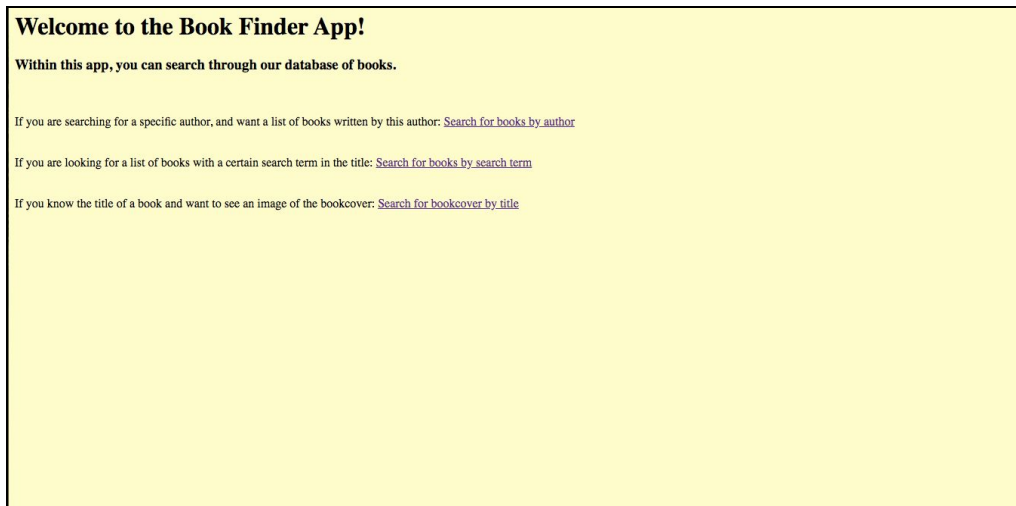For my final project in SI539, I am planning to use my SI507 project from Winter 2019 semester and augment the front end and UX of the project. I chose to do this for my final project because I would like to have a portfolio piece with both a frontend and backend aspect and I think being able to combine the skills I have learned SI507 and SI539 will be a great piece to display and share and allows me to fully flush out what I've learned in these two classes.

Overview:
My project for SI507 was a simple app that took information on 2000 books from the GoodReads website and created an interactive application that allowed users to query books in a variety of ways: by title, author, and by a search term.

The front end of my project is currently very simple. The program currently runs on through flask and has minimal HTML, a snippet of javascript, and no CSS. I would like to use the skills that I've developed in SI539 to created a better looking front end and UX incorporating html, css, and javascript into the user interface of this program.

Current Program Screenshots:

Welcome to the Book Finder App!

Within this app, you can search through our database of books.

If you are searching for a specific author, and want a list of books written by this author: Search for books by author

If you are looking for a list of books with a certain search term in the title: Search for books by search term

If you know the title of a book and want to see an image of the bookcover: Search for bookcover by title

Enter your search term:

Please note: books with titles that contain the search term will be returned.

[input field] [Submit]

[Search for books by author](javascript:void(0))
[Search for bookcover by title](javascript:void(0))
[Database information](javascript:void(0))

To search for a book's cover, enter the book title:

Please note: you must enter the full book title, spelled correctly.

[input field] [Submit]

[Search for books by author](javascript:void(0))
[Search for books by search term](javascript:void(0))
[Database information](javascript:void(0))

To get a list of books written by a certain author, enter the author's name:

Please note: you must enter the author's full name, spelled correctly.

[input field] [Submit]

[Search for bookcover by title](javascript:void(0))
[Search for books by search term](javascript:void(0))
[Database information](javascript:void(0))

Scope:
For the scope of this final project, I am going to focus on building out the frontend and UX of this program with HTML, CSS, and JavaScript. This program currently has 4 routes on flask and I would like to create an aesthetically pleasing frontend (rather than the minimal old-school appearance it currently has) and to create a well thought out User Experience for the program.

Moving forward, I would also like to build out different routes and would ideally like to link this information to an online book store, and allow users to search for books based on tags. However, the database I have on the backend will not currently support that and it would take much longer than the scope of the project (12-15 hours) for me to build that out.

User Interface and Experience:
I would like to augment the program with a front end that will include:
- Header (same for all 4 routes)
- Footer (same for all 4 routes)
- Book cover images (incorporate javascript or CSS to create animation with images)
- Additional images and icons
- Interaction between the routes → add additional linkage between pages and also create a navigation bar that can be found on each page
- I would also like to add some event listeners to the website if possible although at the moment I am struggling to figure out where they would go

If time allows, I would like to attempt to build out the backend a little more to create a better user experience, but for the sake of this project I will work on building out the frontend and applying skills learned in SI539 first and add additional work later. Due to this, I might build out the front end or an example of the frontend for future pages I will include once I get the backend working. Since I have the ISBN of each book in my dataset, I would potentially like to write a javascript API to pull information from google books API using the ISBN and returning more information about each book

Documentation and time:
- Sunday 11/24: Overview and write up (2 hours)
- Monday 11/25: building out homepage html in flask html file and researching how to use css with flask (2 hours)
- Wednesday 11/27: writing html and css for homepage html file - header, footer, images, icons (3 hours)
- Friday 11/29: writing html and css for other search pages (3 hours)
- Saturday 11/30: Updating images for book stores, updating CSS flip cards (2 hours)
- Sunday 12/1: Researching instagram and google books javascript API (1.5 hours - unable to complete due to instagram API updates to getting access token), checking accessibility (1 hour), presentation (1.5 hours)