Software Requirement Specification (SRS)

**Online Bookstore System**

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#### Guide:

Guide: Prof. ABC

**Abstract**

The Online Bookstore System is a web-based project designed to enable cus- tomers to browse, search, and purchase books, while administrators manage inven- tory and sales. This Software Requirement Specification (SRS) combines the IEEE SRS template with a simplified project kick-off structure. It defines system ob- jectives, requirements, development environment, use cases, and a project timeline leading to the completion deadline of October 15, 2025.

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**Revision History**

|  |  |  |
| --- | --- | --- |
| **Name** | **Date** | **Reason / Version** |
| Student Name | Sept 1, 2025 | Initial Draft v1.0 |

# Introduction

## Purpose

Defines the requirements for the Online Bookstore System.

## Document Conventions

IEEE-style numbering and tables are used.

## Intended Audience

Developers, testers, instructors, and students.

## Product Scope

Online platform for browsing, searching, and purchasing books.

## References

IEEE SRS Template (Wiegers, 1999).

# Overall Description

## Product Perspective

A standalone web application with a client–server model.

## Product Functions

* + - User registration and login
    - Browse/search books
    - Shopping cart and checkout
    - Online payment
    - Admin inventory management

## User Classes

Customers and Admins.

## Operating Environment

Web browser with database backend.

## Constraints, Assumptions, Dependencies

Requires internet access, depends on payment gateway.

# System Requirements

## Hardware Requirements

Server: 8-core CPU, 16GB RAM, 1TB SSD. Client: Any PC or mobile device with browser.

## Software Requirements

OS: Windows/Linux. DB: MySQL. Backend: Python/Java/PHP. Frontend: HTML, CSS, JavaScript.

# Functional Requirements

|  |  |  |
| --- | --- | --- |
| ID | Requirement | Description |
| FR1  FR2 FR3 FR4 FR5 FR6 | User Registra-  tion Login  Browse Books Shopping Cart Payment  Admin Manage- ment | Register with email and password.  Secure authentication. Search and view books. Add/remove/update items.  Purchase via payment gateway. Add, edit, delete books. |

# Non-Functional Requirements

* Performance: 100+ concurrent users.
* Security: HTTPS, password hashing.
* Usability: Mobile-friendly.
* Reliability: 99.5% uptime.
* Maintainability: Modular code.

# External Interface Requirements

## User Interfaces

Simple, mobile-friendly web UI.

## Hardware Interfaces

Server Client device.

## Software Interfaces

DB (MySQL), Payment API.

## Communication Interfaces

HTTPS protocol.

# Development Environment

* IDE: VS Code
* OS: Windows/Linux
* Version Control: GitHub

# Development Tools

* MySQL Workbench
* Figma for UI design
* Trello for project management

# Use Cases

## Use Case: Place Order

Actors: Customer, Payment Gateway. Precondition: Logged in, cart has items. Flow: Checkout → Payment → Order Confirmed.

usecase\_diagram.png

# System Diagram

system\_diagram.png

# Flow Charts

flowchart.png

# Timeline (Project Work Plan)

Deadline: October 15, 2025

|  |  |
| --- | --- |
| Phase | Duration |
| Requirement Analysis | Sept 1 – Sept 10 |
| System Design | Sept 11 – Sept 20 |
| Implementation | Sept 21 – Oct 5 |
| Testing | Oct 6 – Oct 12 |
| Deployment | Oct 13 – Oct 15 |

# Appendices

**Glossary**

Cart – Virtual basket of books. Admin – Person who manages the bookstore. RTM – Requirement Traceability Matrix.