# CHAPTER 1

# INTRODUCTION

The Online Book Store Responsive Website stands as a testament to modern convenience, offering users a seamless avenue to delve into the world of literature. With a diverse array of genres spanning from fiction to non-fiction, classics to contemporary works, the platform caters to the varied tastes of book enthusiasts. Its intuitive design and user-friendly interface prioritize ease of navigation, ensuring that users can effortlessly explore the extensive catalog and discover their next literary adventure. By seamlessly blending aesthetics with functionality, the website strives to create an immersive browsing experience that captivates and engages users from the moment they enter the digital bookstore.

At the heart of the Online Bookstore project lies a commitment to simplicity and accessibility. Through the integration of key e-commerce functionalities, such as user registration and secure login systems, the platform fosters a sense of trust and reliability among its users. By allowing customers to create accounts, the website empowers them to manage their orders and preferences with ease, fostering a personalized and tailored shopping experience. Furthermore, the inclusion of dynamic product catalog and search capabilities ensures that users can swiftly navigate through the vast collection of titles, enabling them to find precisely what they're looking for in a matter of moments.

Beyond mere convenience, the Online Bookstore project is driven by a dedication to excellence in customer service and satisfaction. By incorporating features like shopping cart management, secure payment processing, and order tracking, the platform seeks to streamline the entire purchasing process, from selection to checkout. With robust security measures in place to safeguard sensitive information, users can shop with confidence, knowing that their transactions are protected. Through continuous refinement and enhancement, the website aims to redefine the online book-buying experience, setting new standards for convenience, reliability, and user engagement in the digital age.

## 1.1 Objectives

Enhance User Experience: Continuously improve the user interface and overall experience by soliciting feedback, conducting usability testing, and implementing user-centric design principles. This involves refining navigation pathways, optimizing load times, and ensuring seamless interactions across various devices and screen sizes.

Expand Book Catalog: Regularly update and expand the book catalog to offer a wider selection of titles, including new releases, bestsellers, and niche genres. Collaborate with publishers, authors, and distributors to source diverse content and cater to the evolving preferences of the user base.

Implement Recommendation System: Integrate a recommendation system based on user preferences, browsing history, and purchase behavior. By leveraging machine learning algorithms or collaborative filtering techniques, the platform can suggest personalized book recommendations to users, enhancing discoverability and driving engagement.

Enable Social Features: Incorporate social features such as user reviews, ratings, and sharing functionalities to foster community engagement and facilitate word-of-mouth marketing. Allow users to interact with each other, share reading lists, and recommend books, creating a vibrant and interactive online book community.

Offer Multi-language Support: Implement multi-language support to accommodate users from diverse linguistic backgrounds. Provide language options for both the interface and book descriptions, ensuring inclusivity and accessibility for a global audience.

Integrate Analytics and Reporting: Incorporate analytics tools to track user behavior, monitor site traffic, and analyze sales performance. Generate comprehensive reports and dashboards to gain insights into customer preferences, conversion rates, and trends, empowering data-driven decision-making and strategic planning.

Ensure Scalability and Reliability: Design the architecture and infrastructure of the online bookstore to be scalable and resilient, capable of handling increasing traffic, user interactions, and data storage demands. Implement redundancy measures, backup systems, and disaster recovery protocols to ensure continuous availability and minimize downtime.

## 1.2 Scope of the project

1. User registration and authentication: Allow users to create accounts securely and log in, providing access to personalized features and ensuring data privacy.

2. Book browsing and searching: Enable users to explore a wide range of books through intuitive browsing categories and efficient search functionality.

3. Detailed book pages: Present comprehensive information about each book, including descriptions, user reviews, and ratings, aiding users in making informed purchasing decisions.

4. Shopping cart functionality: Allow users to add books to their carts, review their selections, and proceed to checkout seamlessly for a convenient shopping experience.

5. Order management: Enable users to track their orders, view order history, and manage account settings, while administrators can efficiently manage inventory, process orders, and handle customer inquiries.

# CHAPTER 2

# SYSTEM REQUIREMENTS

## 2.1 Front End Tools

The frontend of the website serves as the visual gateway to the online bookstore, crafted with a blend of HTML, CSS, and JavaScript technologies. HTML forms the structural foundation, defining the layout and hierarchy of elements such as headers, navigation menus, content sections, and footer. CSS then steps in to add style and aesthetics, applying colors, fonts, spacing, and visual effects to enhance the presentation and create a cohesive design language.

JavaScript injects interactivity and dynamism into the frontend, enabling features such as dropdown menus, interactive sliders, collapsible panels, and real-time validation in forms. Through event-driven programming, JavaScript facilitates seamless user interactions, allowing users to browse, search, and engage with the bookstore's catalog in a fluid and intuitive manner. Whether it's dynamic loading of content, client-side form validation, or asynchronous updates to the shopping cart, JavaScript plays a pivotal role in elevating the user experience and driving engagement.

Together, HTML, CSS, and JavaScript form a powerful trifecta that not only renders the online bookstore visually appealing but also ensures usability, accessibility, and responsiveness across a variety of devices and screen sizes. By harnessing the capabilities of these frontend technologies, the website delivers a captivating and user-friendly interface that invites exploration, fosters interaction, and ultimately facilitates seamless transactions within the digital realm of literature.

## 2.2 Back End Tools

The backend of the online bookstore is powered by PHP, serving as the engine that drives the processing and management of user requests, form submissions, and authentication procedures. PHP scripts handle incoming requests from the frontend, executing server-side

logic to validate user input, process form submissions, and orchestrate interactions with the database.

Through PHP's versatile features and robust libraries, the backend seamlessly communicates with the MySQL database, fetching and updating data to ensure accurate representation of the bookstore's inventory, user profiles, and order history. This includes tasks such as retrieving book details, adding items to shopping carts, processing payments, and updating user information.

DATABASE:

MySQL serves as the robust relational database management system (RDBMS) underpinning the online bookstore, housing a structured repository of crucial data pertaining to books, user profiles, orders, and various other relevant information. Through MySQL's efficient storage and retrieval mechanisms, the database ensures seamless access to a vast array of book-related details, including titles, authors, genres, descriptions, prices, and availability statuses.

In addition to book-related data, MySQL stores comprehensive user profiles, capturing essential details such as usernames, passwords (securely encrypted), contact information, and preferences. This enables personalized user experiences, allowing individuals to manage their orders, track shipments, and receive tailored recommendations based on their browsing and purchasing history.

