# **Book Online Store**

#### Introduction:

- Store Name: Bookiee
- ❖ Description: A PHP-based e-commerce web application for an online bookstore, allowing users to browse, search, and purchase books, manage carts and orders, and contact support, with an admin dashboard for managing products, orders, users, and messages.
- Technologies: HTML, CSS, JavaScript, PHP, MySQL
- Database: MySQL with tables: register (users), products (books), cart (user cart), orders (order details), message (contact messages)

### **Requirements:**

#### User Requirements:

- Admin and user login functionality.
- ♣ Admin dashboard for product management, order tracking, user removal, message handling, Record keeping of pending and completed payments, overview of total admin and user accounts.
- User-friendly cart system with the ability to add, search, and delete items.
- **♣** Intuitive search functionality for quick product discovery.
- Checkout process to add delivery details.
- User messaging system for queries and assistance.

### System Requirements:

- Functional Requirements: These specify what the system must do, aligning with user requirements but in technical terms.
  - ◆ User Registration: The system shall allow users to register by inserting a record into the register table with name, email, password (hashed), and user type (default: user).
  - User Login: The system shall authenticate users by querying the register table with email and password,

- ♦ Browse Products: The system shall display up to 6 products from the products table on (home.php) and all products on (shop.php) with name, price, and image.
- ♦ Search Products: The system shall query the products table for products matching a user-provided search term (using LIKE) and display results.
- ◆ Add to Cart: The system shall check if a product exists in the cart table for the user; if not, insert a record with user\_id, name, price, quantity, and image.
- ◆ Manage Cart: The system shall update the cart table's quantity field or delete records based on user input and display the updated cart with subtotals.
- ◆ Place Order: The system shall insert a record into the orders table with user\_id, name, number, email, method, address, total\_products, total\_price, placed\_on, and payment\_status (default: pending), then clear the user's cart.
- ◆ View Orders: The system shall query the orders table for records matching the user\_id and display order details (date, products, price, status).
- ◆ Contact Support: The system shall insert a message into the message table with user\_id, name, email, number, and message, preventing duplicates.
- ◆ Admin Dashboard: The system shall query the orders, products, register, and message tables to display metrics (pending/completed payments, total orders, products, users, admins, messages).
- ◆ Manage Orders: The system shall allow admins to update the payment status field or delete records in the orders table.
- ◆ Manage Users: The system shall display all records from the register table and allow admins to delete user records.
- ◆ Manage Messages: The system shall display all records from the message table and allow admins to delete messages.
- non-functional requirements: These specify how the system performs its functions, focusing on quality attributes.
  - ◆ Performance: The system shall respond to user actions (e.g., add to cart, place order) within 2 seconds under normal load (100 concurrent users).
  - **♦ Security: The system shall protect user data by:**

- Hashing passwords (currently MD5 in register.php, recommend password\_hash()).
- Using mysqli\_real\_escape\_string to prevent SQL injection
- Securing sessions (logout.php clears sessions).
- ◆ Usability: The system shall provide a responsive interface for desktop and mobile devices, with clear navigation and error messages.
- ◆ Scalability: The system shall support up to 10,000 products and orders, using AUTO\_INCREMENT for primary keys in products, orders, cart.
- ◆ Reliability: The system shall handle database errors gracefully, avoiding crashes (currently uses or die ('query failed')).
- Maintainability: The system shall be modular, with separate files for user (home.php, cart.php) and admin (admin\_products.php) functionalities.

### **System Modeling:**

#### **Type:**

♦ 3-tier architecture (Presentation, Business Logic, Data).

### Presentation Layer:

- **♦ HTML/CSS/JavaScript for user and admin interfaces.**
- ♦ Files: home.php, admin\_page.php, style.css, home.css, login.css, admin.css.

