Bookstore Assignment Introduction

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Bookstore Assignment Introduction

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Introduction

Purpose

- Develop a website for a book store that is called *Bookworm*
- The online bookstore's main users are divided into two categories:
  - The front – end users
  - The administrator – background users

Introduction

Scope

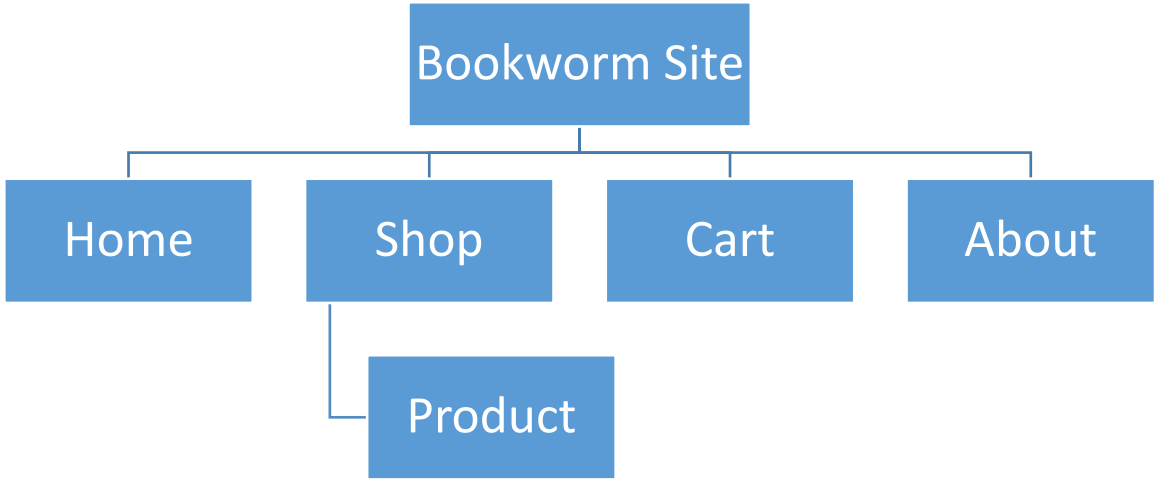
- Complete the main function for the front user
- Full responsibility for developing UI for the website base on the provided mock-ups
- Can insert or update manually a database record to make it display correctly on the website, even though don't have the administrator site
- There are 2 optional requirements which are Customer reviews and Submit review form. You can get bonus score if you complete them

Introduction

Technical Requirements

- Using the FastAPI framework to build a backend system that provides API endpoints
- Using the ReactJs library to build a front-end system as a single page application (SPA) for the site
- Use OAuth2 with Password (and hashing), Bearer with JWT tokens
- Using PostgreSQL for database
- Using the TailwindCSS or Bootstrap framework to build responsive for the site
- Besides using those technical requirements as mandatory, you might have select others to complete this assignment

Site Map



Common Functional Requirements

Layout

- The layout should be clear
- Common components should be consistent in both outline and colour tone or font style
- Using flexbox & grid of TailwindCSS or grid system of Bootstrap that contains the header and footer of the site
- Well support responsive is a plus point

Common Functional Requirements

Pagination

- Allow user to choose how many items (5, 15, 20 and 25) can display on a page
- Show a paging section that allow user to choose page index, move next or previous page
- Display pagination information following pattern:
  - In shop page, at the first page and show 5 items per page: Showing 1-5 of 126 books
  - In customer reviews list, at the second page and show 10 items per page: Showing 11-20 of 126 reviews

Common Functional Requirements

Book display

- The card UI displays on the listing page, only show a summary of a book such as a title, cover image, price and author name
- Full details UI display in product page, show full information of a book

Common Functional Requirements

Authentication

- Build a simple sign in popup (similar to Modal component of Boostrap) which use email and password field to authenticate an user
- Display full name of user (first_name + last_name) in the navigation bar after authenticating
- Allow user to sign out