# CHAPTER 3

# DESIGN

The design chapter of this project report outlines the process and considerations that went into the design of the project. This includes the identification of design goals and objectives, the collection and analysis of data, the development of the system or product design, and the validation and testing of the design. It provides a comprehensive understanding of the project's design, established principles and practices.

## 3.1 Schema Diagram

The schema diagram is a visual representation of the structure and relationships of the database used in the Online Book store project. It illustrates the tables, columns, and relationships between the different elements of the database, and provides a clear overview of the organization and layout of the data. The schema diagram is an important tool for understanding the underlying data model of the Online Book store project, and for identifying the relationships and dependencies between different data entities.

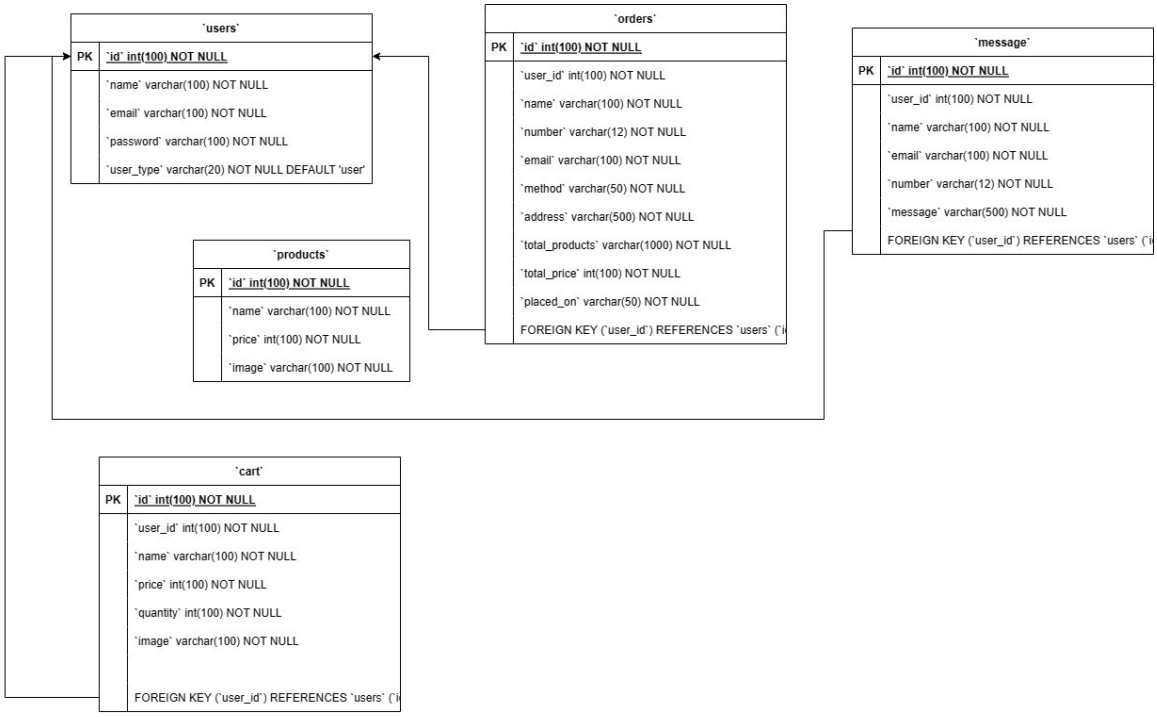


Fig 3.1 schema diagram of the database

## 3.2 ER Diagram

The Entity Relationship (ER) diagram is a visual representation of the data model of the Online Book store project. It illustrates the entities, attributes, and relationships between the different elements of the data model, and provides a clear overview of the organization and structure of the data. The ER diagram is an important tool for understanding the underlying data model of the Online Book store project and for identifying the relationships and dependencies between different data entities. Arrows indicate the direction of these relationships. This diagram provides a clear visualization of the database structure and the connections between its entities.

