## **Textual Description Document**

#### List of files within this project:

- 1. DatabaseConnect.php
- 2. Login.php
- 3. LogOut.php
- 4. Main.html
- 5. stylesheet.css
- 6. Register.php
- 7. Reserve.php
- 8. ReservedBook.php
- 9. Search.php
- 10. SearchResults.php
- 11. Unreserve.php

# 1. DatabaseConnect.php

This php file allows us to establish a connection to the MySQL database we have created in myphpadmin called 'Library'. If it cannot connect to a database, it will show an error message. It is a very important aspect of this assignment since it is connected to every file/page.

# 2. Login.php

This page allows the user to log in to the website. It allows the user to fill in a login form to validate the user's credentials and sets up sessions upon successful completion. This will allow the user to access certain functionalities of the website where they wouldn't have been able to if they weren't logged in. It depends on the DatabaseConnect file to establish a successful database connection; this allows for us to confirm the users' credentials that would be stored in the database. Upon successful login it redirects the users to Main.html where they are greeted with a 'welcome!' and are allowed to further access the website. If the user is logged in and decides to go onto the 'MyAccount' nav link then the login.php page will display the users' username and options such as: 'Search for Books', 'Go to Main Page', 'Not you? Logout.' This would provide links to Search.php, Main.html and LogOut.php files.

### 3. LogOut.php

When clicking onto the logout option on the login page, it logs out the logged-in user by destroying the session and then redirects to the login page straight after.

#### 4. Main.html

This is the main page of the website. It will be the first page you will see when entering it. It has no direct interaction with PHP code, but it serves as the starting point for users to navigate to other sections of the website, such as searching for a book, logging in, registering, accessing account information, and reserving books.

## 5. Stylesheet.css

This file allows us to style and design the whole entire website to make it neat and user friendly.

# 6. Register.php

This page allows a user that does not have an account to register to the website. It validates input and inserts the new user information into the database, which then allows the user to login with their new account. This php depends on DatabaseConnect to establish a database connection. If registration fails it displays and error message.

# 7. Reserve.php

This page allows logged-in users only to reserve a book by entering the book's ISBN. It then records this information in the reservation table in the database by using the users' username and the ISBN they entered. Users must be logged in to access this page if they are not logged on the website will display a message stating that they are not logged in and link the login page. Upon submitting the reservation form, the website checks if the book is available for reservation. If it is available, the book is reserved, and a confirmation message is displayed. If it is not available, then it displays an error message. Users can also access the books they have reserved by clicking on the button 'View reserved books' and can access 'Unreserve Book' to unreserve a book they have already reserved.

## 8. ReservedBook.php

Users must be logged in to access this page and can only access it through the reserve.php page. It retrieves and displays the list of reserved books for the logged-in user.

## 9. Search.php

This page allows users to search for books based on the title, author, and/or category of the book. Once the user inputs the search parameters and submits the form, the website redirects to the SearchResults.php page to display a list of books matching the search criteria.

# 10. SearchResults.php

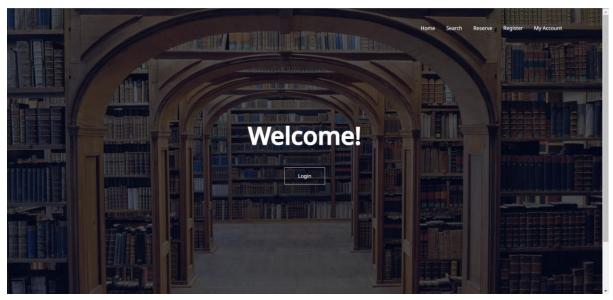
This page displays search results based on the user's search criteria made on the search.php page. Each book entry includes details such as author, name and ISBN, and an option to reserve the book if it is not already reserved.

