

Bookstore Assignment Introduction

Khoi Quan

April 2025



Bookstore Assignment Introduction

1. Introduction
2. Site Map
3. Common Functional Requirements
4. Page Functional Requirements
5. Database Diagram
6. Installation & Configuration
7. Assignment Submission

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



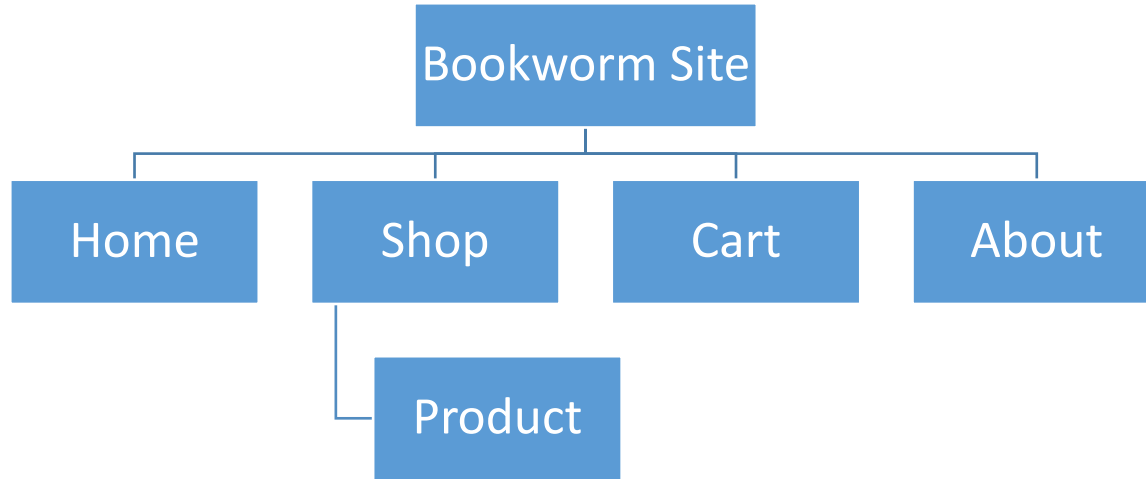
Introduction

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 Bootstrap) 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

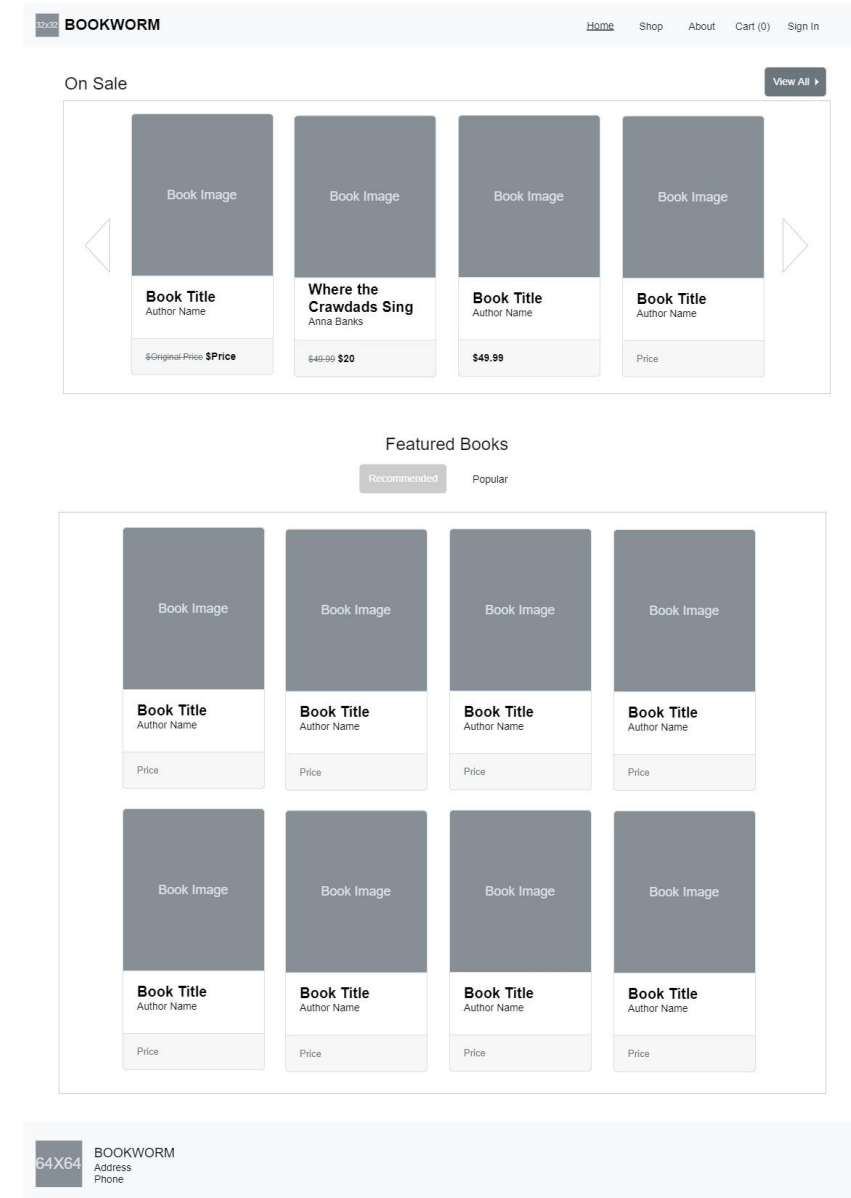
- Use the USD as the main currency - \$ as the main currency symbol
- There are 2 price types, book price (book_price@books table) and discount price (discount_price@discounts table)
- The discount price might have an expired date, if not it is unlimited time. It is only **available** when the current 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