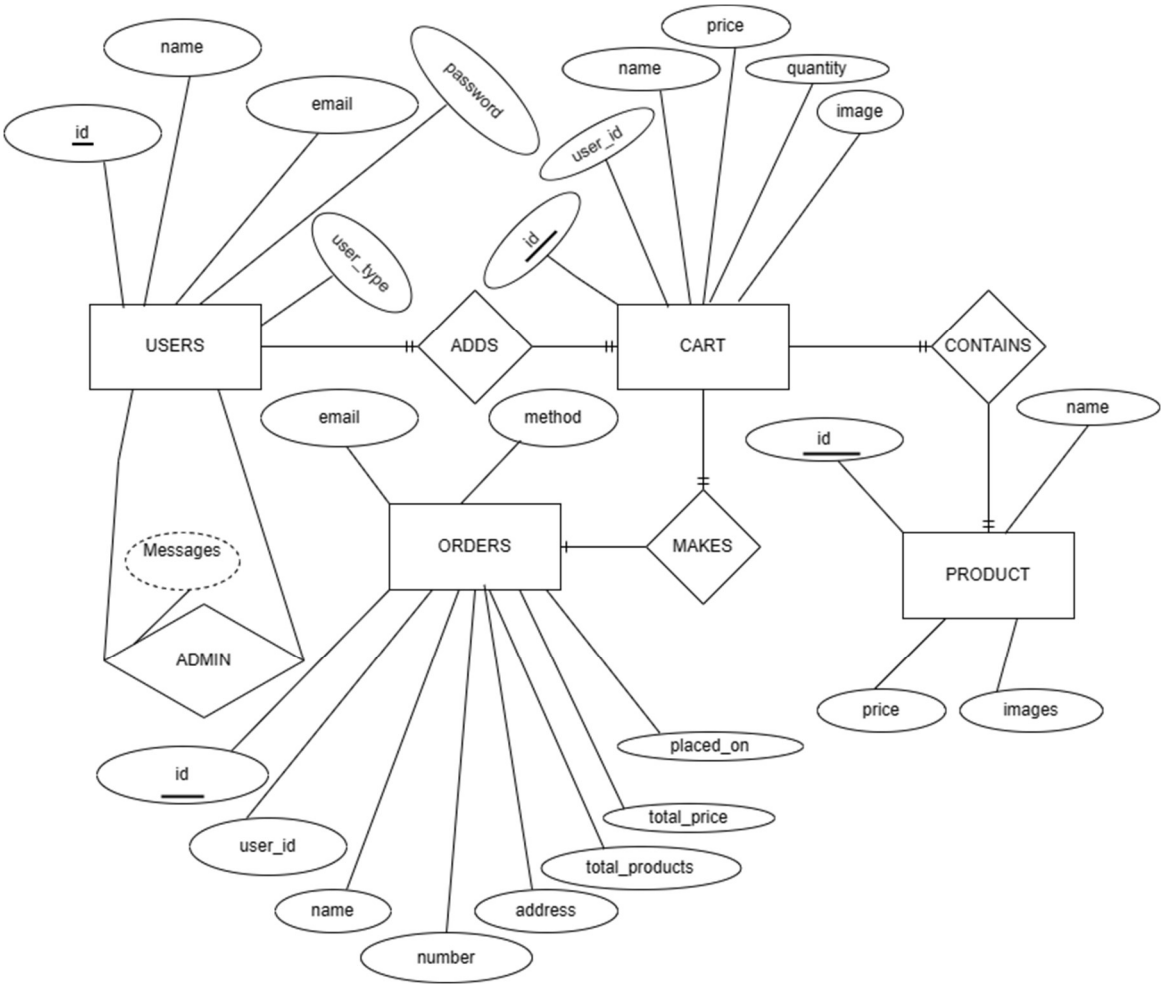


Fig 3.2 ER-Diagram

# CHAPTER 4

## IMPLEMENTATION

Implementation of the online book store responsive website project involves several steps to bring the vision to life. Here's a general outline of the implementation process:

1. Planning and requirement gathering:

- define the objectives and scope of the project.
- gather requirements from stakeholders to understand their needs and expectations.
- create a detailed plan outlining tasks, timelines, and resources required for implementation.

2. Designing the user interface (ui):

- design wireframes and mockups for the website layout, considering responsive design principles.
- choose a color scheme, typography, and imagery that align with the brand identity and enhance user experience.
- ensure easy navigation and intuitive user interaction throughout the website.

3. Frontend development:

- start with the html structure, building the foundation of the website.
- implement css styles to bring the design to life and make the website visually appealing.
- use javascript for client-side interactivity, such as form validation, dynamic content loading, and smooth transitions.
- apply responsive web design techniques using media queries to ensure compatibility across various devices and screen sizes.

4. Backend development:

- set up a server environment with php support for server-side scripting.
- design and implement the backend database schema using mysql for storing books, user data, and order information.
- develop php scripts to handle user authentication, session management, and database interactions.
- implement server-side validation and security measures to prevent common vulnerabilities such as sql injection and cross-site scripting (xss).

```php
if(isset($_POST['submit'])){

   $name = mysqli_real_escape_string($conn, $_POST['name']);
   $email = mysqli_real_escape_string($conn, $_POST['email']);
   $pass = mysqli_real_escape_string($conn, md5($_POST['password']));
   $cpass = mysqli_real_escape_string($conn, md5($_POST['cpassword']));
   $user_type = $_POST['user_type'];

   $select_users = mysqli_query($conn, "SELECT * FROM `users` WHERE email = '$email' AND password = '$pass'") or die('query failed');

   if(mysqli_num_rows($select_users) > 0){
      $message[] = 'user already exist!';
   }else{
      if($pass != $cpass){
         $message[] = 'confirm password not matched!';
      }else{
         mysqli_query($conn, "INSERT INTO `users`(name, email, password, user_type) VALUES('$name', '$email', '$cpass', '$user_type')") or die('query failed');
         $message[] = 'registered successfully!';
         header('location:login.php');
      }
   }

}
```

Fig 4.1 code snippet of register page

```php
if(isset($_POST['submit'])){

   $email = mysqli_real_escape_string($conn, $_POST['email']);
   $pass = mysqli_real_escape_string($conn, md5($_POST['password']));

   $select_users = mysqli_query($conn, "SELECT * FROM `users` WHERE email = '$email' AND password = '$pass'") or die('query failed');

   if(mysqli_num_rows($select_users) > 0){

      $row = mysqli_fetch_assoc($select_users);

      if($row['user_type'] == 'admin'){

         $_SESSION['admin_name'] = $row['name'];
         $_SESSION['admin_email'] = $row['email'];
         $_SESSION['admin_id'] = $row['id'];
         header('location:admin_page.php');

      }elseif($row['user_type'] == 'user'){

         $_SESSION['user_name'] = $row['name'];
         $_SESSION['user_email'] = $row['email'];
         $_SESSION['user_id'] = $row['id'];
         header('location:home.php');

      }
```

Fig 4.2 code snippet of login page

admin_page.php

xampp > htdocs > project > admin_page.php

```
            $number_of_users = mysqli_num_rows($select_users);
          ?>
          <h3><?php echo $number_of_users; ?></h3>
          <p>normal users</p>
        </div>

        <div class="box">
          <?php
            $select_admins = mysqli_query($conn, "SELECT * FROM `users` WHERE user_type = 'admin'") or die('query failed');
            $number_of_admins = mysqli_num_rows($select_admins);
          ?>
          <h3><?php echo $number_of_admins; ?></h3>
          <p>admin users</p>
        </div>

        <div class="box">
          <?php
            $select_account = mysqli_query($conn, "SELECT * FROM `users`") or die('query failed');
            $number_of_account = mysqli_num_rows($select_account);
          ?>
          <h3><?php echo $number_of_account; ?></h3>
          <p>total accounts</p>
        </div>

        <div class="box">
          <?php
            $select_messages = mysqli_query($conn, "SELECT * FROM `message`") or die('query failed');
            $number_of_messages = mysqli_num_rows($select_messages);
          ?>
          <h3><?php echo $number_of_messages; ?></h3>
```

Fig 4.3 code snippet of admin home page

```
if(isset($_POST['add_to_cart'])){

   $product_name = $_POST['product_name'];
   $product_price = $_POST['product_price'];
   $product_image = $_POST['product_image'];
   $product_quantity = $_POST['product_quantity'];

   $check_cart_numbers = mysqli_query($conn, "SELECT * FROM `cart` WHERE name = '$product_name' AND user_id = '$user_id'") or die('query failed');

   if(mysqli_num_rows($check_cart_numbers) > 0){
      $message[] = 'already added to cart!';
   }else{
      mysqli_query($conn, "INSERT INTO `cart`(user_id, name, price, quantity, image) VALUES('$user_id', '$product_name', '$product_price', '$product_quantity', '$product_image')") or die('query failed');
      $message[] = 'product added to cart!';
   }

}
?>
```

Fig 4.4 code snippet of user's home page

# CHAPTER 5

## INTERPRETATION OF RESULT

This chapter presents the output of the Online Bookstore and discusses the results of the completed project. It includes a collection of snapshots of the output and an analysis of the results and the implications.

