

Illini BookBridge Project Description

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Summary

Illini BookBridge is an application that allows students at the University of Illinois to not only get information about their favorite books, but to also connect with other students who share the same book interests.

This application allows users to search for a book and retrieve all kinds of book information such as genre, author, publisher, awards, etc. The social component allows students to connect with others who have the same tastes in books as them. If a user wishes to connect with another user, the student will be provided with the other person's contact information so they can get connected and possibly form a book community.

Description

This web application will allow students at UIUC to look up a book and retrieve information from a dataset called the "Best Books Ever" dataset containing 25 variables and over 50K records. This dataset parsed data from GoodReads.com, the largest site for readers and book recommendations.

While our application's aspect of retrieving book information is similar to existing websites, the creative aspect is the ability for students to connect with other students who share the same passion for books as they do. Students can add or "like" books that they enjoyed and put it into their favorites list. Based on the user's likes, the user will be able to view a list of students that they share book interests with. They will then be able to connect with these other students and reach out to their contact information, which can start new relationships and form new book communities.

Usefulness

This application draws its inspiration from Goodreads, a social website which allows individuals to search its database of books, annotations, quotes, and reviews from other readers.

However, it does what Goodreads cannot do – strike a conversation. Due to privacy concerns on the internet, people are not comfortable with sharing their social media accounts or meeting in-person to discuss the books with strangers on the internet. However, this application requires users to create an account with an @illinois.edu email, creating an extra level of security. This application will prove very useful because many college students enjoy reading and connecting with their peers. Illini BookBridge offers Illinois readers a chance to be connected, start a conversation on the books they like, and even make friends.

Realness

The application bases itself on the aforementioned online database from an online [dataset](#) called the "Best Books Ever Dataset" that scraped data from GoodReads and turned it into a dataset. There are 25 attributes of the book dataset: bookId, title, series, author, rating, description, language, isbn, genres, characters, bookFormat, edition, pages, publisher, publishDate, firstPublishDate, awards, numRatings, ratingsByStars, likedPercent, setting, coverImg, bbeScore, bbeVotes, and price. We elaborate more on what each attribute means later in the proposal. Out of these 25 attributes, we will use most of the attributes to build the book database.

The other components will be based on user data. Since users will have to sign-up with their name and contact information, we will also build a users database. We will also create a database to store records of what users share similar reading interests with other users.

Functionality

The functionality of the application can be broken into three main parts:

1. **Account based functionalities:** This includes the users creating, deleting or editing their account. Each user will have some basic information attached to them. For example user information can include name, an introduction, age, gender, and a phone number. Users can remove or edit their account at any time. Additionally, users can login to a previously created account.
2. **Discovering and liking:** Our application will have one page which allows users to filter through a database to find books. This page will allow users to search for books by title and author and then view attributes. Next to each listed book will be a like button where users can add books into their "favorites list".
3. **Recommendation System:** The application will have a recommendations page. The recommendations page will give users a list of other users who have shared favorite books. They will be able to get access to more information about a certain user if they wish to connect with another student.

UI Mockup

a.) User log-in/sign-up page will ensure users can only sign up if they register with a UIUC email. Users will later be able to go into their account settings to include more information such as a self introduction.

Illini BookBridge

Log In

Sign in here

UIUC Email

netID@illinois.edu

Password

min. 8 characters

☐ Keep me logged in

Login

[Forgot password](#)

Don't have an account? [Sign up](#)

Illini BookBridge

Sign Up

Sign up here

First Name

UIUC Email

netID@illinois.edu

Password

min. 8 characters


Create Account

Already have an account? [Log In](#)

b.) i. Users will have a page to search for a book using the book title and author. Once the user searches for a book, the relevant data for it will be displayed. Below the UI mockup we have linked a **table** of the attributes we would like to include. We categorized the attributes into different tiers where the Tier 1 attributes will likely always be displayed when a book is searched, but the Tier 2 attributes can be viewed with the click of dropdown buttons.

Search


Connect

 My Account


Search for a book!

Tomorrow, and Tomorrow, and Tomorrow

Gabriella Zevin



[Relevant data to be viewed here]




ii. Data that will be displayed:

Tier 1 Attributes	Tier 2 Attributes
coverImg: cover image bookID: book identifier in goodreads.com title: book title series: series name author: book's author rating: goodreads rating description: book's description genres: book's genres pages: # of pages	awards: list of awards bbeScore: score in best books ever list bbeVotes: number of votes in best book ever list setting: story setting characters: main characters publisher: book publisher publishDate: publication date firstPublishDate: publication date of first edition edition: type of edition bookFormat: type of binding language: book's language ISBN: book's ISBN numRatings: number of user ratings ratingByStars: number of ratings of each star likedPercent: percent of ratings over price: book price

c.) i. Users will have a page to see other users who share similar book interests. They will then be able to connect those other users.

User	# of Shared Book Interests	Shared Book Interests	
jrjo2	3	Little Fires Everywhere By Celeste Ng, Pachinko By Min Jin Lee, To The Lighthouse By Virginia Woolf	CONNECT
sarah4	1	Tomorrow, and Tomorrow, and Tomorrow By Gabrielle Zevin	CONNECT

ii. Once a student wants to connect with another student, information about that student as well as contact information will be shown.



Name

Jaywoo Jo

Gender **Age**

Male 22

Introduction

Hi! I'm a rising junior studying CS and some of my favorite genres are historical fiction and coming of age books. I also like to read non fiction. Please don't hesitate to reach out if you have some books you want to recommend!

Contact

jrjo2@illinois.edu

217 100 0000

jrjo2's Favorites Shelf

Little Fires Everywhere By Celeste Ng

Pachinko By Min Jin Lee

To The Lighthouse By Virginia Woolf

Grit By Angela Duckworth

Quiet By Susan Cain

Hello Beautiful By Ann Napolitano

Work Distribution

Front End: (Jay, Alan)

- Physical page/structure (Jay)
- Action/events (Alan)
- Creating the web pages
 - 1) User login page (Jay)
 - 2, 3) Book search page and user connect page (Jay/ Alan)
 - 4) User account settings page (Alan)

Database/Backend: (John, Ruhana)

- Downloading and Cleaning [GoodReads Data](#) (Ruhana)
- Writing out ER diagram (Ruhana/John) **mainly** with input from others
- Building the database (Ruhana/John)
 - Queries for each functionality
 - 1) Adding/Deleting likes (Ruhana)
 - 2) Adding/Deleting/Updating users - Use controls (e.g., trigger)
 - 4) Filtering through books based on query (by title or author) (Ruhana)
 - 5) Recommendation queries
 - 1) Advanced Query #1 For User Recommendations (John)
 - 2) Advanced Query #2 For Book Recommendations (Ruhana)

Project Reflection - Alan; Demo Video - Everyone