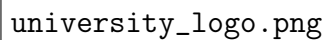


Software Requirement Specification (SRS)

Online Bookstore System

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Abstract

The Online Bookstore System is a web-based project designed to enable customers to browse, search, and purchase books, while administrators manage inventory and sales. This Software Requirement Specification (SRS) combines the IEEE SRS template with a simplified project kick-off structure. It defines system objectives, 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

1 Introduction

1.1 Purpose

Defines the requirements for the Online Bookstore System.

1.2 Document Conventions

IEEE-style numbering and tables are used.

1.3 Intended Audience

Developers, testers, instructors, and students.

1.4 Product Scope

Online platform for browsing, searching, and purchasing books.

1.5 References

IEEE SRS Template (Wieggers, 1999).

2 Overall Description

2.1 Product Perspective

A standalone web application with a client–server model.

2.2 Product Functions

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

2.3 User Classes

Customers and Admins.

2.4 Operating Environment

Web browser with database backend.

2.5 Constraints, Assumptions, Dependencies

Requires internet access, depends on payment gateway.

3 System Requirements

3.1 Hardware Requirements

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

3.2 Software Requirements

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

4 Functional Requirements

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

5 Non-Functional Requirements

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

6 External Interface Requirements

6.1 User Interfaces

Simple, mobile-friendly web UI.

6.2 Hardware Interfaces

Server Client device.

6.3 Software Interfaces

DB (MySQL), Payment API.

6.4 Communication Interfaces

HTTPS protocol.

7 Development Environment

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


8 Development Tools

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

9 Use Cases


9.1 Use Case: Place Order

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



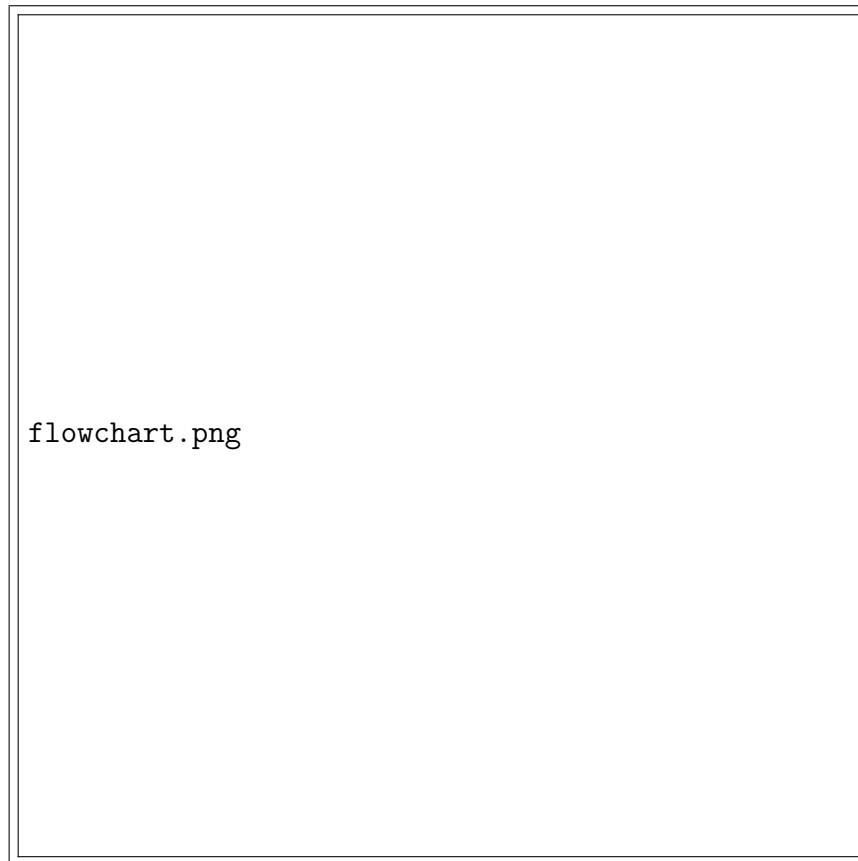
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10 System Diagram



system_diagram.png

11 Flow Charts



12 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.