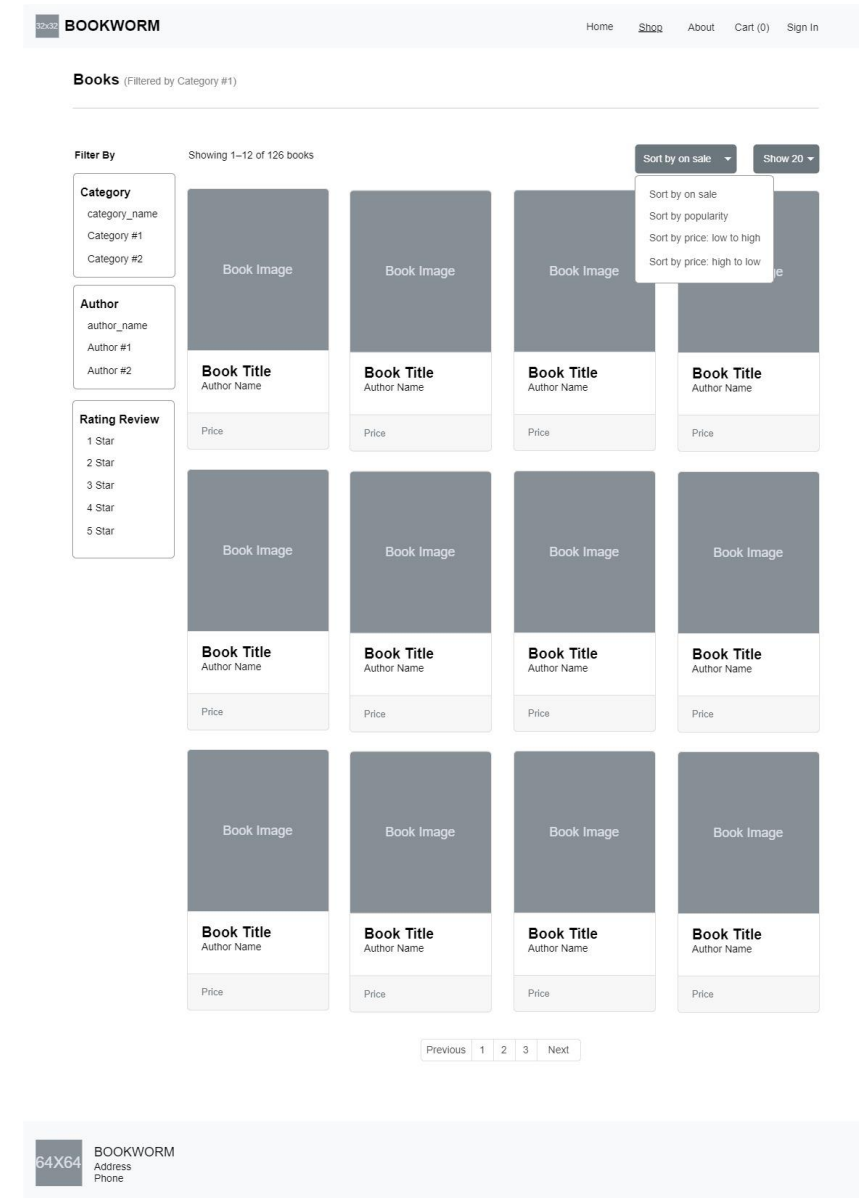
- On sale section
 - Display as a slider of book card item like the carouse of Bootstrap with multiple items
 - Get top 10 books with the most discount
 - Click on each book will open the product page of this book
 - Click on the View All button will open the shop page that automatically apply sort by 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