Common Functional Requirements

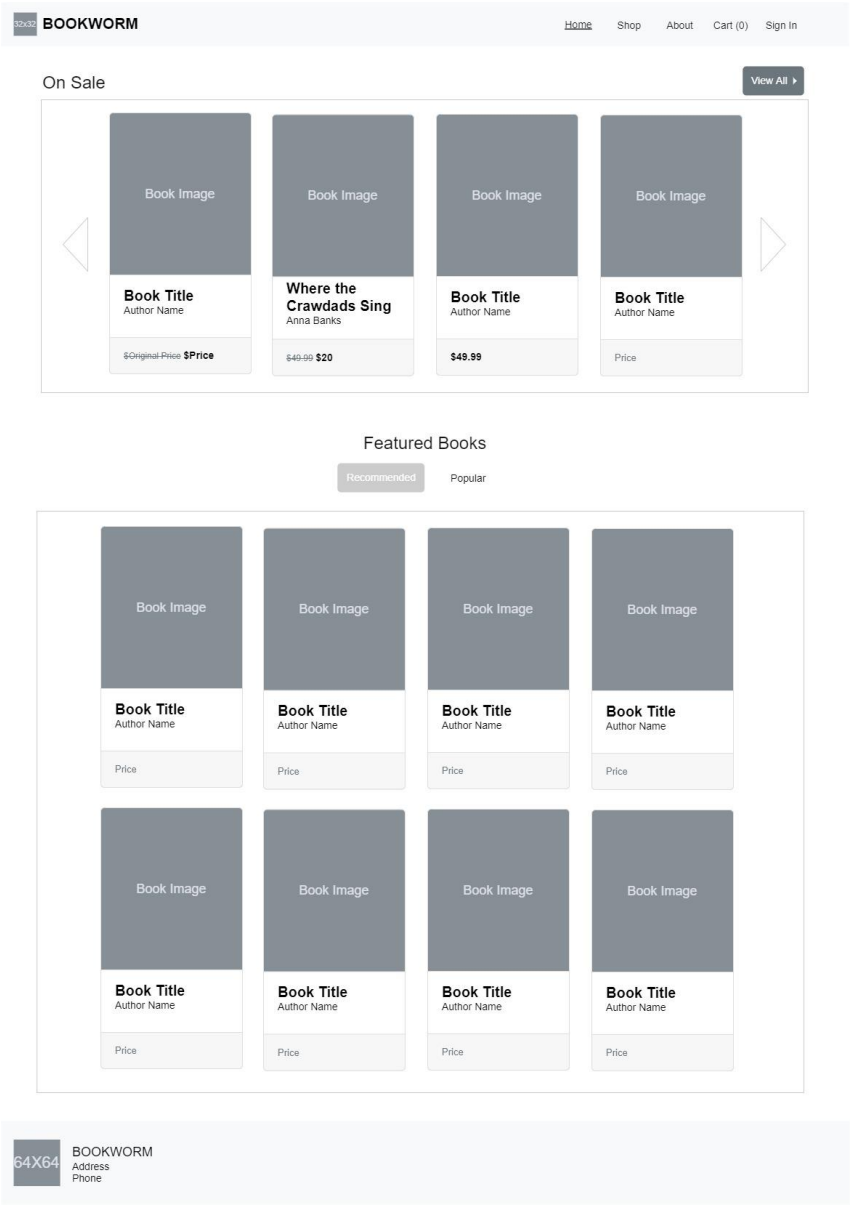
Price display

- Use the USD as the main currency - $ as the main currency symbol
- There are 2 price types, book price (book_price@books table) and discount price (discount_price@discounts table)
- The discount price might have an expired date, if not it is unlimited time. It is only **available** when the current date is before its expired date or its expired date is null
- If a book has **an available discount price**, display it as a **final price** and put the book price in front of it like the mock-up. Otherwise, only display the book price