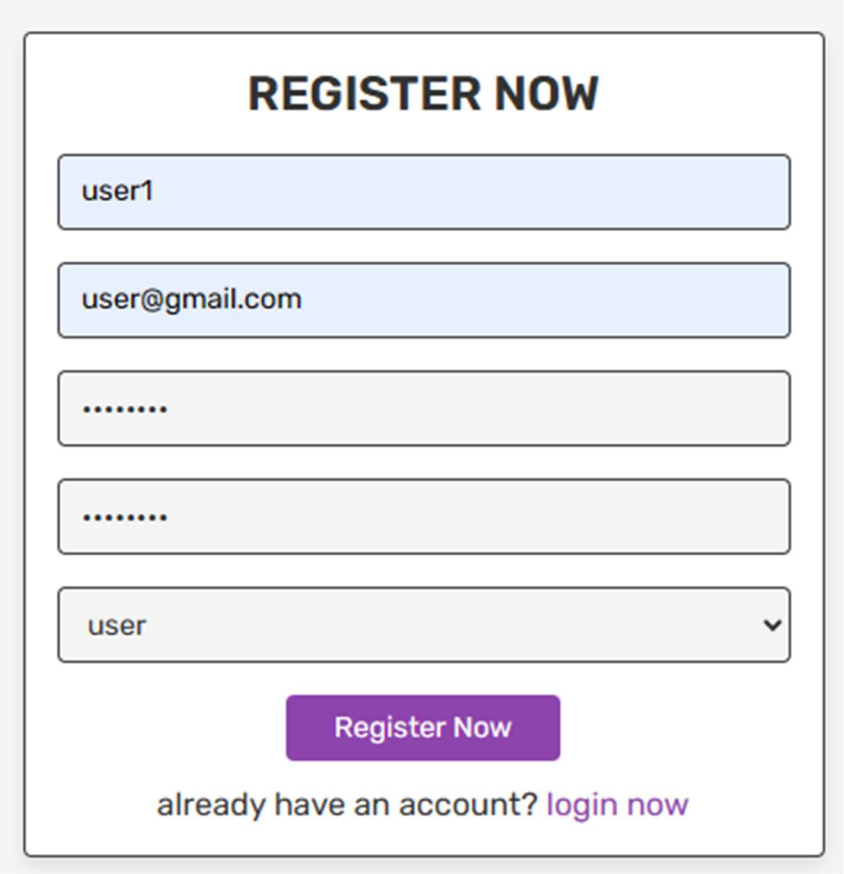


Fig 5.1 registration page

In the above figure 5.1 as show this is an registration page where user can register to the website and the registered details stored in user's table in the mysql database as shown in the figure 5.3.

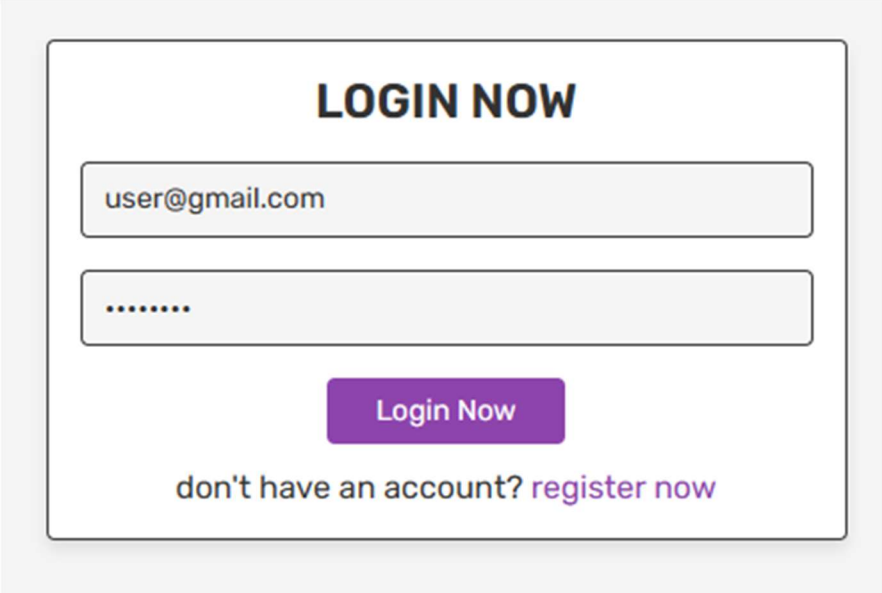


Fig 5.2 login page

Once the registration is completed user can login to the website using email and password as shown in figure 5.2.

| | id | name | email | password | user_type |
|---|---|---|---|---|---|
| Edit Copy Delete | 0 | user1 | user@gmail.com | 25d55ad283aa400af464c76d713c07ad | user |
| Edit Copy Delete | 3 | Harish V | admin@gmail.com | 25d55ad283aa400af464c76d713c07ad | admin |
| Edit Copy Delete | 9 | HArish | admi@gmail.com | 25d55ad283aa400af464c76d713c07ad | user |
| Edit Copy Delete | 10 | 1234 | 1234@gmail | 25d55ad283aa400af464c76d713c07ad | user |
| Edit Copy Delete | 11 | dbms | dbms@gmail.com | 25f9e794323b453885f5181f1b624d0b | user |