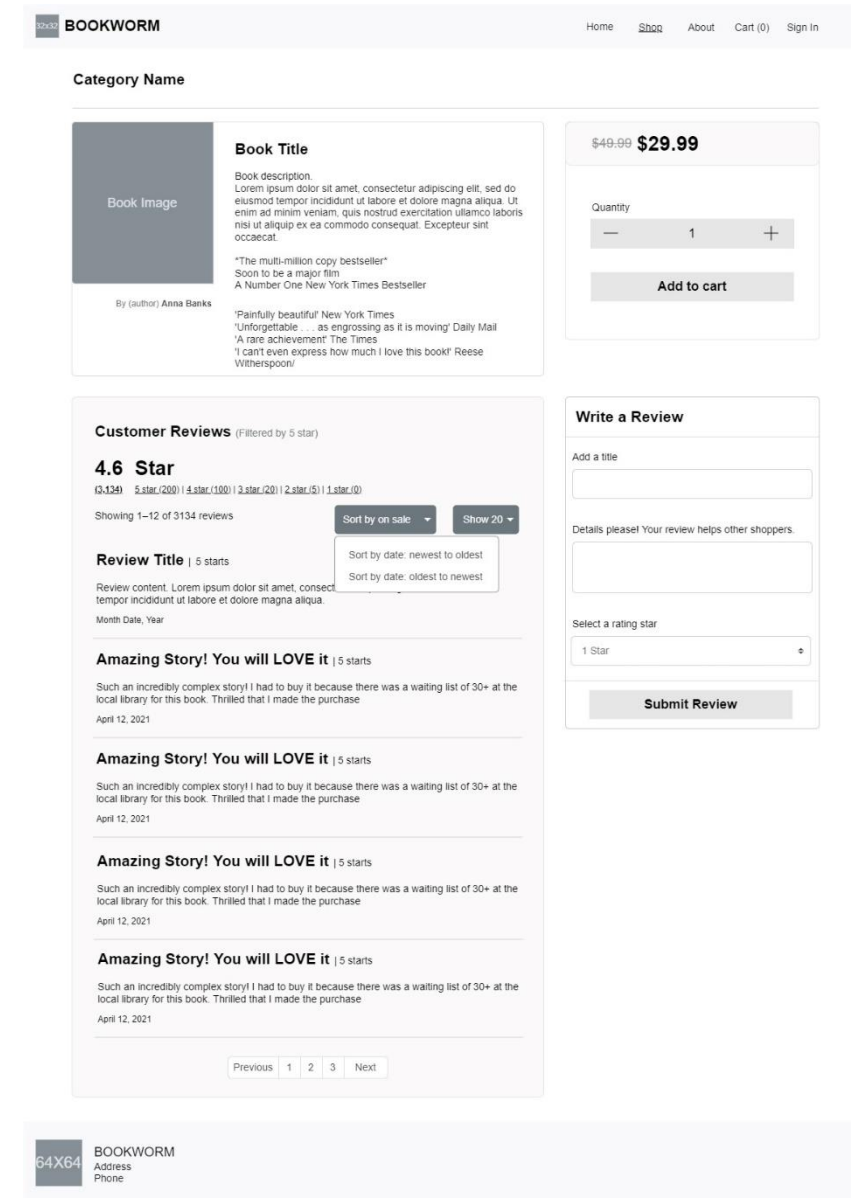
- Listing
- Sorting
 - Allow to sort by on sale
 - Allow to sort by popularity
 - Allow to sort by price
- Filtering - display each filter type section as an accordion behaviour
 - Category
 - Author
 - Rating Review