### **\*** Business Logic Layer:

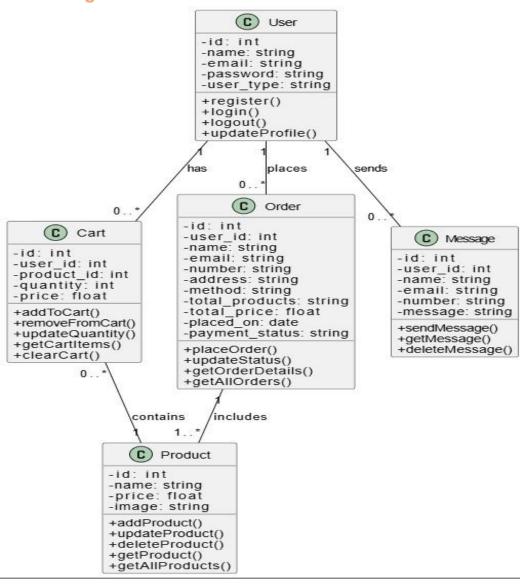
- ♦ PHP handles requests, processes data, and interacts with the database.
- ◆ Files: home.php (add to cart), checkout.php (order placement), admin\_products.php (product management).

### Data Layer:

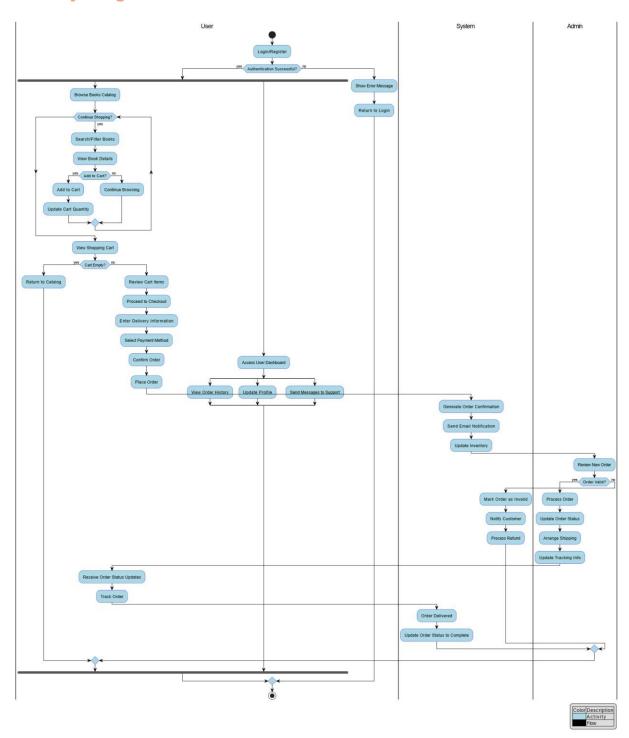
- ♦ MySQL database with tables: register, products, cart, orders, message (dbqueries).
- ◆ Connection: config.php (mysqli\_connect('localhost','root','','books')).

## **Design:**

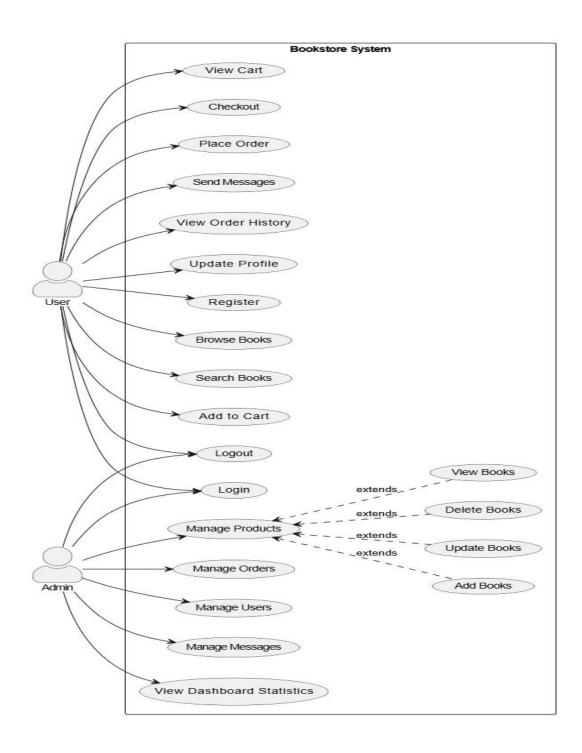
#### Class Diagram:



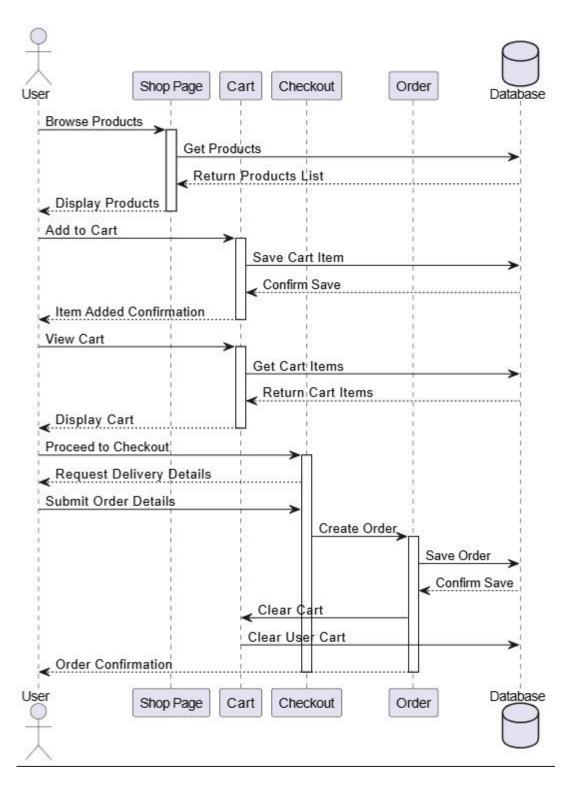
# **Activity Diagram:**



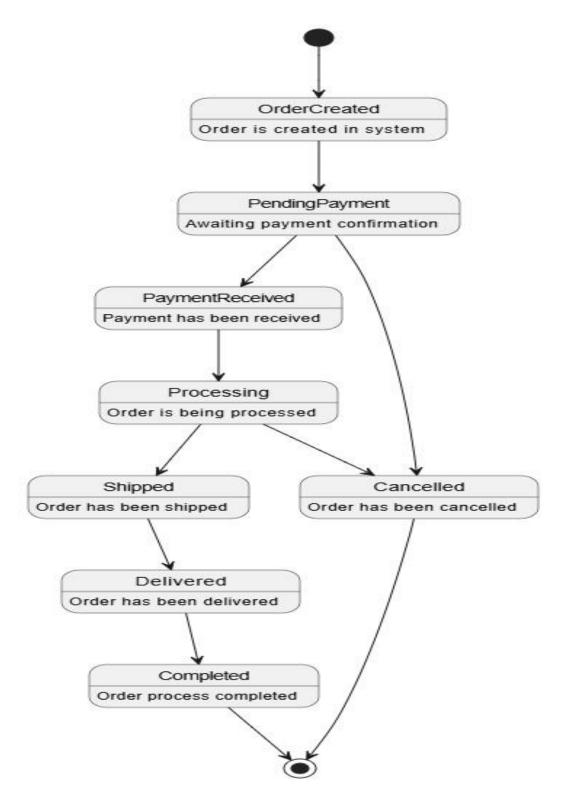
# UseCase Diagram:



# **❖** Sequence Diagram:



# State Diagram:



# Implementation:

The implementation phase of the "Bookiee" online bookstore project involves translating the design specifications (e.g., architecture, database schema, use case diagrams) into a functional system using the provided codebase. The project was developed using HTML, CSS, JavaScript, and PHP, with the XAMPP application to set up a local server environment for testing and deployment.

# **Testing:**

Register Page:



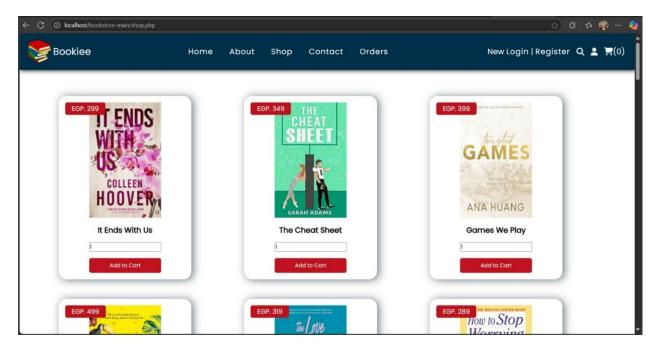
Admin and User Login Page:



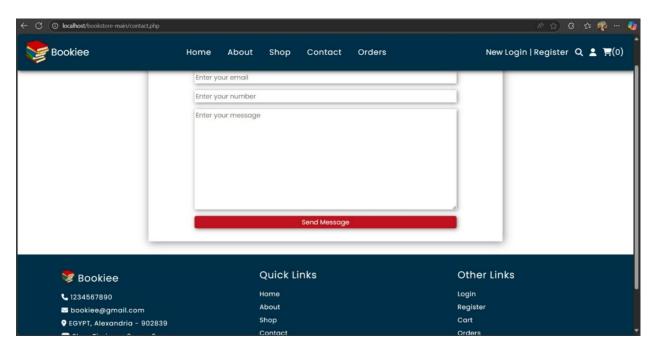
## Home Page:



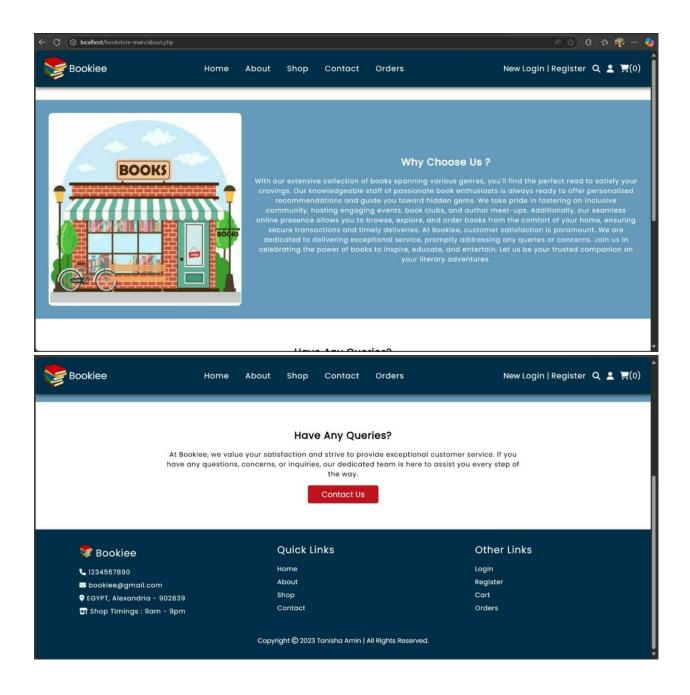
## Shop Page:



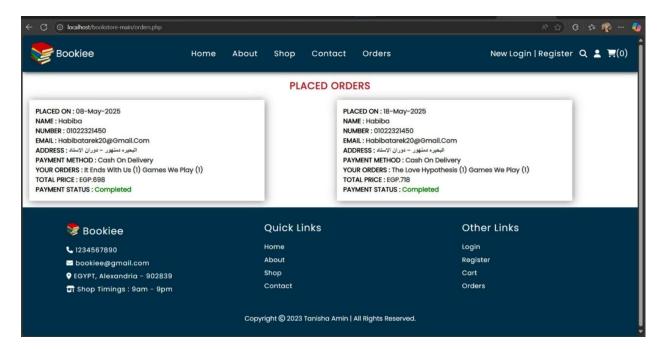
Contact Us Page:



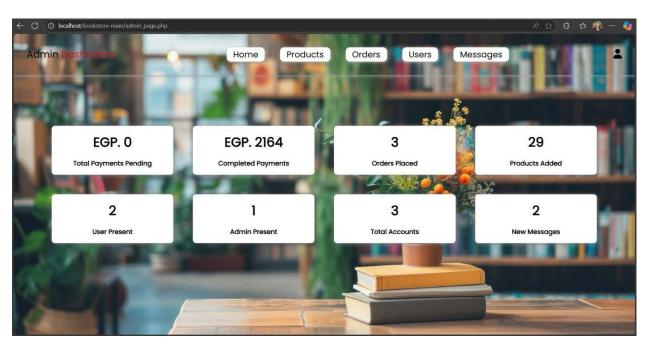
About Page:



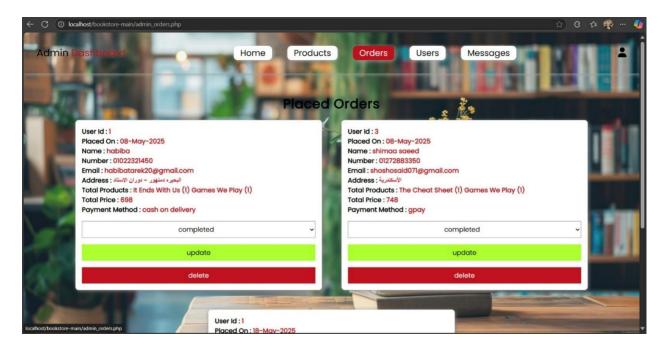
# User Orders Page:



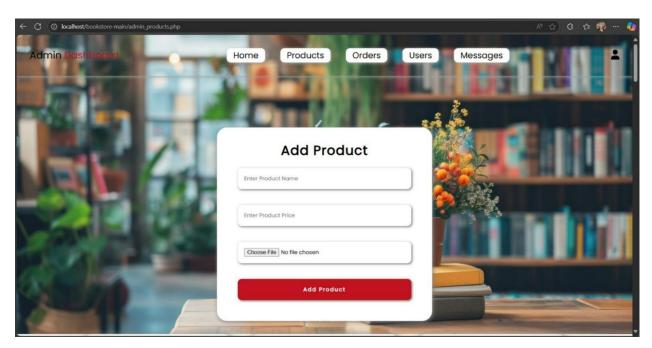
# Admin Dashboard (Home) Page:



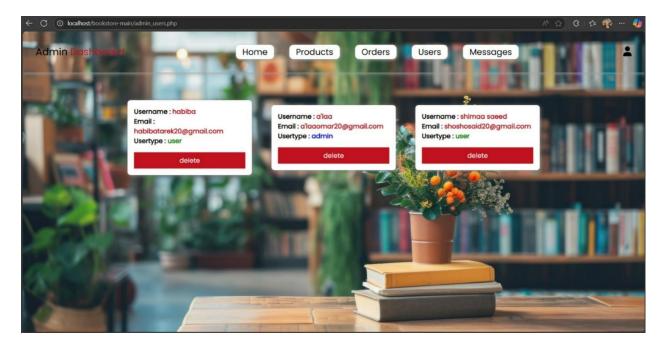
#### Admin Orders Page:



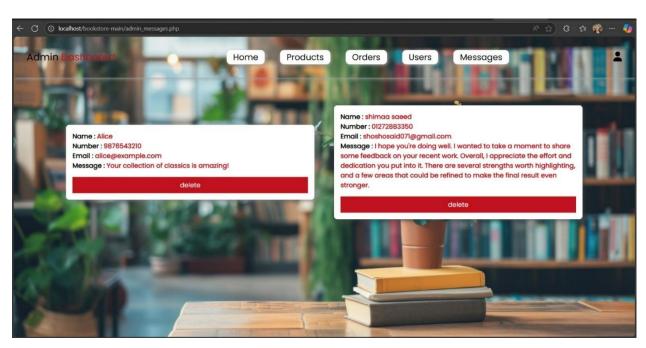
Admin Product Page:



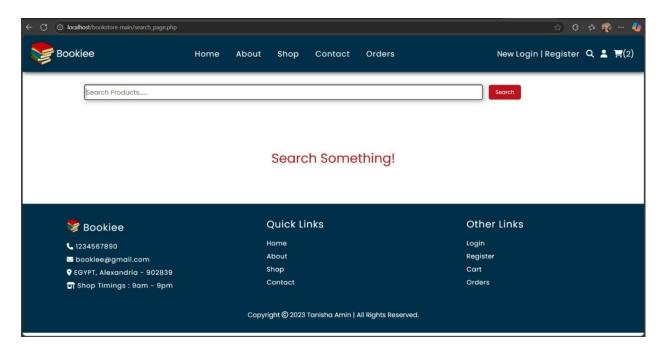
Admin control User Page:



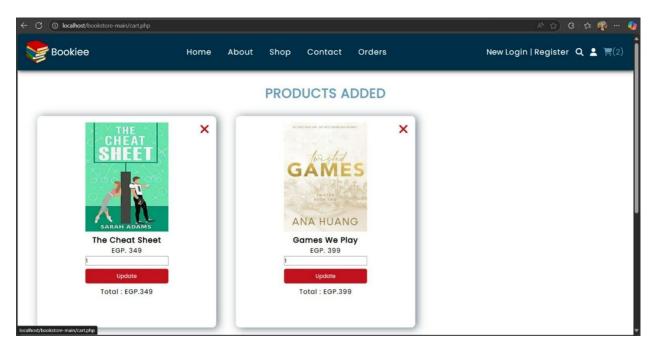
Admin Message Page:



Search Page:



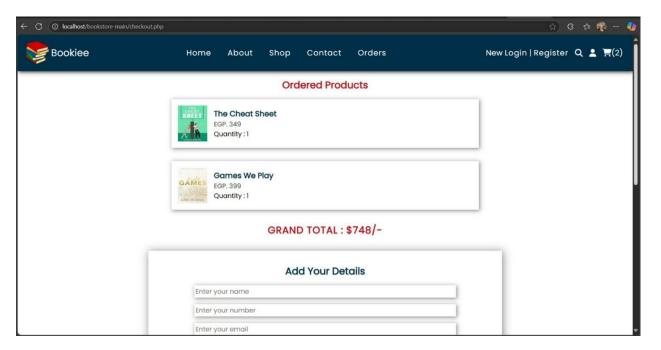
## Cart Page:

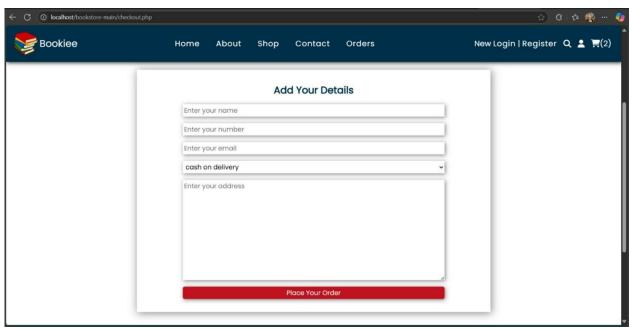


# Log Out Page:

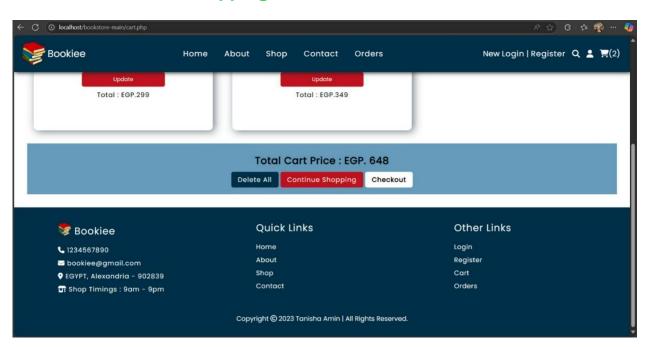


# Checkout Page:





Delete or Continue Shopping:



#### **New Features Preview**

#### 1. Theme Switcher

• Description: Users can toggle between light and dark themes for improved readability and preference.

#### 2. Floating Action Button (FAB) and Quick Actions Menu

 Description: A fixed FAB provides quick access to actions like starting a reading timer, viewing recommendations, joining a book club, or accessing reading history.

#### 3. Search with Suggestions

• Description: A search bar offers real-time book suggestions (e.g., "The Great Gatsby") that appear on focus and hide on blur.

#### 4. Reading Statistics Dashboard

• Description: Displays user metrics in a grid, including books read (42), reading hours (156), reviews written (28), and achievements (5).

#### 5. Book Carousel

 Description: A responsive carousel showcases recommended books with cover images, titles, and genre tags.

#### **6. Wishlist Functionality**

• Description: Users can add/remove books from their Wishlist, with a progress bar showing demand (e.g., 75%).

### 7. Reviews and Ratings System

• Description: Displays star-based ratings (e.g., 4.5/5) and user reviews, with an option to write a review.

### 8. Loyalty Program

• Description: A tiered system (e.g., Gold Member) tracks points (e.g., 2,500) and progress toward the next tier (e.g., 250 points).

#### 9. Social Features

• Description: Enables sharing reading progress on social media and promotes book club participation.

#### 10. Reading Challenge

• Description: Users set and track annual reading goals (e.g., 50 books), with progress displayed (e.g., 20/50).

#### 11. Book Preview Modal

• Description: Provides a sample excerpt in a modal window (e.g., for "Harry Potter").

#### 12. Reading Timer

• Description: Tracks reading duration in hours, minutes, and seconds.

#### 13. Book Club Schedule

• Description: Lists upcoming book club meetings with details (e.g., "Classic Literature Club, The Great Gatsby, March 15, 2024, 7:00 PM EST").

#### 14. Notification System

• Description: Alerts users to actions (e.g., wishlist updates, timer start) via toast notifications.

#### 15. Genre Tags

• Description: Interactive tags (e.g., Classic, Dystopian) allow filtering by genre.

### **16. Responsive Design and Animations**

 Description: Ensures compatibility across devices with smooth animations for user interactions.