Fig 5.3 users details stored in database

User details stored in mysql database shown in fig 5.3

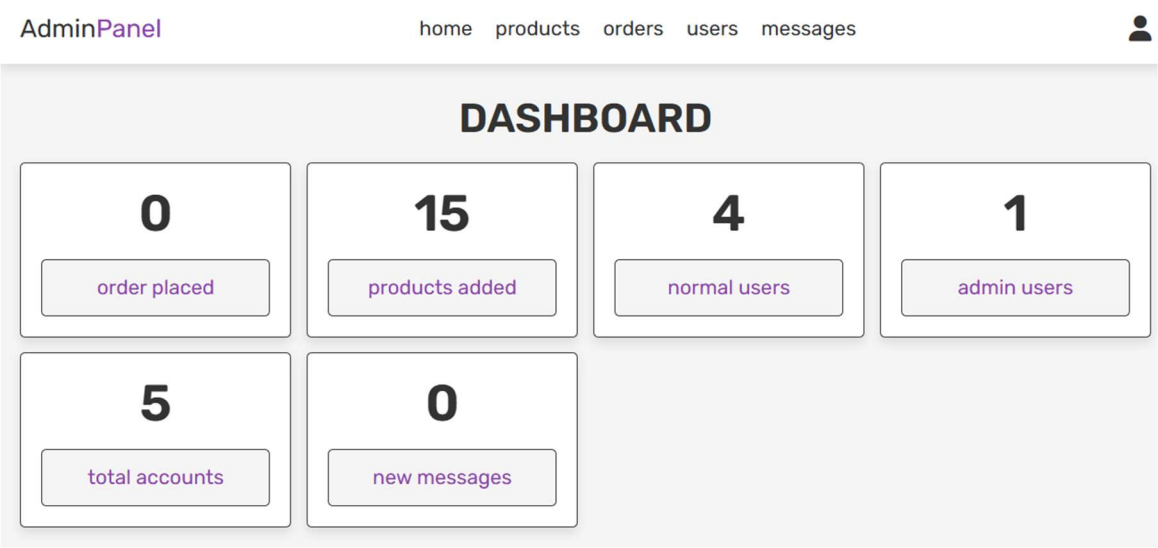


Fig 5.4 admin home page

Admin's home page where admin can see a dashboard which represents all the various options in figure 5.4.

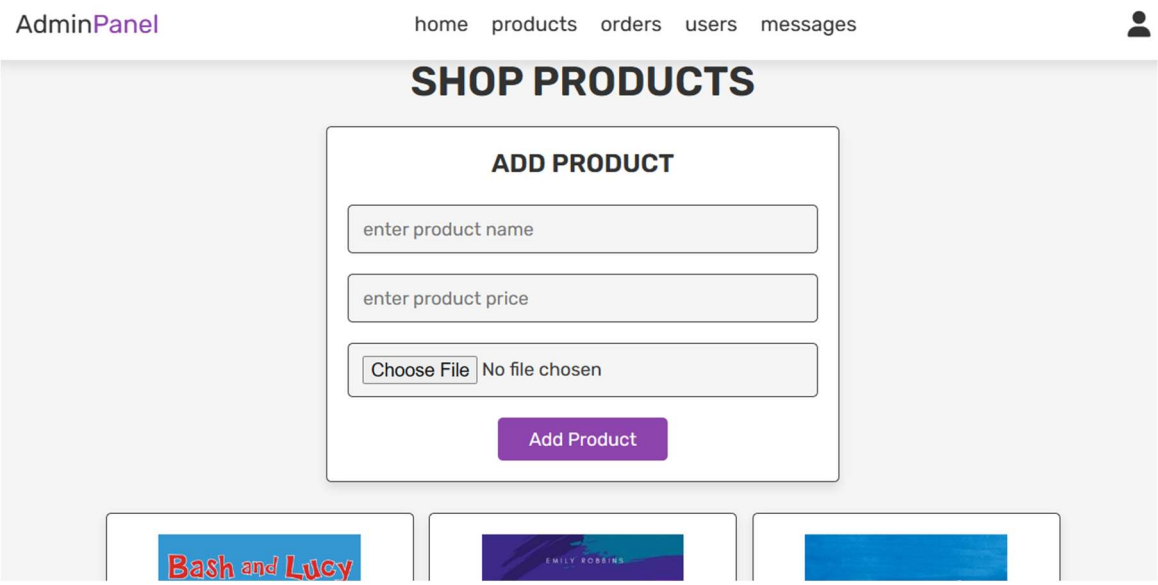


Fig 5.5 admin products page

In figure 5.5 admin can add products and it will get stored in mysql database.

| | id | name | price | image |
|---|---|---|---|---|
| Edit Copy Delete | 1 | bash and lucky | 400 | bash_and_lucy-2.jpg |
| Edit Copy Delete | 2 | The word of art | 600 | the_world.jpg |
| Edit Copy Delete | 3 | Be Well Bee | 700 | be_well_bee.jpg |
| Edit Copy Delete | 4 | Boring Girls | 800 | boring_girls_a_novel.jpg |
| Edit Copy Delete | 5 | Clever Lands | 300 | clever_lands.jpg |
| Edit Copy Delete | 6 | Darknet | 900 | darknet.jpg |
| Edit Copy Delete | 7 | Agricultural Economics | 500 | economic.jpg |
| Edit Copy Delete | 8 | FreeFall | 700 | freefall.jpg |
| Edit Copy Delete | 9 | History Of Modren Architecture | 1100 | history_of_modern_architecture.jpg |
| Edit Copy Delete | 10 | Holy Ghosts | 1500 | holy_ghosts.jpg |
| Edit Copy Delete | 11 | Lloyd | 800 | lloyd.jpg |
| Edit Copy Delete | 12 | Radical Gradening | 1200 | radical_gardening.jpg |
| Edit Copy Delete | 13 | Red Queen | 1050 | red_queen.jpg |

Fig 5.6 products details stored in database

Product details stored in mysql database fig 5.6 which is inserted by admin in fig 5.5.