Page Functional Requirements

Product page

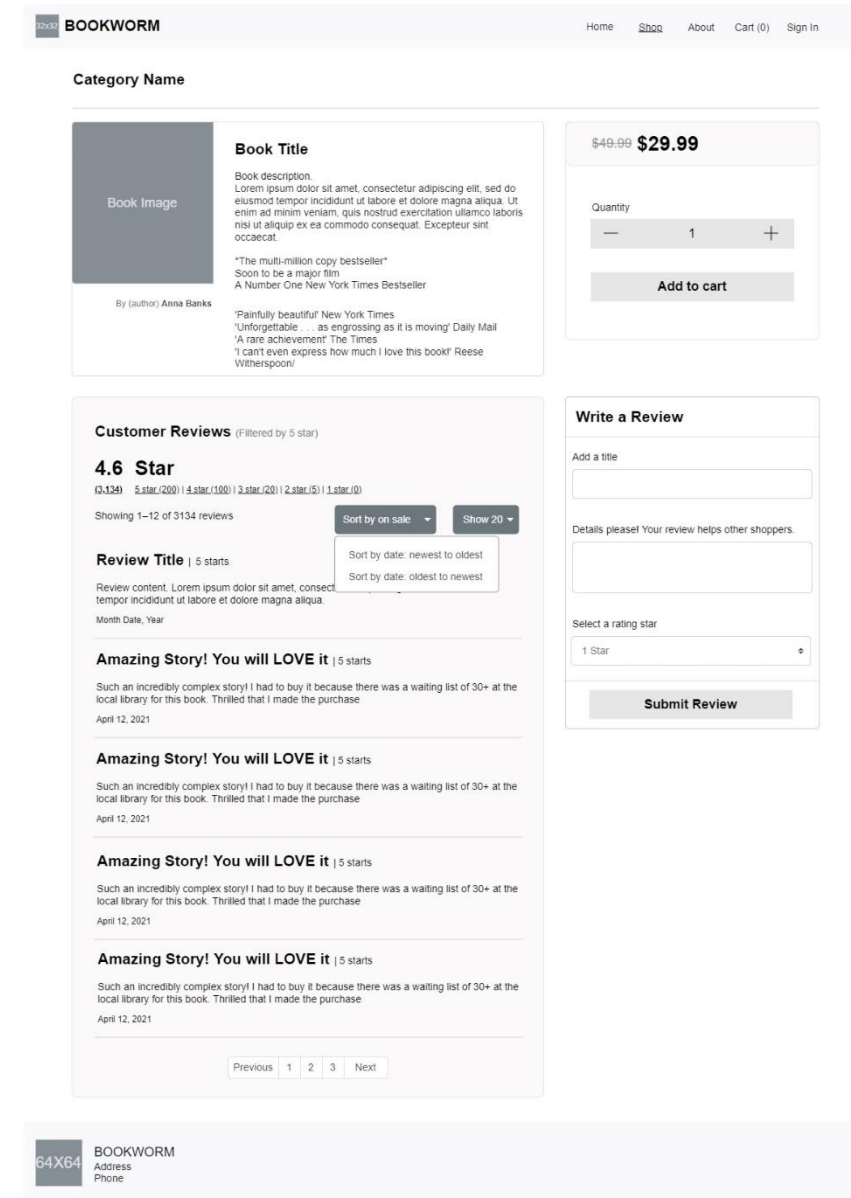
- Book details
- Add to cart
 - Display a discount price if it is available and put the book price in front. Otherwise, only display the book price
 - Provide a quantity input, maximum is 8 and minimum is 1.
 - Click 'Add to cart' button to put the book with quantity to the cart, and increase the number 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:
$$\diamond AR = (1*a+2*b+3*c+4*d+5*e) / (a+b+c+d+e)$$
 - 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