Page Functional Requirements

Home page

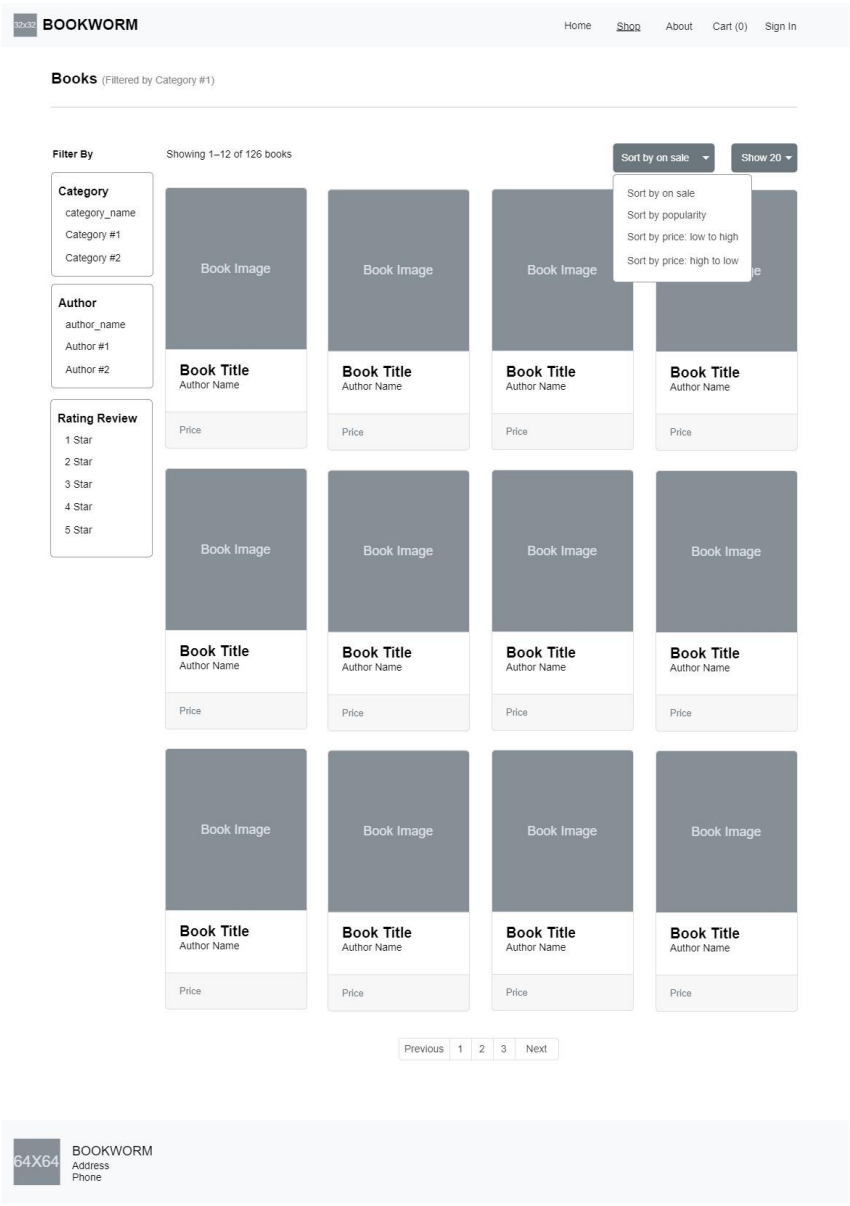
- On sale section
  - Display as a slider of book card item like the carouse of Bootstrap with multiple items
  - Get top 10 books with the most discount
  - Click on each book will open the product page of this book
  - Click on the View All button will open the shop page that automatically apply sort by on sale
- Featured books section
  - Recommended: get top 8 books with most rating starts
  - Popular: get top 8 books with most reviews - total number review of a book and lowest final price



