# Implementation Description

# Site Map

- Home page: Welcome page with featured books
- Browse: View all available books with search/filter options
- Dashboard: User's personal area with their books, requests, etc.
- Discussions: Forum area for book discussions
- User profile: View/edit personal information
- Book detail: Detailed view of a specific book
- Admin panel: Management interface for administrators

# **Features**

## User Management

- User registration with email verification
- User authentication (login/logout)
- Password reset functionality
- User profile management
- Admin users with additional privileges

# **Book Management**

- List books you own
- Browse books from other users
- Search books by title, category, or status
- Request books from other users
- View book details including cover image
- · Track borrowed books and their status

#### **Discussion Forums**

- Create discussion threads
- Comment on threads
- View all discussions

#### **Admin Features**

- User management (view, promote, demote, delete)
- Book management (view, delete)
- Thread management (view, delete)
- Comment management (view, delete)
- Report management (view, resolve, dismiss)
- Content search across all content types (books, threads, comments)

#### Admin Dashboard

- Tab-based interface for easy navigation between management areas
- Advanced AJAX search functionality for users, books, and threads
- Comprehensive report filtering system with status indicators
- Robust error handling with user-friendly messages and retry options
- Server-side fallback rendering for critical sections when AJAX fails
- Real-time content overview showing recent activity across the platform
- Direct action buttons for content moderation tasks
- Mobile-responsive design for administration on any device

# Content Reporting

- Report inappropriate books, threads, or comments
- Admin panel for reviewing and handling reports
- Status tracking for reports (pending, resolved, dismissed)

# **Technical Details**

#### **Database Structure**

- Users table: stores user information
- Books table: stores book information
- Book Requests table: tracks book lending requests and status
- Threads table: stores discussion threads
- Comments table: stores comments on threads
- Reports table: stores user-submitted reports of content

### **Security Features**

- Password hashing
- Input validation and sanitization
- Protection against SQL injection
- Session management
- Access control based on user roles

#### UI/UX

- Responsive design
- Intuitive navigation
- User-friendly error messages
- Success notifications
- Admin dashboard with tabs for different management areas

### **Admin Dashboard Implementation**

- Implements XMLHttpRequest for robust AJAX operations with enhanced browser compatibility
- Comprehensive error handling with graceful degradation
- Server-side fallback rendering ensures content accessibility even when JavaScript fails

- Deep linking support via URL hash and parameters
- Real-time reporting system with filtering and status management
- Enhanced debugging using console logging and specialized diagnostic tools
- Custom CSS styling for admin-specific interface elements