The mockup displays a product page for 'BOOKWORM'. At the top, a navigation bar includes links for Home, Shop, About, Cart (0), and Sign In. The main content area is divided into three columns. The left column features a 'Book Image' placeholder. The middle column displays the 'Book Title', a description, and author information. The right column shows the price (\$49.99 to \$29.99), a quantity selector, and an 'Add to cart' button. Below the book details, a 'Customer Reviews' section shows a 4.6 star rating and a list of reviews. A 'Write a Review' form is located on the right side of the reviews section. The footer contains the 'BOOKWORM' logo and contact information.

BOOKWORM

Home Shop About Cart (0) Sign In

Category Name

Book Image

Book Title

Book description

By (author) Anna Banks

Quantity

Add to cart

Customer Reviews (Filtered by 5 star)

4.6 Star

Showing 1–12 of 3134 reviews

Sort by on sale Sort by date: newest to oldest Sort by date: oldest to newest

Review Title | 5 stars

Review content: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Month Date, Year

Amazing Story! You will LOVE it | 5 stars

Such an incredibly complex story! I had to buy it because there was a waiting list of 30+ at the local library for this book. Thrilled that I made the purchase

April 12, 2021

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April 12, 2021

Previous 1 2 3 Next

Write a Review

Add a title

Details please! Your review helps other shoppers.