Page Functional Requirements

Shop page

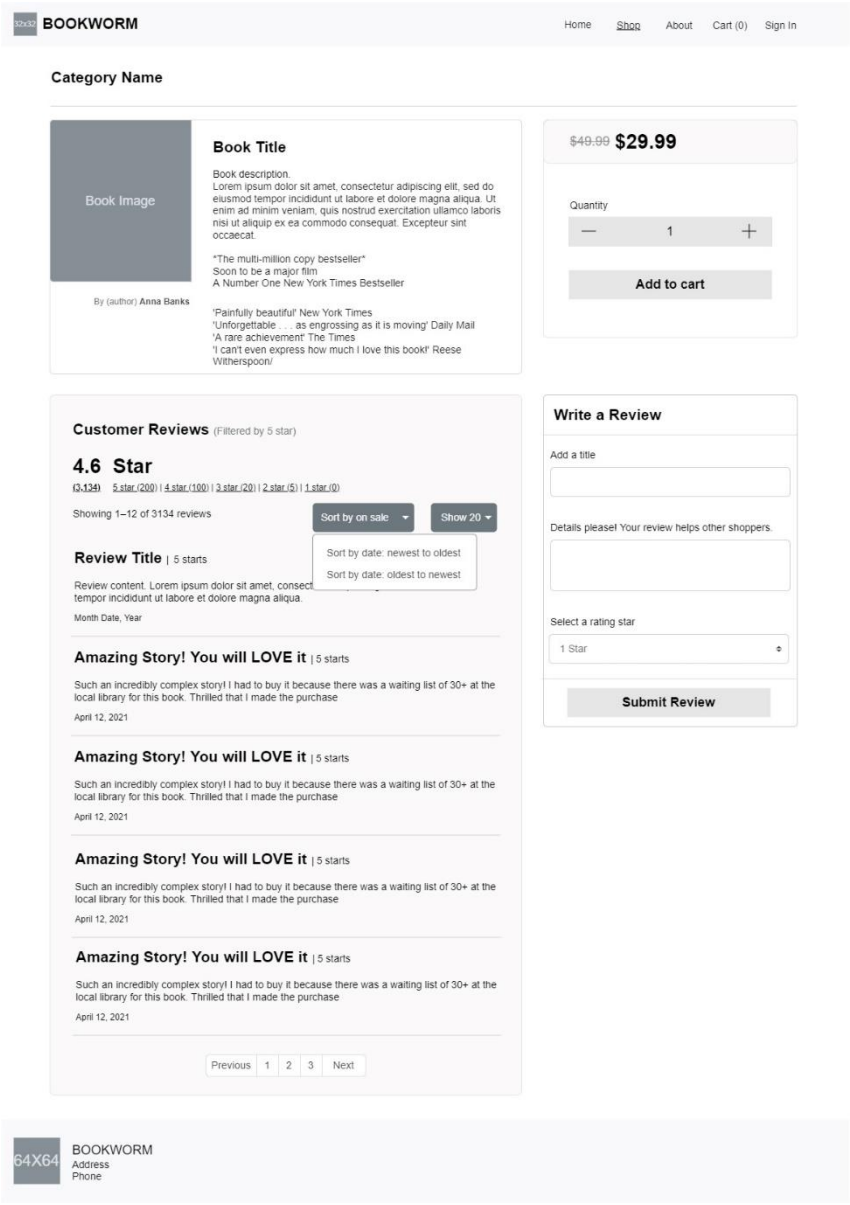
- Listing
- Sorting
  - Allow to sort by on sale
  - Allow to sort by popularity
  - Allow to sort by price
- Filtering - display each filter type section as an accordion behaviour
  - Category
  - Author
  - Rating Review