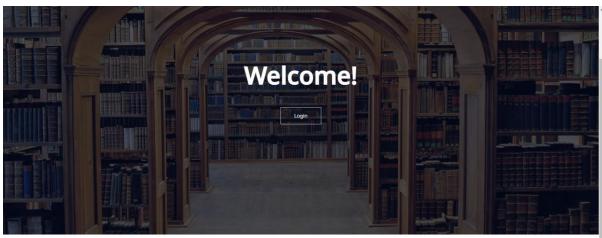
# 11. Unreserve.php

This page allows logged-in users to unreserve a previously reserved book. The only way to access this page is through the Reserve.php page. It displays a list of the user's reserved books with radio buttons for selection. Upon picking the option and submitting it, a confirmation message is displayed and then the book is then deleted from the reservations table in the database.

Screenshots of the website

Main.html:

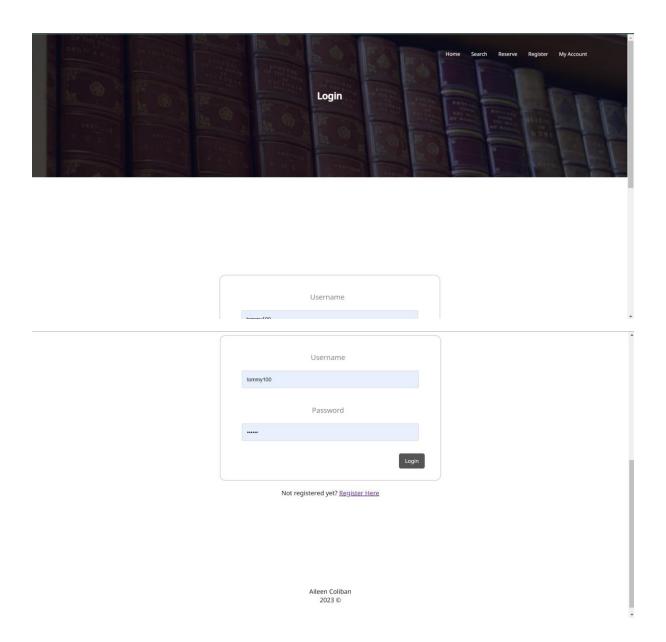




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Login.php

Before logging in:



After logging in:



#### Hello tommy100

You have successfully logged in.

What would you like to do?

#### Hello tommy100

You have successfully logged in.

What would you like to do?

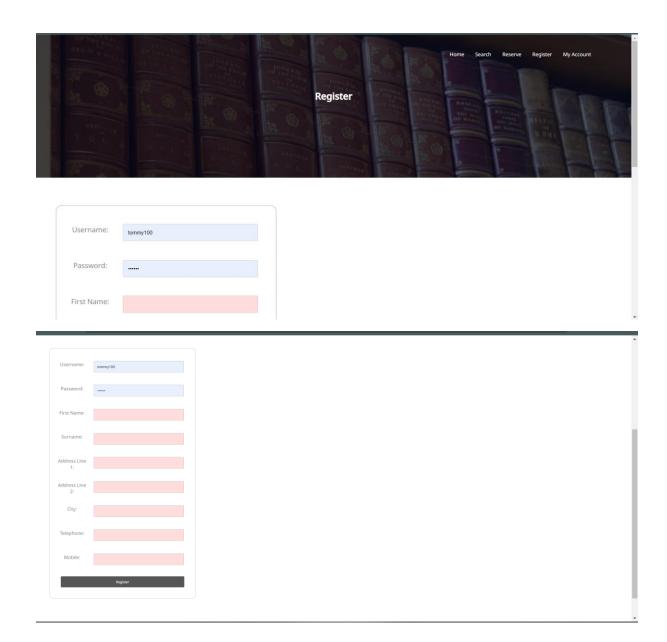
Search For Books

Go To Main Page

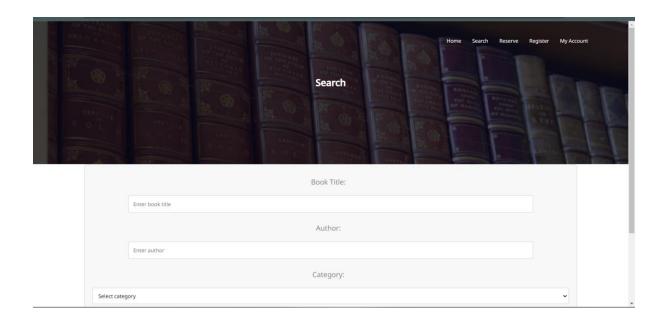
Not you? Logout.

