Books For You Technical Report: Phase 1

Team:

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Motivation

Books4U is a site that aims to help people explore the literary world by browsing and exploring new books and authors. This site is aimed towards people who want to learn more about their favorite literary works or authors, or for those who simply want to get more into reading. We feature options to search for/by an individuals' favorite author, book, or by famous quotes they might have encountered.

User Stories

From our customers (Ready Recipes - Group 13):

1. Displaying Genre - I read a lot of fantasy so it would be useful to quickly see which books belong to the fantasy genre.
2. Author Accolades - Along with listing works written by the author, awards/accolades won by the author could be provided as well.
3. Use bootstrap CSS framework - I have a severe phobia of webpages that use raw CSS stylesheets and won't be able to use the website unless I see Bootstrap styling. I really hate seeing unorganized stylesheets everywhere. I also like pretty colors and would like to see that represented with Bootstrap styling.
4. Book Release Dates - I love the organization of the components folder and the code looks fantastic! However, it appears that the year field in the Book JSON object does not correspond to the date the book was released (for instance, "The Great Gatsby" has the year 2021). Perhaps it would be interesting to include the actual release year of the book.
5. Book Audience Suggestion - I think that adding a particular audience to books like this book would be good for this age range or people looking to learn something in particular, it would be a nice addition!

To our developers (Disaster Averted - Group 15):

1. Add region on Natural Disaster type and Location - As a moving resident, I want to know what types of natural disasters occur most frequently in what regions. I also want to know what region a location is part of. This is so that while moving, I can see what natural disasters I may have to deal with in a specific location.
2. Displaying Historical Examples of Natural Disasters - As a moving resident, I want to know some historical examples of natural disasters so that I can understand the impact certain natural disasters have had on different areas in the past.

3. <u>Adding 'Preventative Measures' as Attribute for Disaster Type Model</u> - As a resident, I want to be able to know how to prepare for the types of natural disasters I have learned are common in my area. If I use the location model to learn what disasters are frequent in my region, I should be able to use the disaster type model to find tips for handling/surviving those types of disasters. These might include things like preventative measures, tips on what to do if I find myself experiencing a natural disaster or steps for preparing for a natural disaster.
4. <u>Add Most Frequent Natural Disasters to Location Information</u> - As a moving resident, I would like to know information about which locations are more prone to specific natural disasters. This can allow me to understand which natural disasters are more likely to occur in a certain location so that I can make a more educated decision when moving to that location. This can also help people living in that location be more aware of potential natural disasters that could affect their area.
5. <u>Adding Contact Information for each Relief Program</u> - As a moving resident, I would like to know the contact information about each relief program. Such as phone numbers, email addresses, or any other ways that I can contact them, so I can get help from them when I need it.

RESTful API

Postman Documentation:
https://documenter.getpostman.com/view/10839542/Tz5jcyx6

Model Endpoints

- GET https://booksforyou.me/api/books
  - Returns a list of all books with basic information, including name, genre, year, author, page count, and price.
- GET https://booksforyou.me/api/authors
  - Returns a list of all authors with basic information, including name, works, genre, whether or not they are on tour.
- GET https://booksforyou.me/api/quotes
  - Returns a list of all quotes with basic information, including the quote, length, author, tags.

Instance Endpoints

- GET https://booksforyou.me/api/book/id=<id>

- - Returns the information of a single book, including name, genre, year, author, description, page count, and price.
  - GET https://booksforyou.me/api/author/id=<id>
    - Returns the information of a single author, including name, works, bio/spotlight, on tour, first initial, last initial.
  - GET https://booksforyou.me/api/quote/id=<id>
    - Returns the information of a single quote, including the quote, length, image, author, and tags.

Models

- Books
  - Name
  - Genre
  - Year
  - Author
  - Description
  - Page Count
  - Price
- Authors
  - Author Name
  - Works
  - Bio/Spotlight
  - On Tour
  - First Initial
  - Last Initial
- Quotes
  - Quote Text
  - Length
  - Image
  - Author
  - Tags

Tools

- AWS: We used AWS to deploy our website to a public Namecheap domain.
- Postman: We used Postman to define and design our API.
- React: We used React with TypeScript to design the frontend of our site.
- Bootstrap: We used Bootstrap as a front-end framework to style our site.

- GitLab: We used GitLab to manage our project repository and assign/create issues.

Hosting

The site is hosted at https://booksforyou.me/

We used AWS to host our site on a public domain registered with Namecheap. We created a Docker image and then used an EC2 instance to run it so that it hosts both our site and backend. We used Route 53 for HTTPS authentication.