Page Functional Requirements

Product page

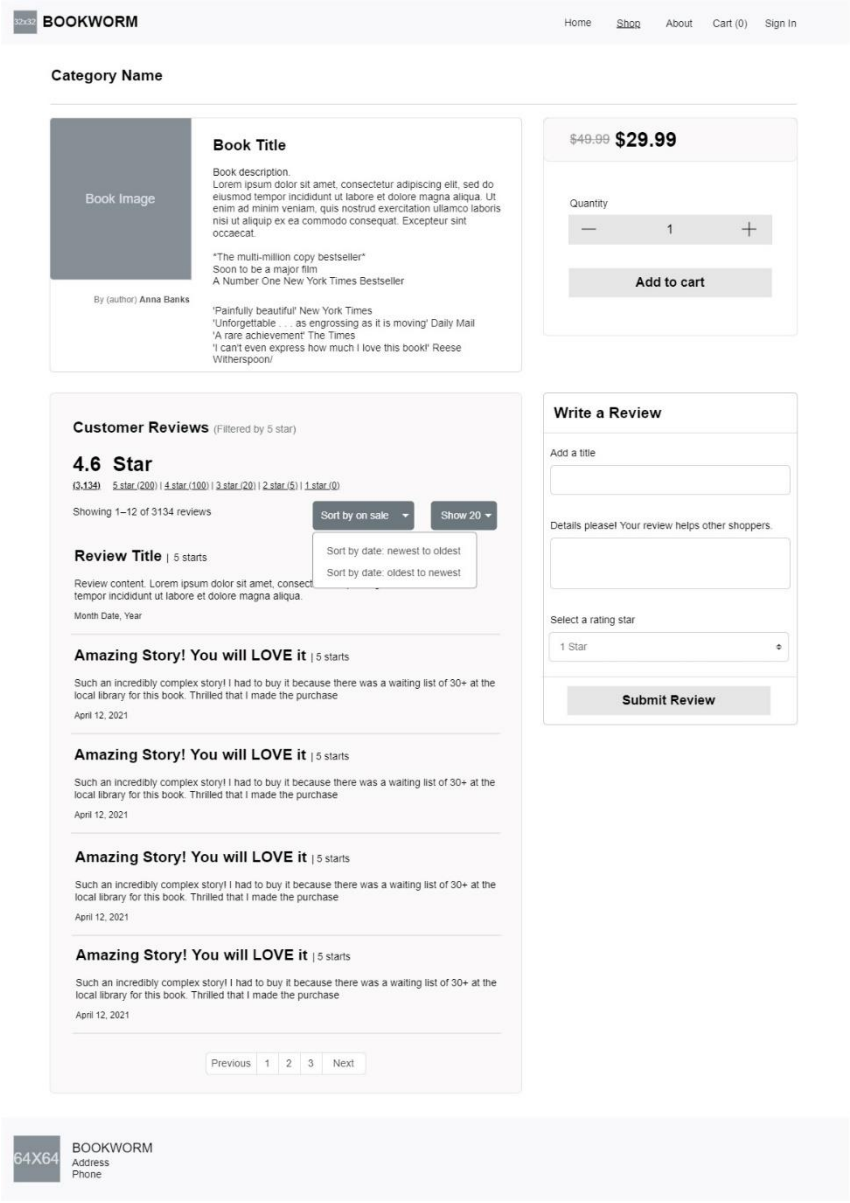
- Book details
- Add to cart
  - Display a discount price if it is available and put the book price in front. Otherwise, only display the book price
  - Provide a quantity input, maximum is 8 and minimum is 1.
  - Click ‘Add to cart’ button to put the book with quantity to the cart, and increase the number item of card which is displayed in the navigation bar then show a successful message.
  - In the navigation bar, display the same number item of card across the site.



