EE 461L Term Project Report

Team: The Bookish People
Project: Booklopedia
Canvas Group: morning-2
Github Repository: https://github.com/VishruthiR/EE461L_IDB

Meet the Team :

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Motivation :

Our motivation for making this website was to combine a lot of our favorite book models from different websites (google, amazon, barnes & noble) and turn it into one cohesive website to find all the information. We also want to implement a user profile for the website where users can personalize their experience to fit their interests.

Users :

We expect our primary users to be online book lovers (users that would usually engage with Google Books or Amazon Books).

User Stories :

Name :
Genre Description
Assignee :
Siddhartha Shetkar
Description :
As a user, I want to be able to see descriptions of various genres and so I can further explore different areas of literature.
Development Process :
Create descriptions to put in a database with corresponding type of genre. On the genre page display the description.
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
Editor’s Choice Carousel
Assignee :
David Day
Description :
As a user, I want to be able to see the "Editor's Choice" of books by a favorite author or of a certain genre so I can further explore books that may fit my interest and likings.
Development Process :
Create a carousel of images of books pulled from a database by the same author (for author page), or classified as same genre (for genre page).
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
Book Summary
Assignee :
Vishruthi Ramaswamy
Description :
As a user, I want to be able to read short descriptions (blurbs) of books so I can get a sense of what the book is about and gage my interest.
Development Process :
Using API store data on book summaries in database. Display corresponding summary to book on page.
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
Book Images
Assignee :
Jaino Vennatt
Description :
As a user, I want to be able to visualize different books that I am searching, so when I am looking to purchase a book I have an idea of what the book looks like.
Development Process :
Store images from API of books. Display book images on corresponding pages.
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
Navigation Bar
Assignee :
Matthew Jiang
Description :
As a user, I want to be able to easily access the different pages the site has to offer so I can navigate through the website with ease and find information quickly.
Development Process :
Have links to different pages on a side bar available on all pages.
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
About Page
Assignee :
Kumaran Arulmani
Description :
As a developer, I want to be able to see the different contributions that went into the website and GitHub statistics on interactions/commits with the project so I can better understand everyone's contribution.
Development Process :
Have a dynamic webpage pulling data from the GitHub regarding each team member's profile (picture, biography, commits, interactions) and overall project statistics.
Estimated Time to Completion :
2 hours
Actual Time to Completion :
2 hours

Name :
Author Biographies
Assignee :

Description :
As a user, I want to be able to read short biographies of authors so I can further explore my favorite authors and their stories.
Development Process :

Estimated Time to Completion :
5 hours
Actual Time to Completion :

Name :
Author's Popular Books
Assignee :

Description :
As a user, I want to be able to receive suggestions on other popular books by an author I am interested in so I can explore other literary works by the same author.
Development Process :

Estimated Time to Completion :
3 hours
Actual Time to Completion :

Name :
User Reviews
Assignee :

Description :
As a user, I want to be able to post and read reviews on books so I can gather further information about the book and help share my thoughts with other readers as well.
Development Process :

Estimated Time to Completion :
6 hours
Actual Time to Completion :

Name :
Book Purchase Links
Assignee :

Description :
As a user I want to be able to view/receive multiple links to websites where I can purchase a particular book online so I can compare prices and deals between sites easier.
Development Process :

Estimated Time to Completion :
5 hours
Actual Time to Completion :

Name :
User Profile
Assignee :

Description :
As a user, I want to be able to create a user profile, so I can have a custom wishlist and like/follow threads to stay updated with the newest releases by my favorite authors.
Development Process :