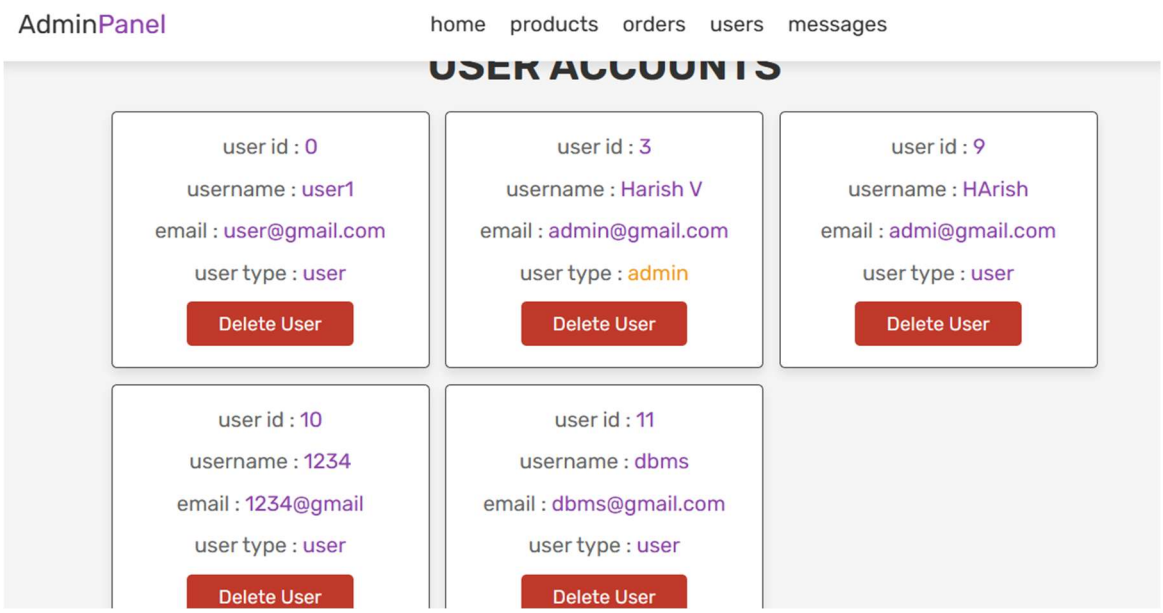


Fig 5.7 admin users page

Admin can control all the users which are registered as shown in fig 5.7

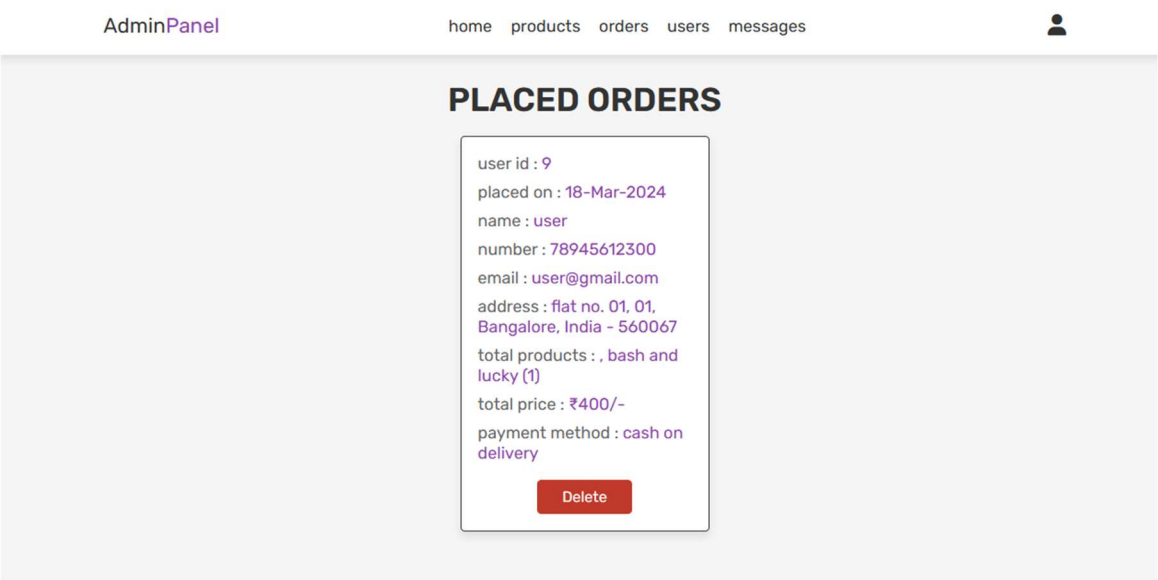


Fig 5.8 admin orders manage page.

Admin can manage user's orders which is stored in orders table.

| id | user_id | name | number | email | method | address | total_products | total_price | placed_on |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 9 | user | 78945612300 | user@gmail.com | cash on delivery | flat no. 01, 01, Bangalore, India - 560067 | , bash and lucky (1) | 400 | 18-Mar-2024 |