Page Functional Requirements

Product page

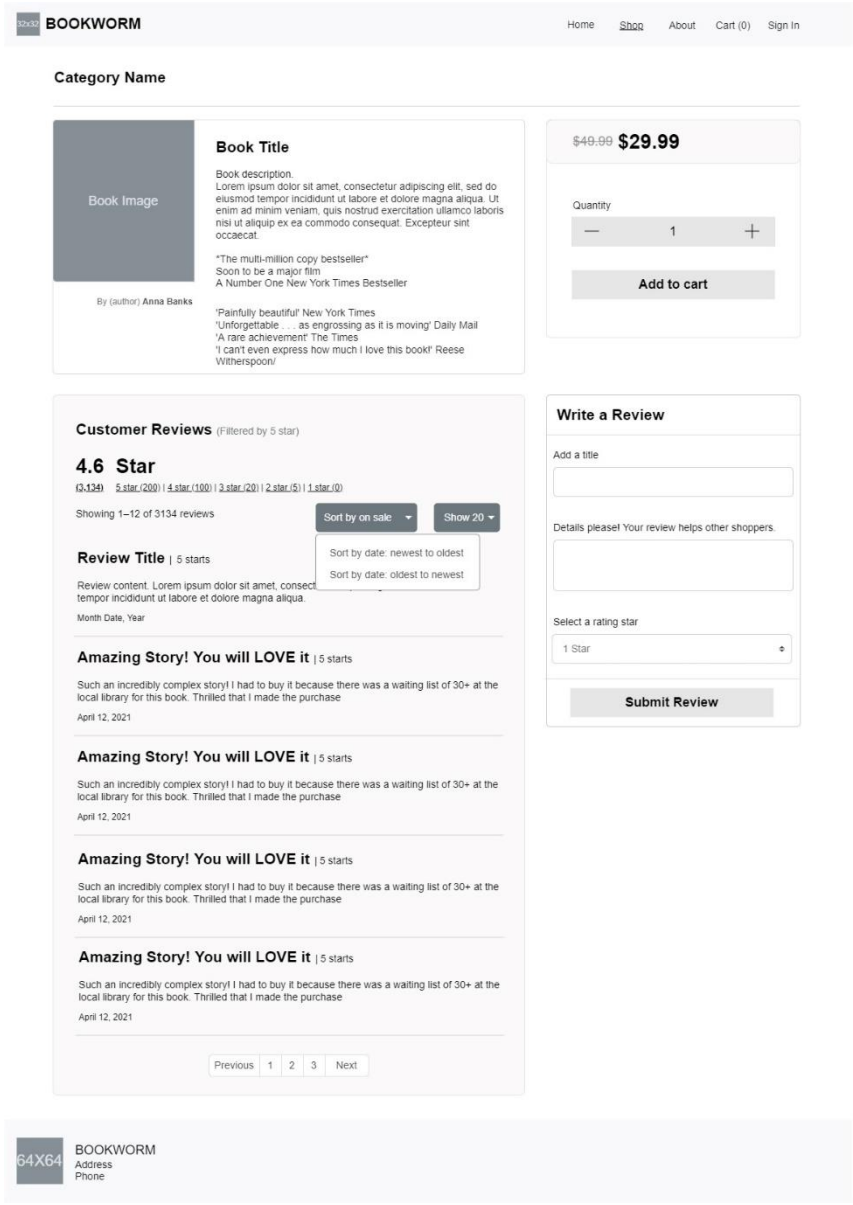
- Customer reviews – **optional section**
  - Listing
    - Display the average number of rating star, it is calculating following this formula:
      - AR = (1*a+2*b+3*c+4*d+5*e) / (a+b+c+d+e)
    - Display total number of review.
    - Display total number of review for each rating star.
  - Sorting
    - Allow to sort by date of review, in both ascending and descending mode.
    - Set sort by date: newest to oldest as default sort
  - Filtering
    - Allow to filter by rating star level by click on level item
    - Show all reviews by click on total number of review
    - Only a filter is applied, display it after the title of this section following pattern “Filtered by 5 star”.



