***Yankee***

***Bookish-Bookstore***



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# **Planning and Preparation**

## Planning

**Defining the Scope**

* Catalog of books with categories.
* Functionalities for user registration, login and book search.
* Basic recommendation system based on user behavior.

**Feasibility and Risk Analysis**

* Estimating project timelines and aligning with school deadlines.
* Analyzing and preparing for potential risks in project development.

**Team Roles and Responsibilities**

* Splitting the workload among three team members, each with distinct roles such as front-end developer, back-end developer, and database administrator.

**Project Timeline**

* Setting up milestones for design, development, testing, and presentation phases.

## Wireframes

1. **Gathering Requirements:** First, we gathered requirements from the project stakeholders, such as the client and end users. We identified key functionalities like user registration, product listings, shopping cart management, and checkout.
2. **Wireframe Tools:** We decided to use Figma, a collaborative design tool. We created an account and set up a project for the bookstore website.
3. **Key Screens:** We started by creating wireframes for key screens, including the homepage, user registration, login, book listing, shopping cart, and checkout pages. For each screen, we included different states and interactions.
4. **Labeling and Annotations:** We labeled each UI element to describe its purpose, and we used annotations to provide additional information. For example, we labeled the "Add to Cart" button and annotated that it should increment the product quantity in the shopping cart.
5. **User Feedback:** We shared the wireframes with the client and development team to get feedback. Based on their input, we made necessary revisions and improvements.

## Data Model

1. **Selecting a Tool:** To design the database, we opted for MySQL Workbench, a widely-used database design tool.
2. **Entity-Relationship Diagram:** We created an ER diagram that represented the entities, attributes, and relationships within our database. In our case, entities included "Books," "Users," "Orders," and "Authors."
3. **Attributes and Constraints:** For each entity, we defined attributes (e.g., book title, author name, user email) along with data types and constraints (e.g., primary keys, foreign keys, unique constraints).
4. **Relationships:** We illustrated the relationships between entities using lines and diamonds. For instance, we showed a one-to-many relationship between "Users" and "Orders," indicating that one user could have multiple orders.
5. **Normalization:** We ensured that our data model adhered to normalization rules, such as 1NF, 2NF, and 3NF, to minimize data redundancy and maintain data integrity.

# E/R Diagram

1. **Selecting Notation:** We chose Crow's Foot Notation for our ERD.
2. **Entities:** In the ERD, we represented entities (e.g., "Books" and "Authors") as rectangles, each labeled with its name.
3. **Attributes:** We used oval shapes to represent attributes (e.g., "BookTitle" and "AuthorName") within entities. Lines connected attributes to their respective entities, and we added data types and constraints.
4. **Relationships:** We depicted relationships using diamond shapes. For instance, we used a diamond to show the relationship between "Books" and "Authors" to signify that books are authored by authors.
5. **Cardinality:** To indicate the cardinality of relationships, we used lines and numbers to show if it's one-to-one, one-to-many, or many-to-many.
6. **Annotations:** For complex relationships, we added annotations to explain them further. For example, we clarified that one "User" can place multiple "Orders."
7. **Example Queries:** To complete our ERD, we included sample SQL queries to illustrate how data can be queried from the database.
8. **Review and Refine:** We shared the ERD with our database administrators and team members, and they provided feedback and suggestions for refinement.

## Research Performed

**Market Research**

* Analyzed existing online bookstores to understand essential features and best practices.
* Explored different book genres and categories popular in online platforms.

# **Website Details**

## Website URL

<https://bookish.azurewebsites.net/>

## GitHub Repository URL

<https://github.com/001elias/Final-Project-WebDev>

## Overall Goal and Purpose of the Website

The goal of the "Bookish Bookstore" website is to provide an interactive and user-friendly online platform for book enthusiasts to explore, review, and purchase books across various genres. The site aims to cater to a community of readers by offering personalized recommendations, up-to-date inventories, and a seamless shopping experience.

## Description of Website Sections and Overall Workflow

**Homepage**

* Features a clean and engaging design with a carousel highlighting best-selling books.
* Quick navigation options include "Home," "Books," "Categories," "Contact Us," "About Us," "Login," and "Register."

**Books Section**

* A catalog of available books that users can browse.
* Includes search functionality for users to find books by title or category.

**Categories Section**

* Organized division of books into genres or categories, allowing users to filter books based on their interests.

**Contact Us Section**

* Provides users with the bookstore's contact information.
* Offers a contact form for the clients to contact customer service.

**About Us Section**

* Gives background information about the bookstore.
* Highlights the store's mission and the value it provides to customers.

**User Registration and Login**

* Allows new users to create an account and returning users to log in.
* A secure system to protect user information and provide a personalized experience.

**Shopping Cart and Checkout Workflow**

* Users can add books to their shopping cart and proceed to checkout.
* The checkout process includes the submission of shipping and payment information.

**Footer**

* Contains contact information, social media links, and additional resources for users.

**Overall Workflow**

* Users are welcomed with featured books and promotions.
* Navigation is straightforward, with clear pathways to book details and purchase options.
* Registered users can save favorite books and receive recommendations.
* The shopping process is designed to be intuitive, from selection to payment.

**Additional Considerations**

* The website is designed to be responsive, ensuring it is accessible and functional across various devices and screen sizes.
* Security measures are implemented to protect user data and transactions.
* The design is scalable, allowing for future expansion of the bookstore’s offerings and features.

# **Communications**

# **Post-Mortem**

# **Project Feedback**