

**Project Title:** CSCI 4370 Final: Simple Library Platform

**Describe the problem and the domain:**

Libraries often have the perception of something old-school and removed from technology.

Additionally, many smaller libraries still rely closely on physical library cards and outdated spreadsheets, resulting in a difficult experience for those who want to read more. This also makes it difficult for users to efficiently:

- Browse a personalized and curated book page
- View book details with recommendations
- Browse a trending book page and user page to form a community of avid readers
- Check in and out books
- Add books in and out of a wishlist
- View personal reading statistics

The domain of this project is information management for a library. This project focuses on how books and their metadata are stored, organized, and combined into a structured UI that allows for users to see and search for applicable information. We will design a simple web application that allows for users to search for book information, and access essential features that a library catalog would need.

**User Interface Plan:**

We have created below an overview of each main interface component, based on the wireframes shown on the next page.

1. Navigation Bar: Appears on every page

This includes: ForYou, Trending, Wishlist, MyBooks, Account, Search Bar, and Logout.

2. ForYou Page: A simple starting point after login

A list of books curated to the user.

3. Trending Page: Highlights the most popular content in the library.

Displays a list of top 10 books and users.

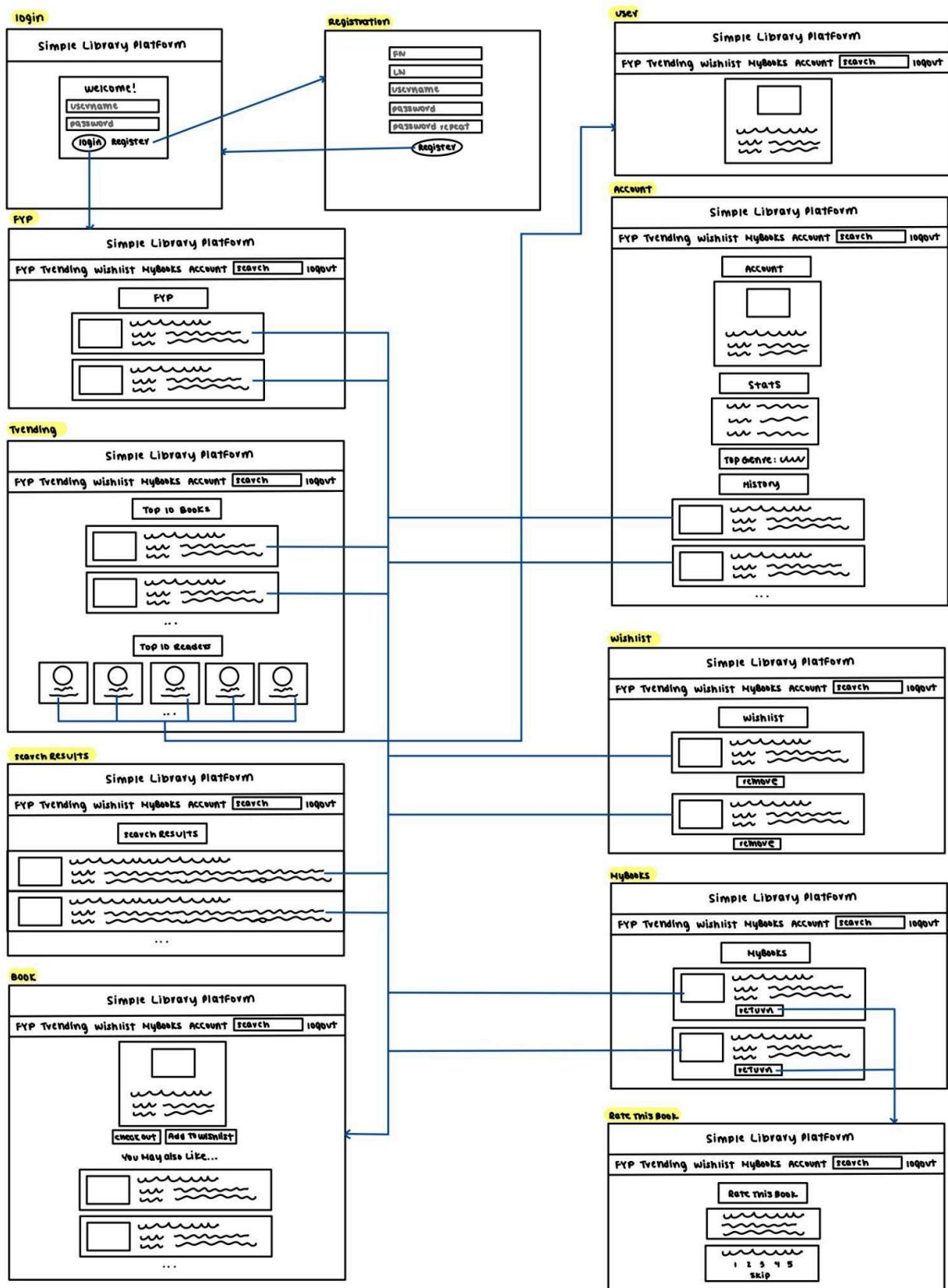
4. Wishlist Page: List of books currently wishlisted.

