

## Team Members and Roles:

- **Matthew Fuchs** - Backend Development (PHP), API integration, and user authentication.
- **Sunidhi Sharma** - Frontend Design (HTML, CSS), UI/UX Design.
- **Connor Kingsmill** - Frontend Development (JavaScript, Bootstrap), API integration

## Project Description:

The BookTrade site is an online application that allows users to share and exchange books within their community as well as tracking and reviewing the books they have read. Users can create an account, list books for exchange, browse available books, and interact with other users through reviews and discussions. Admins will have the ability to monitor and manage site activities, ensuring content moderation and user compliance.

## Key Features:

1. **Unregistered Users:**
  - Browse and search for books by keyword.
  - View book listings and descriptions.
  - Access limited community discussions.
2. **Registered Users:**
  - Create an account with a profile picture, name, and email.
  - List books for exchange with descriptions and images.
  - Search for books using keywords and filters (e.g., category, availability).
  - Review and discuss books within topic threads.
  - Edit and manage their profile information.
  - View borrowing and reading history.
3. **Admin Users:**
  - Search for users by name, email, or posts.
  - Enable/disable user accounts for policy violations.
  - Edit or remove book listings and discussions.
  - Generate reports on platform activity.

## Minimum Functional Requirements:

- **User Interface & Navigation:**
  - Hand-styled layout using Bootstrap.
  - Contextual navigation menus based on user type.
  - Responsive design for different screen sizes.
  - Breadcrumb navigation for user orientation.
- **Backend & Database:**
  - User registration, authentication, and profile management.

- Secure data storage using MySQL.
- PHP-based backend for handling user requests.
- **Interactivity & Features:**
  - Form validation using JavaScript.
  - AJAX for real-time updates in discussion threads.
  - Error handling for incorrect navigation and input errors.
- **Content & Security:**
  - User profile images stored in the database.
  - Admin panel for user and post management.
  - Secure login system with password hashing.

## **Additional Features (If Time Permits):**

1. **Book Wishlists & Notifications**
  - Users can create a wishlist of books they want.
  - Receive notifications when a listed book becomes available.
2. **Book Reviews & Ratings**
  - Users can leave reviews and rate books to help others make informed choices.
  - Implement a verified-borrower tag for credible reviews.
3. **Real-Time Chat for Book Exchanges**
  - Private messaging or chat rooms between users discussing book swaps.
  - Integration with WebSockets for instant communication.
4. **User-to-User Lending System**
  - Users can set lending periods and track borrowed books.
  - Implement return reminders for borrowed books.
5. **Genre-Based Book Clubs & Discussion Groups**
  - Users can join book clubs based on categories of interest.
  - Scheduled virtual reading discussions
6. **Multi-Language Support**
  - Users can switch languages based on their preference.
7. **Google Books API Integration**
  - Autofill book details using ISBN or title lookup.
  - Provide additional metadata like author bio, book description, etc.

## **Project prototype:**

<https://www.figma.com/design/VzPM2TwvLHT7GxKEO8ANTA/COSC-360---Proposal-prototype?node-id=0-1&t=5tOHyeoiriTzfN6a-1>