Page Functional Requirements

Product page

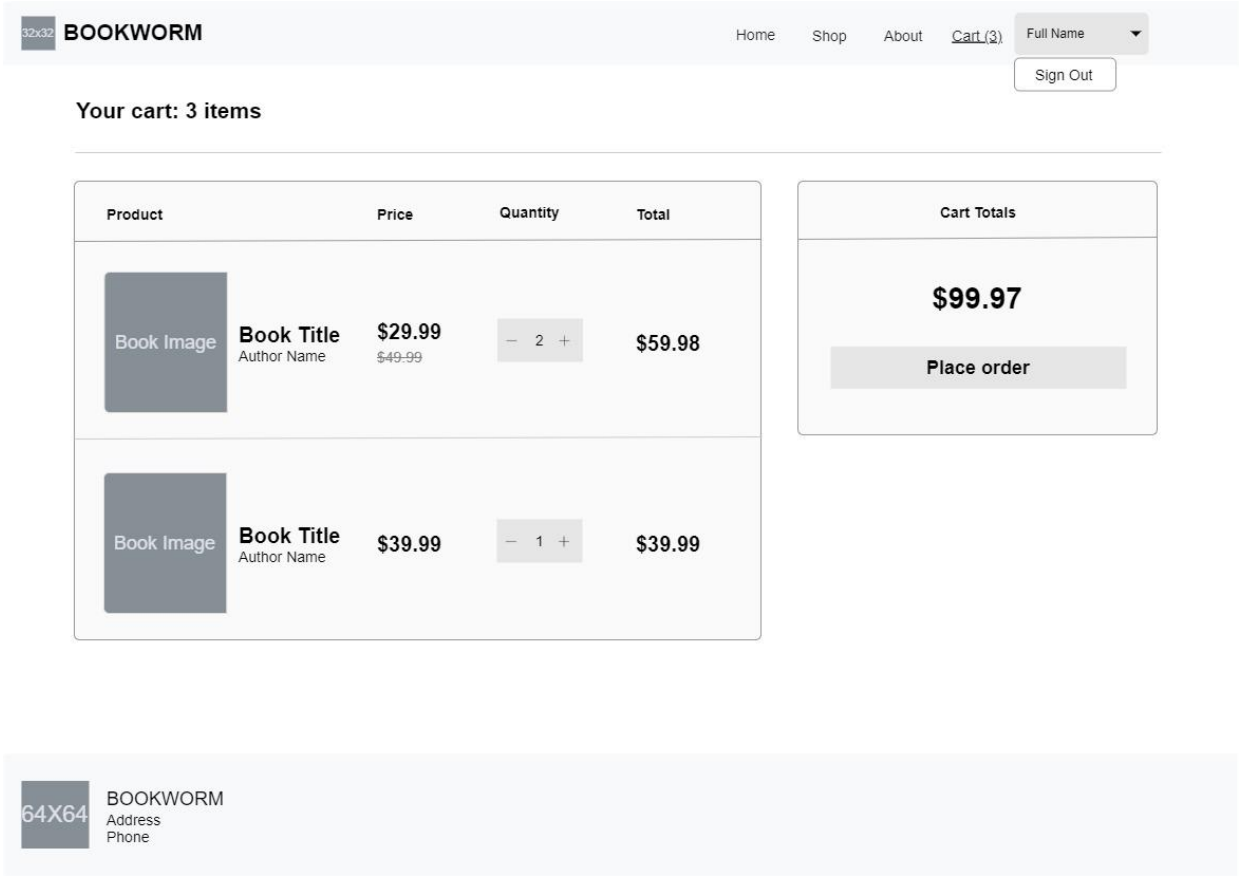
- Submit review form – **optional section**
  - A submit form allow to send a review of the book
    - Title input is mandatory field
    - Details input is optional field
    - Rating star dropdown list has 5 options (from 1 to 5 star), it is mandatory field
  - After clicking submit review, show a successful message in 5 seconds and reload the customer reviews list