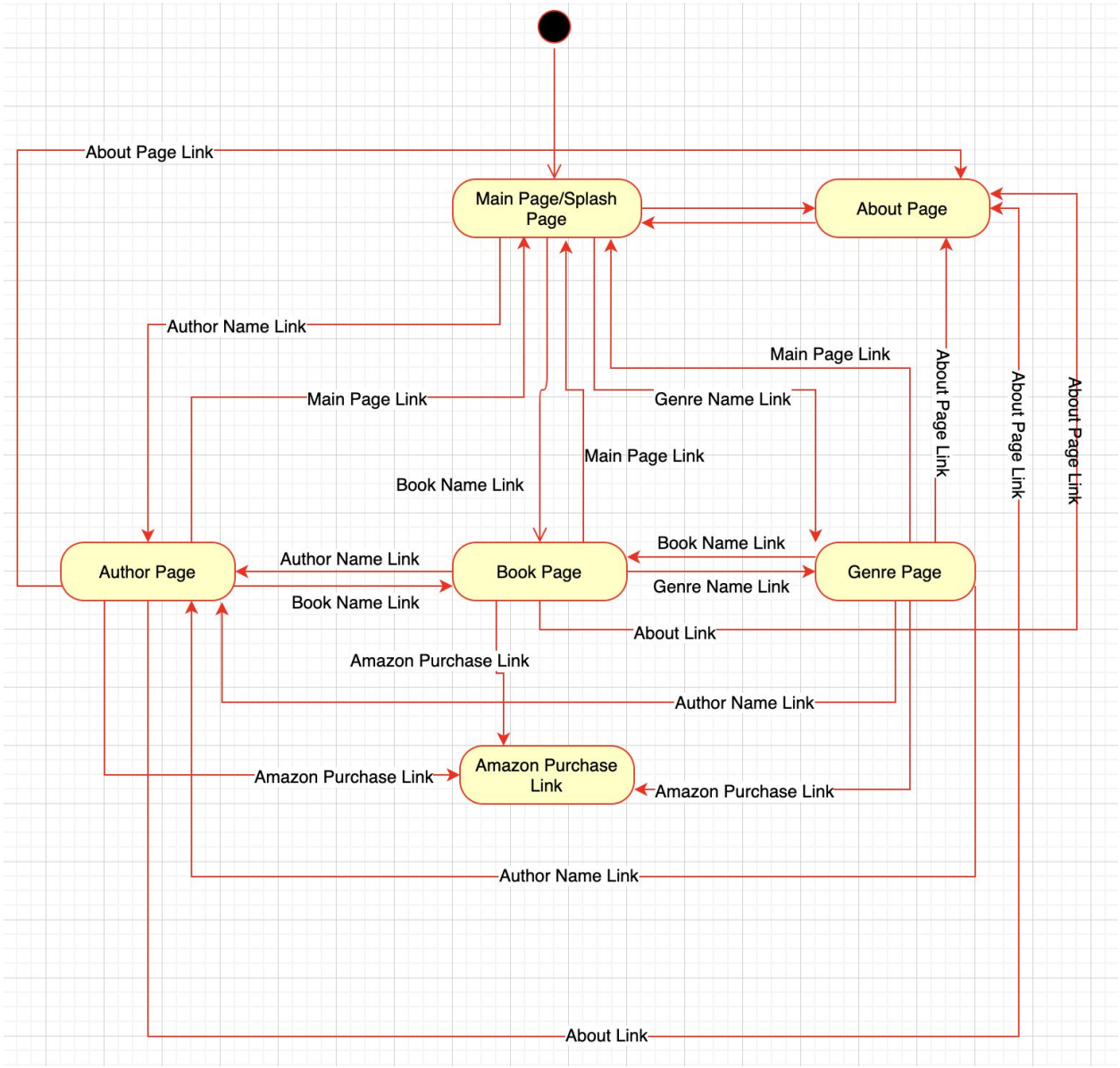
Estimated Time to Completion :
10 hours
Actual Time to Completion :

Name :
Search Functionality
Assignee :

Description :
As a user, I want to be able to search by Book Title, Author, Genre and Publisher so I can further explore literary works related to one another.
Development Process :

Estimated Time to Completion :
12 hours
Actual Time to Completion :

UML Diagram :