Select a rating star

1 Star

Submit Review

BOOKWORM

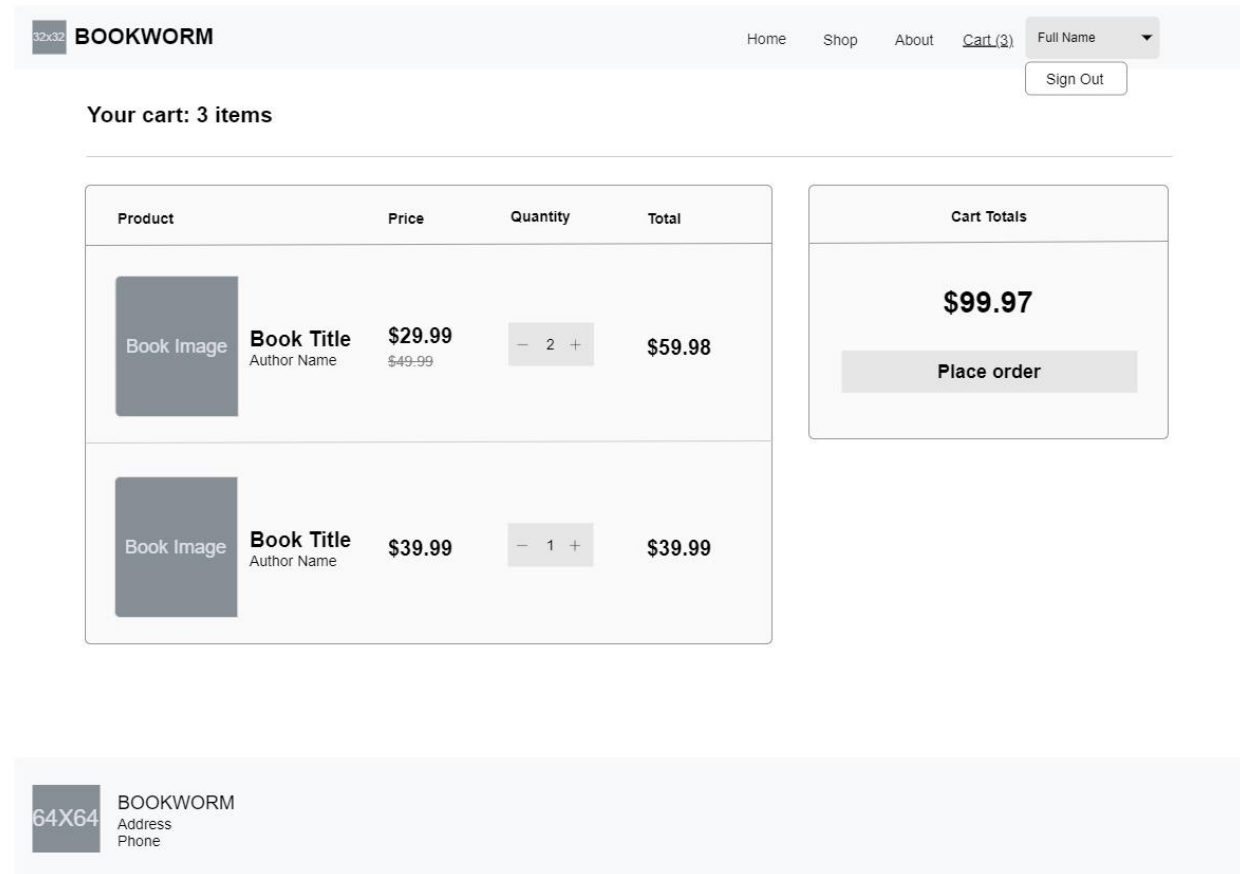
Address

Phone

Page Functional Requirements

Cart page

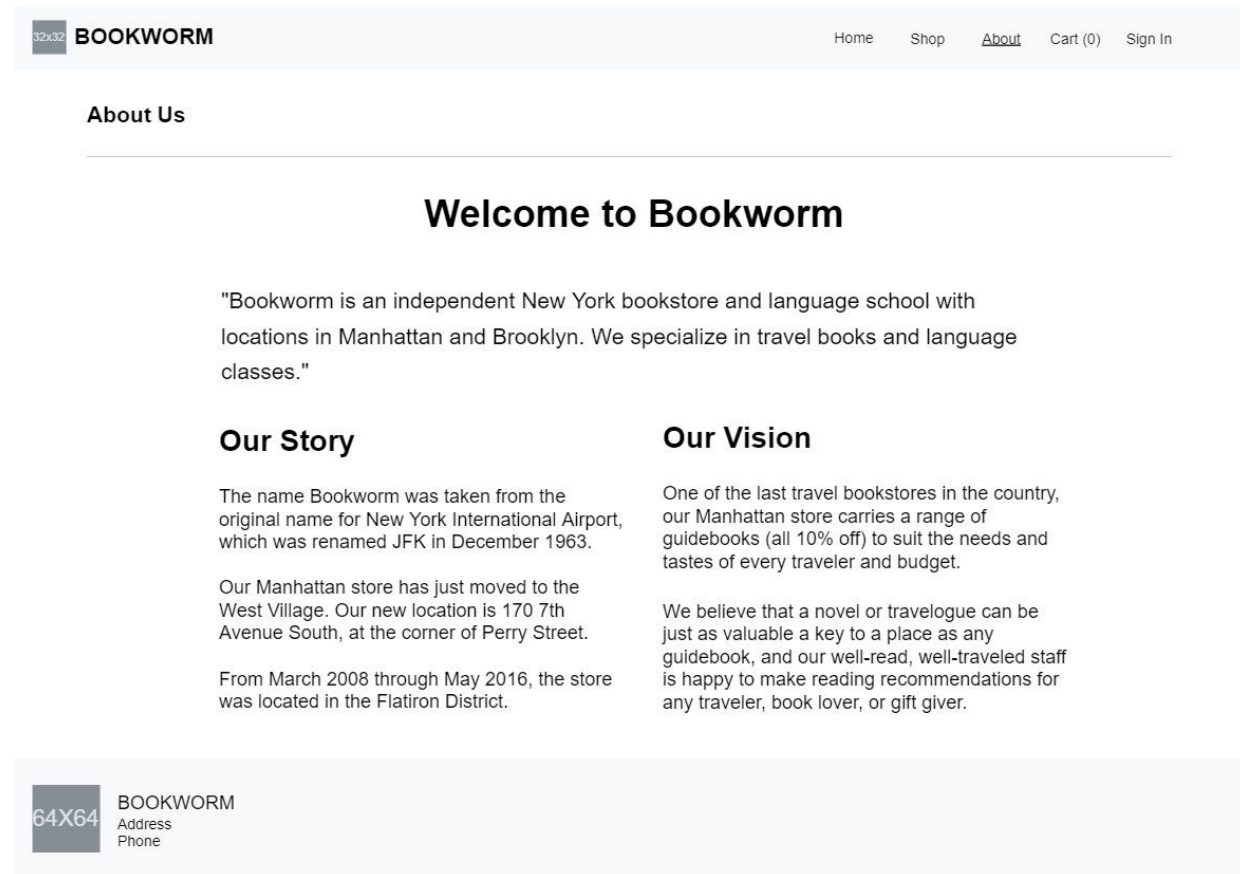
- Cart item list
 - Show information cart following the mock-up
 - Can click to an item to open a product page in a new tab
 - Allow updating the quantity of each item
 - If it is set to 0 then remove this item from the cart
 - Only allow a maximum of 8 quantity for each item
- Cart total
 - Automatically 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

