

COMP 730 + 830 Final Software Project Update 1

Team Members:

Charishma Bandari and Benjamin Heney

Past Project Progress:

Completed initial project planning and proposal. Defined project goals, major features, and functions. Established team members and their roles.

The initial phase of our Book Catalog System project, we focused on laying the groundwork for essential functionalities. We created the basic structure for user authentication, book management, and check-in/check-out systems. Specifically, we developed the framework for managing book inventory, implemented basic user authentication with registration and login features. As part of this progress, we have created the following classes like (User.java) which handles user authentication features such as registration, login, password management, and session handling. It includes methods like registerUser, loginUser, changePassword, and logoutUser and (BookCatalog.java) which manages the catalog of books in the system. It includes methods for adding new books to the catalog, editing existing book entries, deleting books, and retrieving book information. Methods like addBook, editBook, deleteBook, and getBookDetails are part of this class.

Past Team Member Activities:

Charishma Bandari:

Contributed significantly to the project planning phase, including defining system requirements and outlining major features.

Collaborated closely on the design and implementation of user authentication features, playing a key role in developing the User.java class which serves as the backbone for user authentication functionalities such as registration, login, password management, and session handling.

Actively participated in the development of the catalog browser interface, ensuring a user-friendly experience for browsing book listings.

Ben Heney:

Played a crucial role in defining technical aspects and establishing the system architecture for the project.

Began development and implementation of the application settings class and database management class. Considered how to securely manage database access credentials and the user workflow of connecting the application to the database.

To-Do Items :

Our immediate focus is on advancing towards the 50% completion milestone. To achieve this, we have identified the following tasks:

Setting up a simple catalog browser for users to view book listings. Implement CRUD operations for book management, including adding new books, editing existing entries, and deleting books from the catalog. Create a database schema that includes tables for books, users, transactions (check-ins/outs), and any other relevant entities. Implement Java classes for interacting with the database, in one these classes implement methods for CRUD operations like addBook, updateBook, deleteBook, and getBookDetails to manage book entries in the database. Maintain a field in the Book table to track the availability status of each book, such as "Available," "Checked Out," or "On Hold." Update the availability status based on check-in/check-out transactions and user actions. Develop advanced search and filter functionalities to Implement advanced search and filter options allowing users to refine book searches based on criteria like author, genre, publication year, ISBN, and availability status. Provide filters to sort and categorize search results for easier navigation. Further enhance the check-in/check-out system by tracking book availability, due dates, and implementing notifications for overdue books and return reminders.

Difficulties:

Integrating the User.java and BookCatalog.java classes with other modules and ensuring seamless communication between them was challenging. Designing a scalable, maintainable, and extensible system architecture that aligns with project goals and requirements was difficult.

Ben has a lot to learn about building secure applications and will need to quickly become proficient with managing sensitive data.