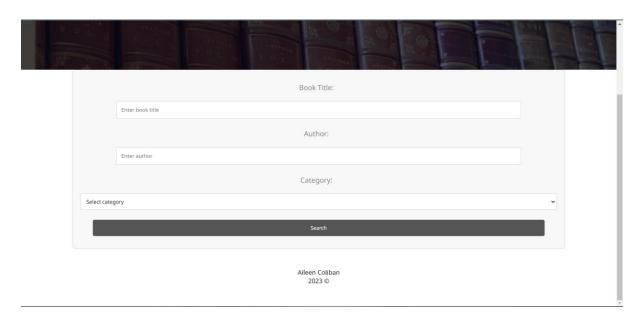
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# Register.php:

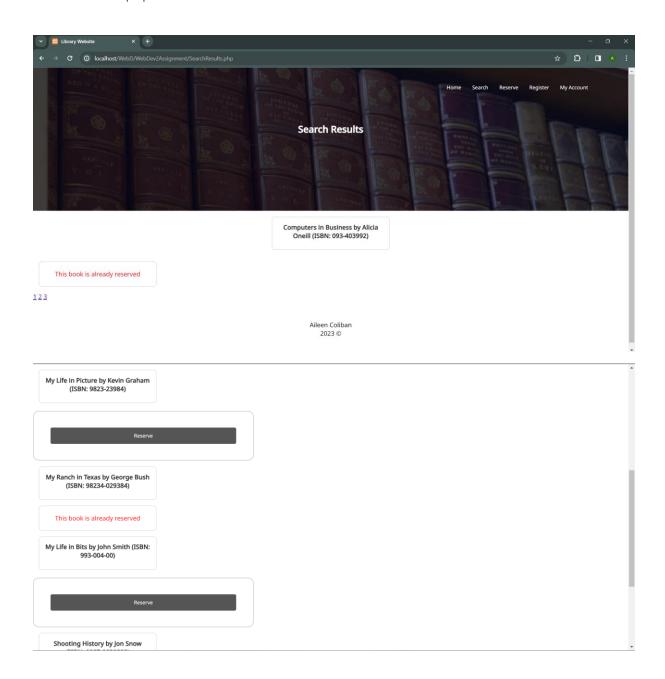


# Search.php:

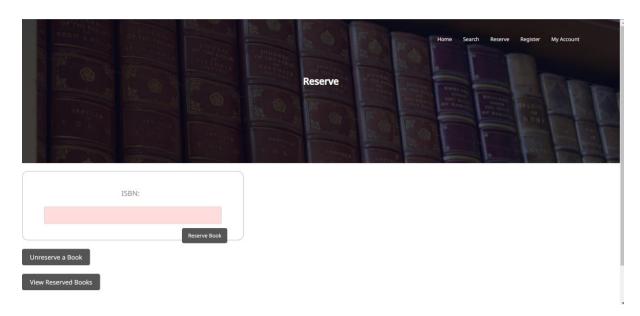




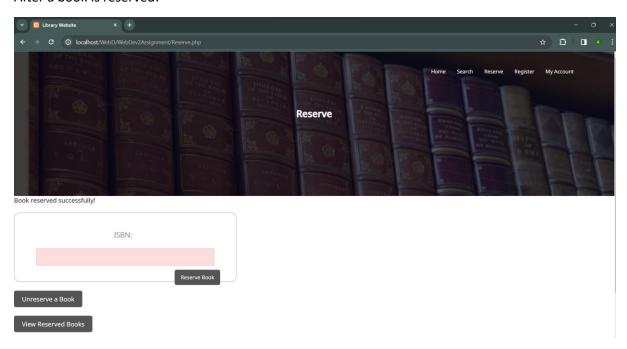
#### SearchResults.php:



#### Reserve.php:



#### After a book is reserved:



# ReservedBooks.php:

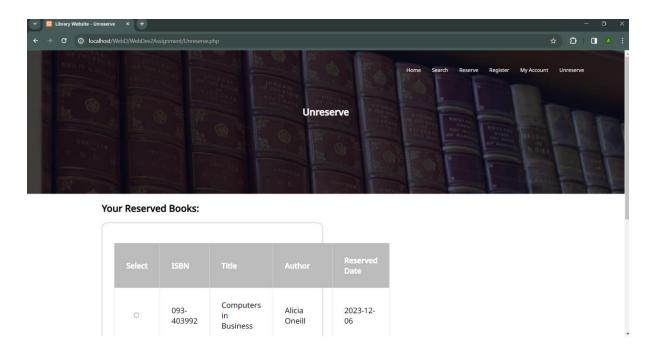


# **Your Reserved Books:**

ISBN	Title	Author	Reserved Date
093-403992	Computers in Business	Alicia Oneill	2023-12-06
23472-8792	Exploring Peru	Stephanie Birchi	2023-12-08
9823-98345	How to Cook Italian Food	Jamie Oliver	2008-10-11

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# Unreserve.php:

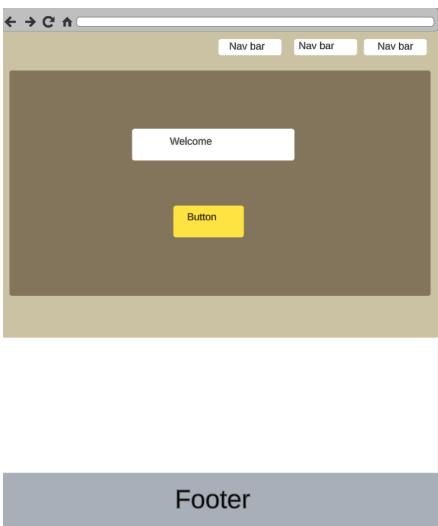


#### Your Reserved Books:

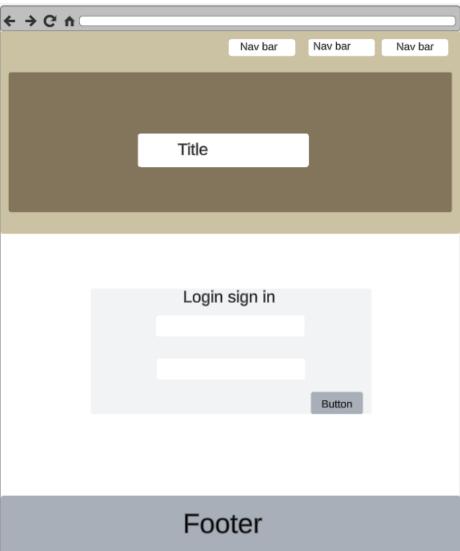
				Reserve Date
0	093- 403992	Computers in Business	Alicia Oneill	2023-12 06
0	23472- 8792	Exploring Peru	Stephanie Birchi	2023-12 08
0	9823- 98345	How to Cook Italian Food	Jamie Oliver	2008-10 11

# Design Document

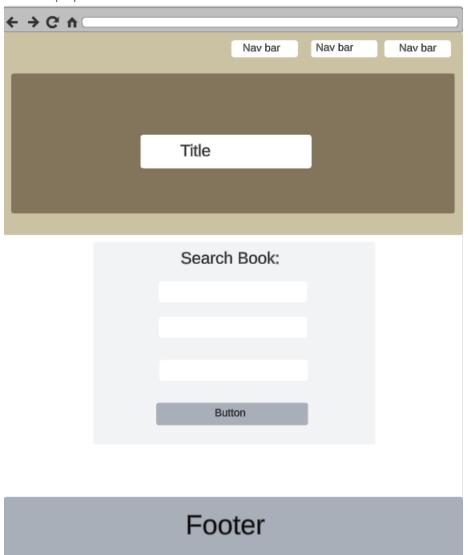
### Main.html



# Login.php:



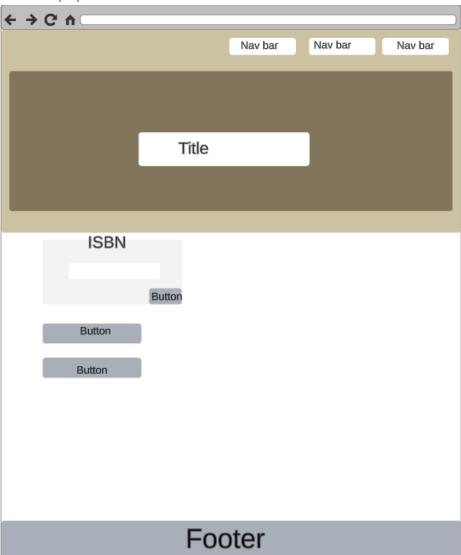
# Search.php:



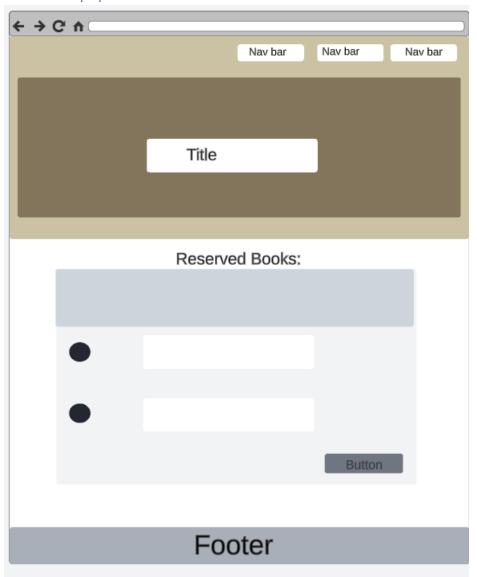
# Register.php:



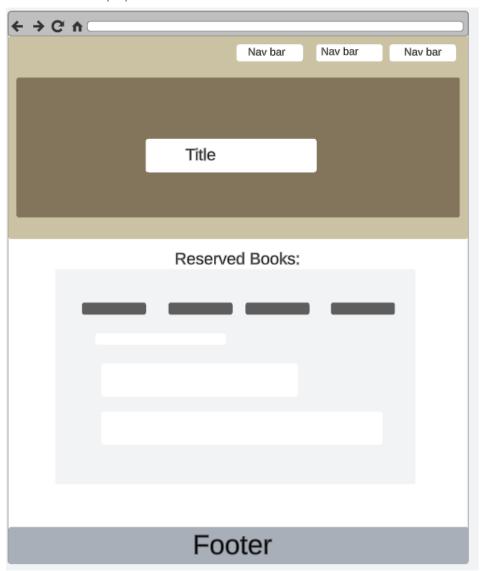
# Reserve.php:



# Unreserve.php



# ${\sf SearchResults.php}$



# Source code

```
Main.html:
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <link rel="stylesheet" type="text/css" href="stylesheet.css"/>
 <title>Library Website</title>
 <link rel="preconnect" href="https://fonts.googleapis.com">
 <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
 k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
<body>
 <section class="header">
    <nav>
      <div class="nav-links">
        <a href="Main.html">Home</a>
                                    <a href="Search.php">Search</a>
                                    <a href="Reserve.php">Reserve</a>
```