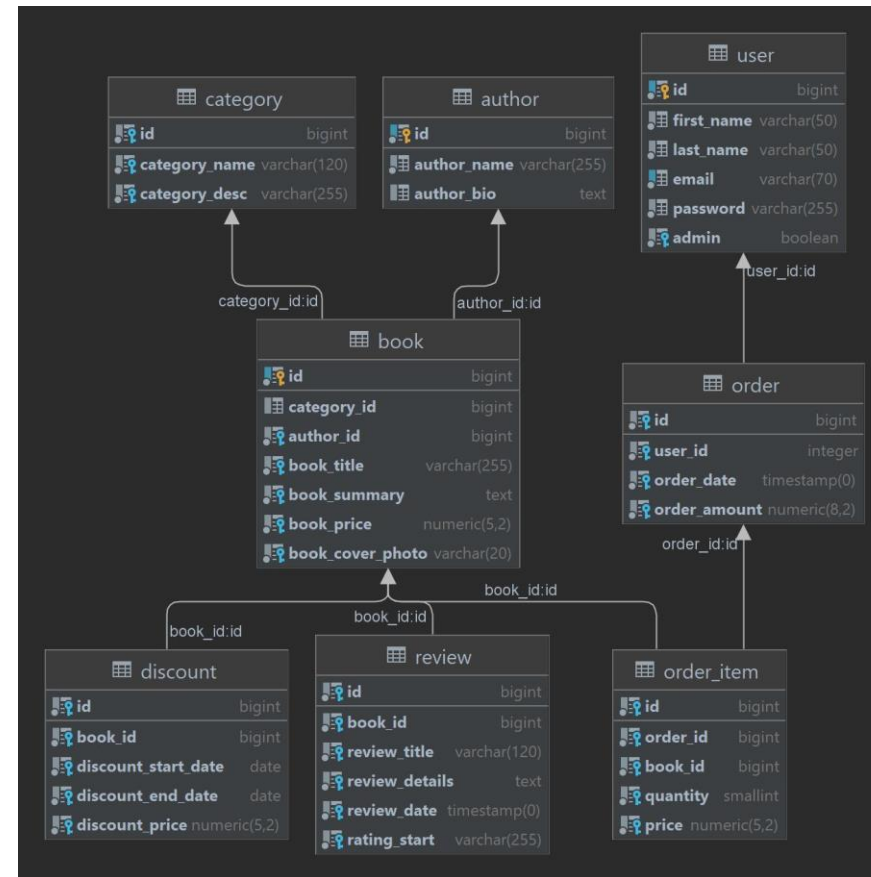


Database Diagram

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.



A vibrant, high-contrast image featuring a dynamic splash of blue liquid. The splash is captured in mid-air, with multiple droplets and a large, flowing mass of liquid. The background is a gradient of red and purple, with the red being more prominent on the right side. A white rectangular box is superimposed over the center of the splash, containing the text 'Q&A' in a bold, white, sans-serif font.

Q&A