Software Requirements Specification (SRS)
HH Library Management System

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1. Introduction

1.1 Purpose
The HH Library Management System is a web-based application designed to manage books in a library. The system will allow users to search, borrow, and return books while administrators will be able to add, update, and remove books. The project is being developed as part of the Beginner Tier Capstone Project.

1.2 Document Conventions
- Frontend: React (Visual Studio Code)
- Backend: Spring Boot (Eclipse)
- Database: MySQL
- Deployment: Localhost (port 8080)

1.3 Intended Audience & Reading Suggestions
This document is intended for:
- Capstone Learners (Developers)
- Project Mentors (Reviewers)
- End Users (Library Members & Administrators)

1.4 System Overview
The HH Library Management System is a CRUD-based application that allows users to register, log in, search for books, borrow books, return books, and receive overdue notifications. Administrators manage the book inventory.

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2. General Description

2.1 Product Perspective
This is a standalone web-based system developed using Spring Boot, React, and MySQL. It will be accessed via a browser-based interface.

2.2 Product Functions
- The system will include:
- User Registration & Authentication
- Book Search Functionality
- Borrowing & Returning Books
- Admin Book Management (Add, Update, Delete Books)
- Overdue Notifications

2.3 User Characteristics
The system will have two types of users:
- Library Members: Can search, borrow, and return books.
- Administrators: Manage book inventory and users.

2.4 Constraints

- The project must be completed within the Beginner Tier timeframe.
- The system will only run on localhost (not deployed to the cloud).
- Basic security implementation (not suitable for production use).

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3. Specific Requirements

3.1 Functional Requirements

FR1: Users must be able to register and log in.
FR2: Users must be able to search for books by title, author, or category.
FR3: Users must be able to borrow and return books.
FR4: The system should prevent users from borrowing more books than allowed.
FR5: Administrators must be able to add, update, and delete books.
FR6: Users should receive overdue notifications.

3.2 Non-Functional Requirements

- Security: Basic authentication with usernames and passwords.
- Performance: The system should handle at least 10 concurrent users.
- Usability: The system should have a simple and user-friendly interface.

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4. System Features

Feature	Description	User Type
User Registration	Users can sign up and create accounts	Library Members
Book Search	Users can search for books	Library Members
Borrow Books	Users can borrow books	Library Members
Return Books	Users can return books	Library Members
Overdue Notification	Users receive overdue notifications	Library Members
Manage Books	Admins can add, update, and delete books	Administrators

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5. Assumptions & Dependencies

- System will use Spring Boot, React, and MySQL.
- Only basic security is implemented.
- Users must have an internet browser to access the system