Page Functional Requirements

Cart page

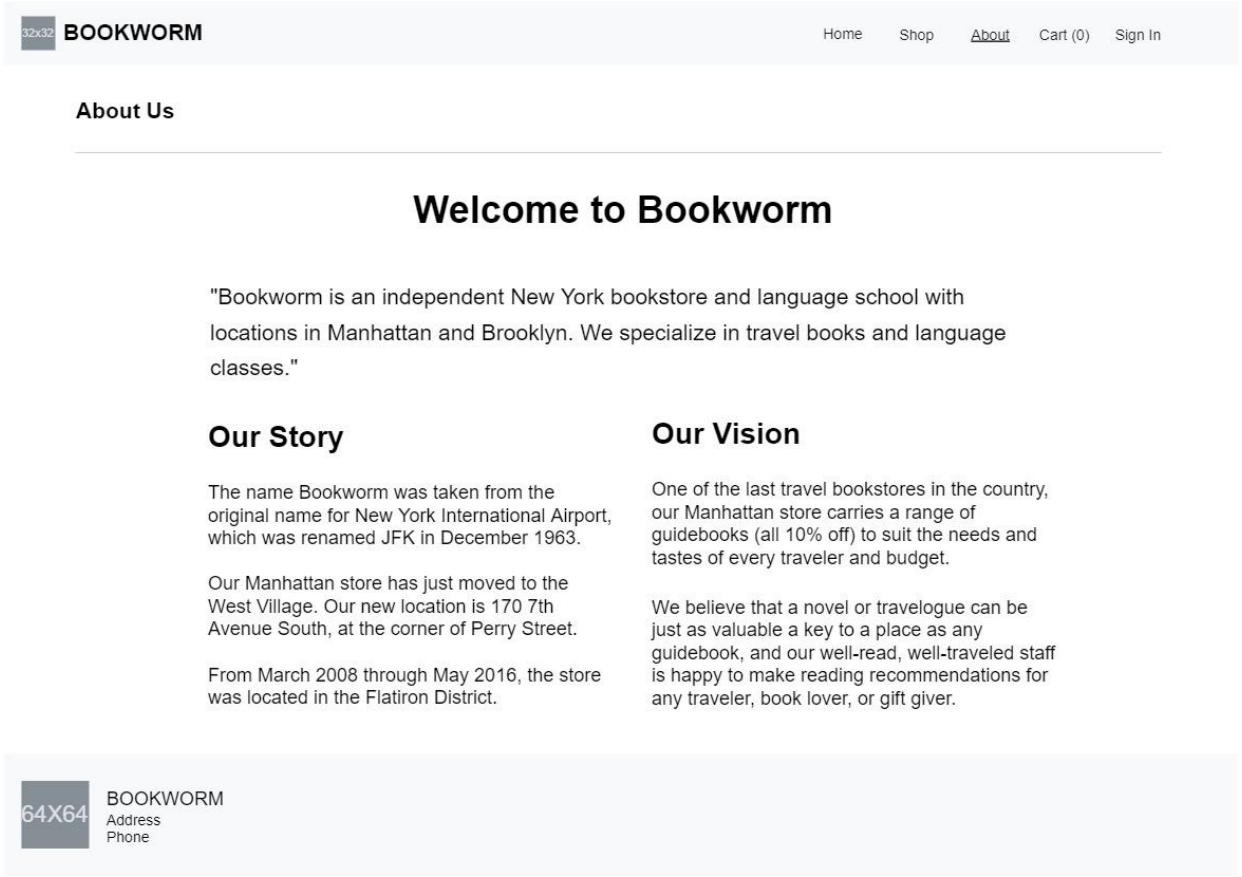
- Cart item list
  - Show information cart following the mock-up
  - Can click to an item to open a product page in a new tab
  - Allow updating the quantity of each item
    - If it is set to 0 then remove this item from the cart
    - Only allow a maximum of 8 quantity for each item
- Cart total
  - Automatically calculate the total amount of items in the cart
  - Display sign in popup if user click place order button but not sign in yet
  - When an authenticated user click place order button,
    - If those items are still available then insert this order to database, then show a successful message in 10 seconds then redirect to home page
    - Otherwise, show an unsuccessful message that notes which item is not available then automatically remove it from the cart.



Page Functional Requirements

About page

- Following the mock-up to display this page as a static page



Database Diagram

bookworm_app Database

- Tables
  - user
  - category
  - author
  - book
  - discount
  - review
  - order
  - order_item

Assignment Submission

Assignment Schedule

- Deadline: 05th May, 2025
- Presentation day: from 06th May, 2025

Keep calm and do your assignment

Assignment Submission

Submit Assignment

- Complete your work on GitHub repo by the deadline
- Make sure your GitHub repo is public
- Provide your GitHub repo so that mentor can check out
- Any commit that is pushed after the deadline is invalid
- Any copy/clone code found will fail your whole assignment

HAPPINESS is …finally finishing an assignment

Assignment Submission

Assignment Evaluation

- Following the "*Bookworm Assignment Evaluation Checklist*" to make sure that you will deliver a good product
  - bookworm_invidial_assignment_presentation_checklist_v2.0.pdf
- You will be asked to present your work following that checklist on the presentation day
- Your code will be reviewed as a part of evaluating your work and dynamic data will be applied to check your query.

Q&A