Hardware Platform

There are no specific hardware requirements. The application is web-based and intended to run on various user devices with a modern (actively maintained and updated as of March 2024) Web Browser.

Operating Systems and Versions

The application should function properly on commonly used operating systems, including:

- Windows, MacOS (latest major versions)
- Linux (latest stable/supported kernel versions)

Co-existing Software

The web application should be designed to coexist peacefully with other applications and services typically used on user devices (with Web Browser(s) installed) and web servers. Standard internet protocols and web technologies will be employed to ensure compatibility.