<a href="Register.php">Register</a>

```
</div>
   </nav>
   <div class="text-box" id="text-box">
     <h1 id="text">Welcome!</h1>
     >
     <a href="Login.php" class="btn">Login</a>
   </div>
 </section>
 <!---->
 <section class="footer">
   Aileen Coliban <br>2023 &copy;
 </section>
</body>
</html>
Login.php:
 <?php
   //Connect to database
   require_once"DatabaseConnect.php";
   // Start the session to track the logged-in user
```

```
session_start();
//If the form is submitted.
if ( isset($_POST["Username"]) && isset($_POST["Password"]) )
{
  $username=$_POST["Username"];
  $password=$_POST["Password"];
  //SQL query to check user info
  $query = "SELECT * FROM users WHERE Username='$username' AND Password='$password'";
  //execute the query
  $res = mysqli_query($conn, $query) or die("Failed to query database: " . mysqli_error($conn));
  // Fetch a row from the result
  $row=mysqli_fetch_array($res);
  //Check if row is fetched
  if ($row!=0)
  {
    echo "<h1>Login success!! Welcome </h1>".$row['Username'];
    $_SESSION["success"] = "Logged in.";
    $_SESSION["Username"] = $_POST["Username"];
    header( 'Location: Main.html' );
    return;
  }
  else
  {
    echo "Invalid Login. Please register.";
    $_SESSION["error"] = "Incorrect username or password.";
    header( 'Location: Login.php');
```

```
return;
      }
    }
    else if ( count($_POST) > 0 )
    {
      $_SESSION["error"] = "Missing Required Information";
      header( 'Location: Login.php');
      return;
    }
    //Check if user is already loggin in
    if (isset($_SESSION['Username'])) {
      $Username = $_SESSION['Username'];
      //Displays user options
      echo '<!DOCTYPE html>
          <html lang="en">
          <head>
          <meta charset="UTF-8">
          <meta name="viewport" content="width=device-width, initial-scale=1.0">
          <link rel="stylesheet" type="text/css" href="stylesheet.css"/>
          <title>Library Website</title>
          k rel="preconnect" href="https://fonts.googleapis.com">
          <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
          k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
          </head>
          <body>
            <section class="sub-header">
               <nav>
                 <div class="nav-links">
```

```
<a href="Main.html">Home</a>
         <a href="Search.php">Search</a>
         <a href="Reserve.php">Reserve</a>
         <a href="Register.php">Register</a>
         <a href="Login.php">My Account</a>
       </div>
   </nav>
   <h1>Login</h1>
  </section>
  <section class="login-form">
   <div class="Form">
     <h1>Hello ' . $Username . '<br></h1>
     You have successfully logged in. <br>
     What would you like to do? <br>
     <br>
     <h1><a href="Search.php" class="button-link">Search For Books</a> <br></h1>
     <br>
     <h1><a href="Main.html" class="button-link">Go To Main Page</a> <br></h1>
     <br>
     <h1><a href="LogOut.php" class="button-link">Not you? Logout.</a> <br></h1>
     <br>
   </div>
   <br><br>>
  </section>
  <section class="footer">
   Aileen Coliban <br>2023 &copy;
  </section>
</body>
</html>';
```

```
} else {
     //Displays login form
      echo '
         <!DOCTYPE html>
         <html lang="en">
         <head>
            <meta charset="UTF-8">
            <meta name="viewport" content="width=device-width, initial-scale=1.0">
            <link rel="stylesheet" type="text/css" href="stylesheet.css"/>
            <title>Library Website</title>
            <link rel="preconnect" href="https://fonts.googleapis.com">
            <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
            k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
         </head>
         <body>
            <section class="sub-header">
              <nav>
               <div class="nav-links">
               <a href="Main.html">Home</a>
                 <a href="Search.php">Search</a>
                 <a href="Reserve.php">Reserve</a>
                 <a href="Register.php">Register</a>
                 <a href="Login.php">My Account</a>
               </div>
```

```
</nav>
             <h1>Login</h1>
           </section>
           <section class="login-form">';
     if (isset($_SESSION["error"])) {
       echo 'Error:' . $_SESSION["error"] . "\n";
       unset($_SESSION["error"]);
     }
     echo '<form action="" method="post">
                <label>Username</label>
                <input type="text" name="Username" placeholder="Username" required><br>
                <label>Password</label>
                <input type="password" name="Password" placeholder="Password"
required><br>
                <button type="submit">Login</button>
              </form>
              Not registered yet? <a href=\'Register.php\'>Register Here</a>