About Page Link
Main Page/Splash Page
About Page
Author Name Link
Main Page Link
Main Page Link
Genre Name Link
Main Page Link
Book Name Link
About Page Link
About Page Link
About Page Link
Author Page
Author Name Link
Book Page
Book Name Link
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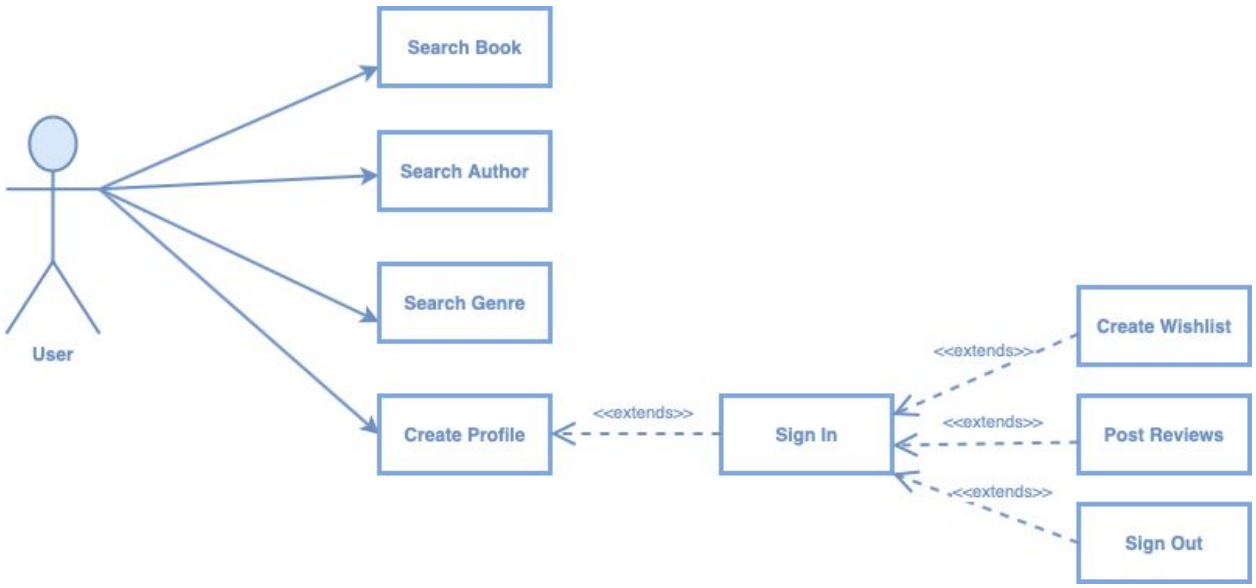
Author Name Link
Amazon Purchase Link
Amazon Purchase Link
Amazon Purchase Link
Author Name Link
About Link

Use Case Diagram :



Design :

Our website starts on the splash page, where we plan on including the following attributes: a navigation bar (links to the home page and about page), an "editor's choice" of books (new releases and trending literature), and explore links (to different genres and authors). We plan to have the navigation bar available on every page. Other pages we also have are book, genre, and author pages. Each of these pages will be dynamically generated from a base template and offer detailed information on each particular instance. Our base template for the author, genre, and book pages include author biography description, reviews, purchase links, genre description, popular books, popular authors, and book summaries. These pages are designed to be accessed through links on the homepage (editor's choice and explore) as well as through the search functionality (which will be a bar towards the top of every page).

Testing:

All of our testing for Phase I was completed by hand and user testing. All pages implemented thus far have been static (apart from the "About" page) so to test the feasibility of this page we viewed the pages on different screen sizes (laptop, tablet, phone) to make sure content was resized correctly (and dynamically). We also monitored the About page throughout the course of our working sessions to see the real time update of information. We hope to do more intensive testing in the upcoming phases once our pages are dynamically produced.

Models:

1. Books

- Number of Instances: ~6000000
- Attributes: Author, Publisher, Genre, Cover, Year
- Examples: The Road, Kite Runner, The Book Thief

2. Authors
    - Number of Instances: ~100000
    - Attributes: Name, Biography, Most Popular Publications
    - Examples: J.K. Rowling, Cormac McCarthy, Markus Zusak
3. Genre
    - Number of Instances: ~50
    - Attributes: Description, New Releases, Most Popular Publications, Most Popular Authors
    - Examples: Non-Fiction, Romance

Tools/Software/Frameworks:

We used the Google Cloud Platform to deploy the website. We used Bootstrap for our CSS Frameworks. We also used React implemented with Javascript to further enhance our front-end. MongoDB has been set up to be used in future phases for when we pull data using our REST APIs (Google Books, GoodReads, ISBN). The database will additionally hold user information (login, profile, wishlist, preferences).

Reflection:

Overall, our team got together with a great mindset and was able to hold a long productive working session that resulted in the majority completion of Phase 1. It was helpful to sit together and work in the same room, so many team members could pair program pages, ask questions freely, and bounce ideas off of each other. Our slack also helped us stay extremely organized throughout this process - with the ability to view git commits instantly from your phone, talk to teammates about pressing issues, create polls to vote on any team decisions. We were able to work independently after our joint working session, however productivity seemed to lag since members had to wait for the response of others through slack to make any design decisions/move forward with their assignments. For the upcoming phases, it would be beneficial for us to reduce the amount of independently worked time on the project and hold more joint working sessions to keep increased productivity.