5. MyBooks Page: List of books currently checked out.

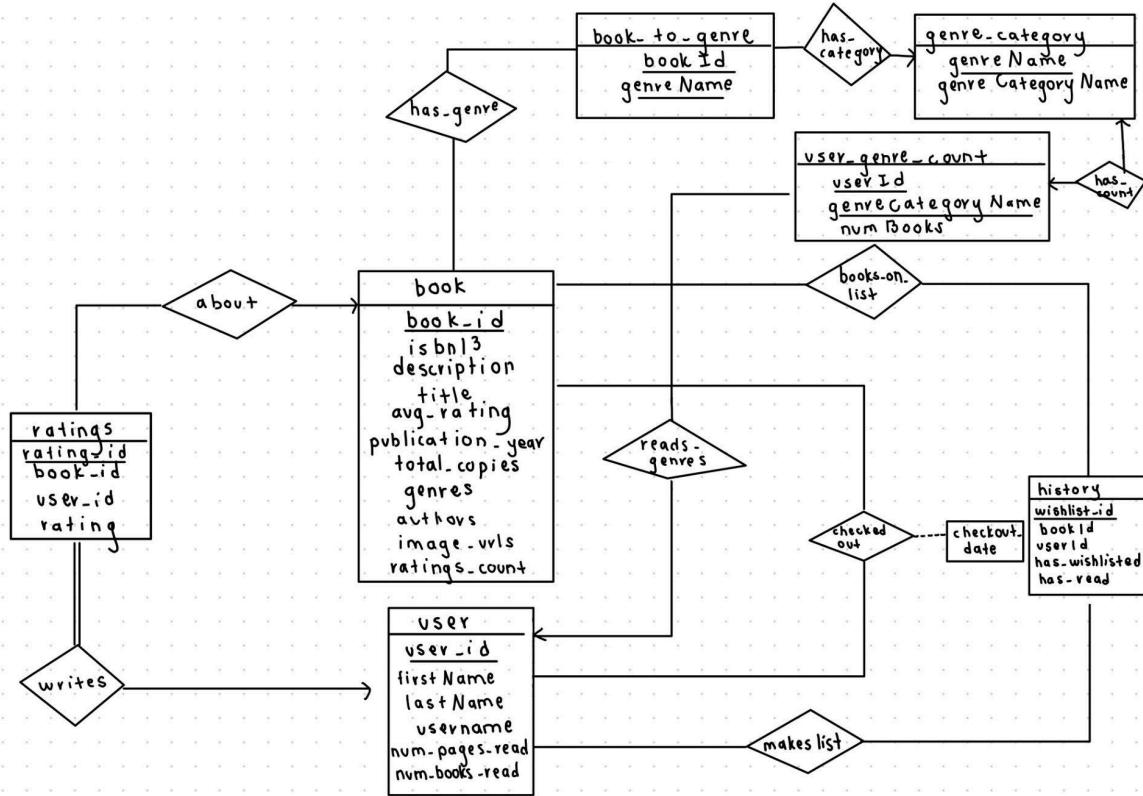
6. Account Page: Shows account information, statistics, and reading history.

7. Search Bar: To search for book by title, author, or genre

8. Logout Button



## Preliminary ER diagram:



## Technologies that we will use:

### Backend

- Java
- Spring Boot: Web, JDBC, Mustache, Security/Hashing

### Frontend: HTML + CSS

- Mustache templating

### Database

- MySQL

### Build Tool: Maven

Python is used for converting and cleaning CSV files for importing purposes.