Fig 5.9 orders details in database

Orders details stored in orders table in mysql database in fig 5.9

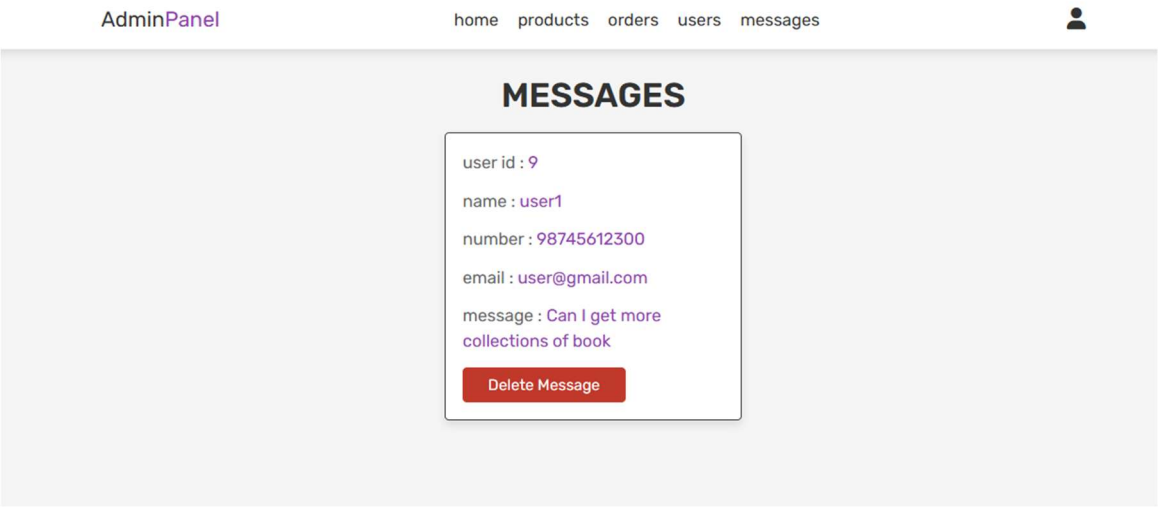


Fig 5.10 admin  users messages

Admin can view users messages and can delete message as in figure 5.10

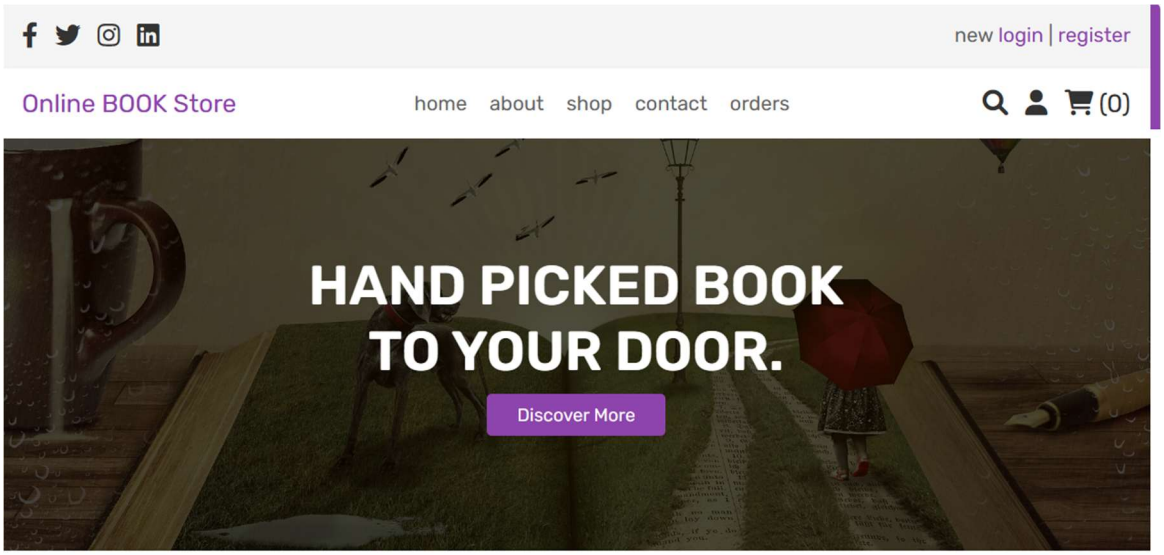


Fig 5.11 user's home page

In figure 5.11 show user's home page it appears once the user logins

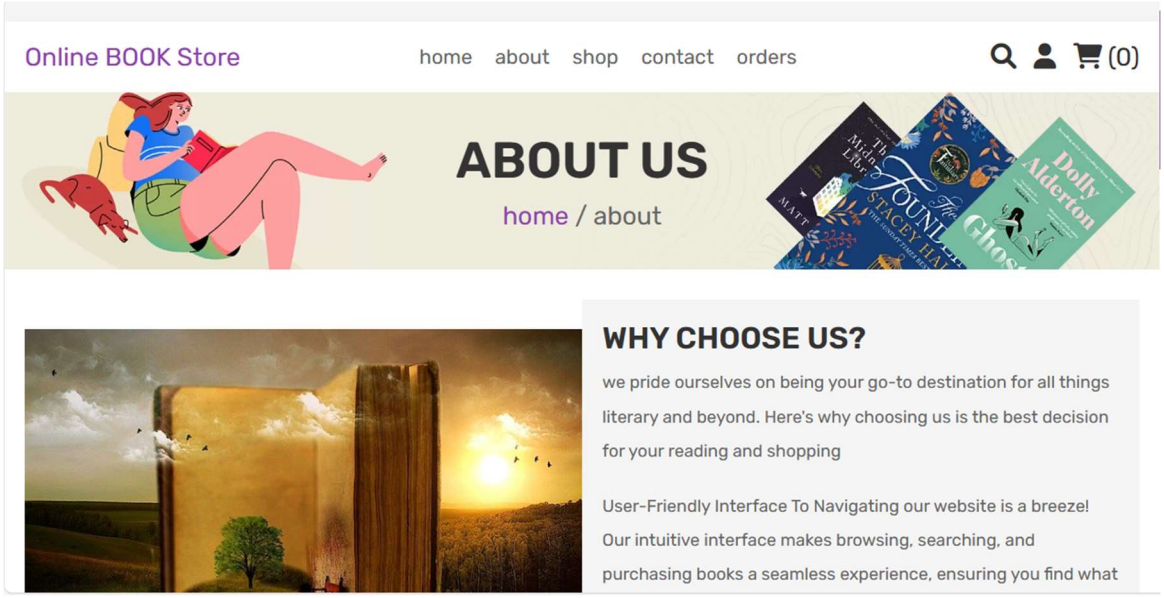


Fig 5.12 user's about us page

In figure 5.12 user's can see about the website in about us page.