           </section>
           <!---->
           <section class="footer">
             Aileen Coliban <br>2023 &copy;
           </section>
```

```
</body>
          </html>';
   }
?>
Logout.php:
<?php
//Start or resume the session
session_start();
//Unset all session variables, destroying the current session data
session_unset();
//Destory the session
session_destroy();
//Redirect the user to login page
header("Location: Login.php");
?>
DatabaseConnection.php:
<?php
$host = "localhost";
$username = "root";
$password = "";
$dbname = "library";
// Create connection
```

```
$conn = new mysqli($host, $username, $password, $dbname);
// Check connection
if ($conn->connect_error)
{
  die("Connection failed: " . $conn->connect_error);
}
?>
Register.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  k rel="stylesheet" type="text/css" href="stylesheet.css"/>
  <title>Library Website</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
<body>
  <?php
    //Connect Database
    require_once"DatabaseConnect.php";
    // Start the session to track the logged-in user
    session_start();
```

```
// Check if the form is submitted using POST
    if ($_SERVER["REQUEST_METHOD"] == "POST")
    {
      //Retrive form data
      $username = mysqli_real_escape_string($conn, $_POST["Username"]);
      $password = mysqli_real_escape_string($conn, $_POST["Password"]);
      $firstname = mysqli_real_escape_string($conn, $_POST["FirstName"]);
      $surname = mysqli_real_escape_string($conn, $_POST["Surname"]);
      $addressline1 = mysqli_real_escape_string($conn, $_POST["AddressLine1"]);
      $addressline2 = mysqli_real_escape_string($conn, $_POST["AddressLine2"]);
      $city = mysqli_real_escape_string($conn, $_POST["City"]);
      $telephone = mysqli_real_escape_string($conn, $_POST["Telephone"]);
      $mobile = mysqli_real_escape_string($conn, $_POST["Mobile"]);
      // Insert user data into the database
      $sql = "INSERT INTO users (Username, Password, FirstName, Surname, AddressLine1,
AddressLine2, City, Telephone, Mobile)
      VALUES ('$username', '$password', '$firstname', '$surname', '$addressline1', '$addressline2',
'$city', '$telephone', '$mobile')";
      // Check if the query is executed successfully
      if ($conn->query($sql) === TRUE) {
      echo "Registration successful!";
      } else {
      echo "Error: " . $sql . "<br>" . $conn->error;
      }
    }
```

```
<section class="sub-header">
  <nav>
   <div class="nav-links">
     <a href="Main.html">Home</a>
       <a href="Search.php">Search</a>
       <a href="Reserve.php">Reserve</a>
       <a href="Register.php">Register</a>
       <a href="Login.php">My Account</a>
     </div>
  </nav>
 <h1>Register</h1>
</section>
<!-- Registration form section -->
<section class="contact-form">
  <div class="container">
   <form method="post" action="">
     <div class="con-row">
       <div class="con-col1">
         <label for="Username">Username:</label>
       </div>
       <div class="con-col2">
         <input type="text" name="Username" required><br>
       </div>
     </div>
     <div class="con-row">
       <div class="con-col1">
```

```
<label for="Password">Password:</label>
  </div>
  <div class="con-col2">
    <input type="Password" name="Password" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="FirstName">First Name:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="FirstName" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="Surname">Surname:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="Surname" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="AddressLine1">Address Line 1:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="AddressLine1" required><br>
  </div>
</div>
<div class="con-row">
```

```
<div class="con-col1">
    <label for="AddressLine2">Address Line 2:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="AddressLine2" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="City">City:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="City" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="Telephone">Telephone:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="Telephone" required><br>
  </div>
</div>
<div class="con-row">
  <div class="con-col1">
    <label for="Mobile">Mobile:</label>
  </div>
  <div class="con-col2">
    <input type="text" name="Mobile" required><br>
  </div>
</div>
```

```
<div class="con-row">
        <input type="submit" value="Register" class="submit-button">
        </div>
      </form>
    </div>
  </section>
  <!-----
  <section class="footer">
    Aileen Coliban <br>2023 &copy;
  </section>
</body>
</html>
Reserve.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="stylesheet.css" />