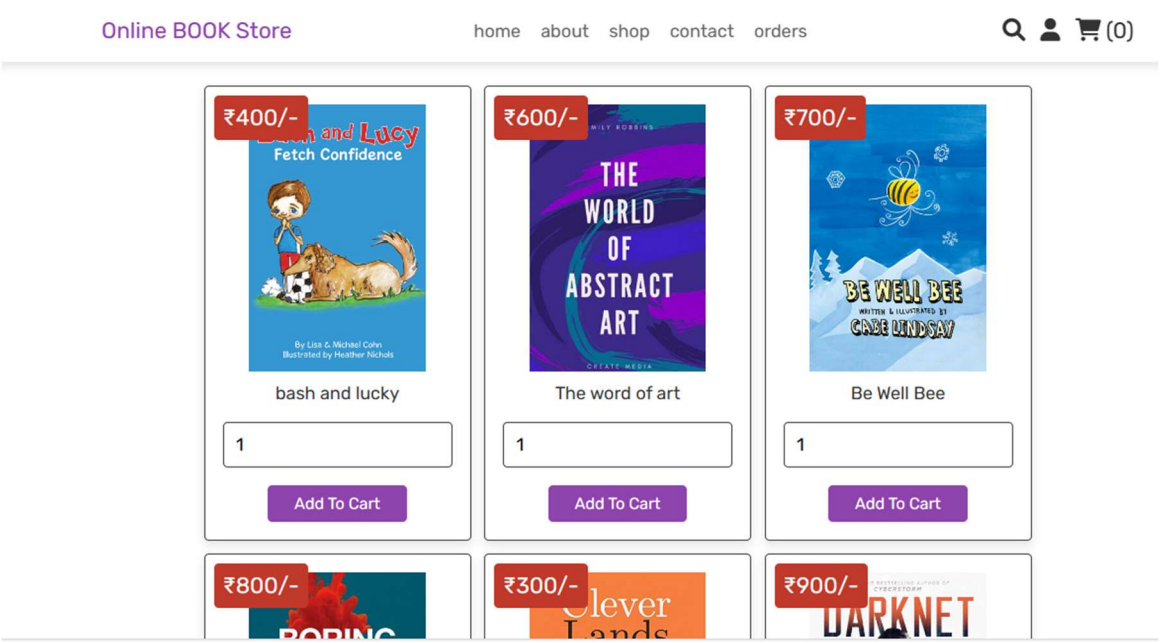


Fig 5.13 user's products page

In figure 5.13 shows all the products added by the admin

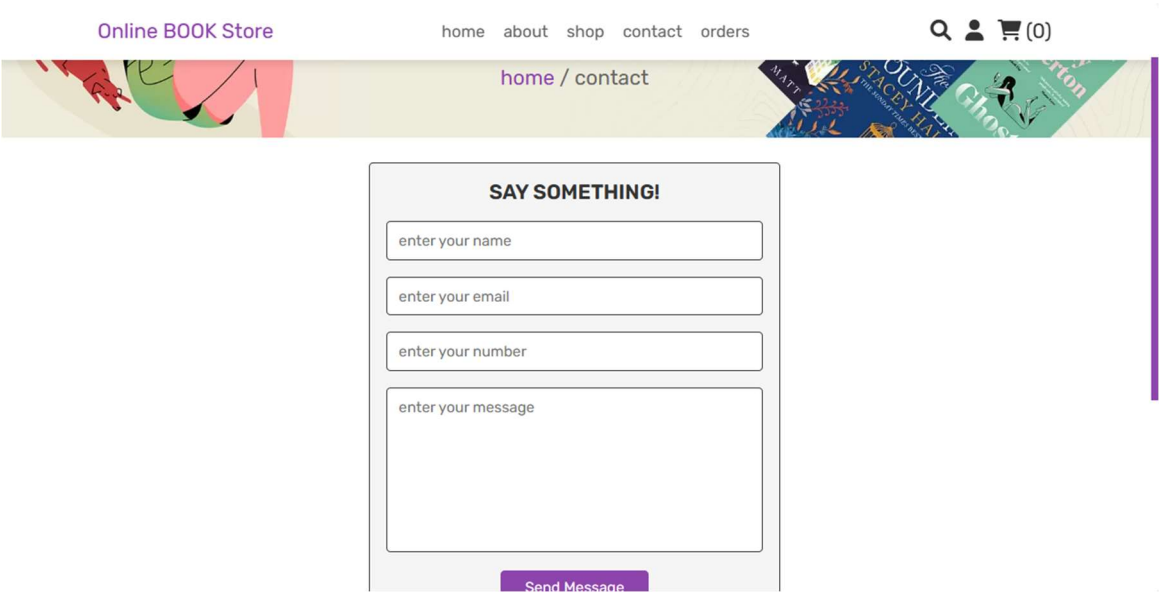


Fig 5.14 user's contact page

In figure 5.14 shows user can send messages directly to admin.

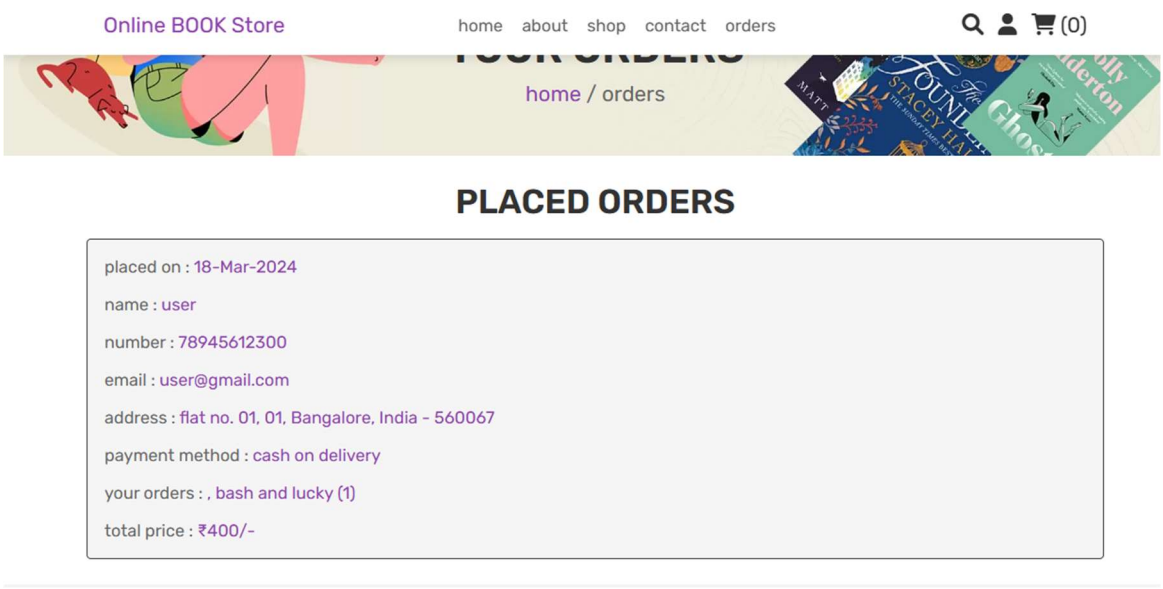


Fig 5.15 user's order page

In figure 5.15 user's can see their all previously placed orders

# CHAPTER 6

# CONCLUSION AND FUTURE SCOPE

CONCLUSION:

The Online Book Store Responsive Website project successfully develops an interactive and user-friendly platform for buying books online. By leveraging HTML, PHP, JavaScript, CSS, and MySQL, the project achieves its objectives of providing a seamless browsing experience, secure user authentication, and efficient order management. The Online Bookstore project emphasizes responsive web design to ensure seamless functionality across a range of devices, including desktops, tablets, and smartphones. The project aims to provide an engaging and visually appealing user interface, enhancing user experience and encouraging repeated visits.

FUTURE SCOPE:

1. Recommendation system: implement a recommendation engine based on user browsing and purchasing history, similar to those used by major e-commerce platforms. This system could suggest books based on the user's preferences, increasing user engagement and sales.

2. Advanced search functionality: enhance the search functionality by implementing filters, sorting options, and advanced search algorithms. Users should be able to search for books based on various criteria such as genre, author, publication date, etc.

3. Social integration: integrate social media platforms to allow users to share their favourite books, reviews, and purchases with their friends and followers. Social login options can also be provided for easier access and user engagement.

4. Virtual bookshelf: allow users to create virtual bookshelves where they can save their favourite books, create reading lists, and track their reading progress. This feature enhances personalization and encourages users to return to the platform.

5. Multi-language support: implement multi-language support to cater to a wider audience. Users should be able to browse and purchase books in their preferred language, enhancing accessibility and user experience.

# REFERENCES

[1] HP and MySQL Web Development" by Luke Welling and Laura Thomson.

[2] Coursera (https://www.coursera.org/)

[3] Udemy (https://www.udemy.com/)

[4] PHP Manual (https://www.php.net/manual/en/)

[5] MySQL Documentation (https://dev.mysql.com/doc/)

[6] W3Schools (https://www.w3schools.com/)