  <title>Library Website</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
```

```
<body>
 <section class="sub-header">
    <nav>
     <div class="nav-links">
       <a href="Main.html">Home</a>
         <a href="Search.php">Search</a>
         <a href="Reserve.php">Reserve</a>
         <a href="Register.php">Register</a>
         <a href="Login.php">My Account</a>
       </div>
    </nav>
    <h1>Reserve</h1>
 </section>
 <?php
 //Connect to database
 require_once "DatabaseConnect.php";
 // Start the session to track the logged-in user
 session_start();
 //function to check if user is logged in
 function isLoggedIn()
 {
   return isset($_SESSION['Username']);
 }
 //Function to display reserved books
 function displayReservedBooks($conn, $username)
```

```
{
   //retrieves books
   $resBooks = "SELECT booktable.ISBN, booktable.BookTitle, booktable.Author,
reservations.ReservedDate
             FROM booktable
             JOIN reservations ON booktable.ISBN = reservations.ISBN
             WHERE reservations. Username = '$username'";
   //Executes query
   $resBooksResult = mysqli_query($conn, $resBooks);
   if ($resBooksResult) {
     echo "<h2>Your Reserved Books:</h2>";
     echo "
        ISBN
          Title
          Author
          Reserved Date
        ";
     //Loop through the result to display each reserved book
     while ($row = mysqli_fetch_assoc($resBooksResult)) {
       echo "
          {$row['ISBN']}
          {$row['BookTitle']}
          {$row['Author']}
          {$row['ReservedDate']}
         ";
     }
     echo "";
```

```
} else {
      echo "Error: " . mysqli_error($conn);
    }
  }
  // Check if the user is logged in
  if (!isLoggedIn()) {
    //message and link if the user is not logged in
    echo "You are not logged in. You cannot reserve a book.
       <a href='Login.php'>Login</a> to reserve books.";
  } else {
    // Check if the form is submitted to reserve a book
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
      if (isset($_POST["isbn"]) && isset($_POST["username"])) {
        $isbn = mysqli_real_escape_string($conn, $_POST["isbn"]);
        $username = mysqli_real_escape_string($conn, $_POST["username"]);
        // Check if the book is not already reserved
        $checkReserve = "SELECT * FROM reservations WHERE ISBN = '$isbn'";
        $checkReserveResult = mysqli_query($conn, $checkReserve);
        if (mysqli_num_rows($checkReserveResult) == 0) {
          // If book is not reserved, reserve it
          $reservedDate = date("Y-m-d"); // Capture the current date
          $reserve = "INSERT INTO reservations (ISBN, Username, ReservedDate) VALUES ('$isbn',
'$username', '$reservedDate')";
          $reserveResult = mysqli_query($conn, $reserve);
          if ($reserveResult) {
             echo "Book reserved successfully!";
```

```
} else {
          echo "Error: " . mysqli_error($conn);
        }
      } else {
        echo "This book is already reserved by someone else.";
      }
    }
 }
  // Display reservation options for the logged-in user
  echo "<section class='reserve-options'>";
  echo "<form action='Reserve.php' method='post'>
      <label for='isbn'>ISBN:</label>
      <input type='text' id='isbn' name='isbn' required>
      <input type='hidden' name='username' value='" . $_SESSION['Username'] . "'>
      <button type='submit'>Reserve Book</button>
     </form>";
  echo "<br><a href='Unreserve.php' class='button-link'>Unreserve a Book</a><br>";
  echo "<a href='ReservedBooks.php' class='button-link'>View Reserved Books</a>";
  echo "</section>";
?>
<!-----
<section class="footer">
            Aileen Coliban <br>2023 &copy;
          </section>
```

}

```
</body>
</html>
ReservedBooks.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="stylesheet.css" />
  <title>Library Website - Reserved Books</title>
  k rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
<body>
  <section class="sub-header">
    <nav>
      <div class="nav-links">
       <a href="Main.html">Home</a>
         <a href="Search.php">Search</a>
         <a href="Reserve.php">Reserve</a>
         <a href="Register.php">Register</a>
         <a href="Login.php">My Account</a>
         <a href="Unreserve.php">Unreserve</a>
```

```
</div>
    </nav>
    <h1>Reserved Books</h1>
  </section>
  <?php
  //Connects to database
  require_once "DatabaseConnect.php";
  // Start the session to track the logged-in user
  session_start();
 // Function to display reserved books
  function displayReservedBooks($conn, $username)
  {
    //Retrieves reserved books for the user
    $resBooks = "SELECT booktable.ISBN, booktable.BookTitle, booktable.Author,
reservations.ReservedDate
               FROM booktable
               JOIN reservations ON booktable.ISBN = reservations.ISBN
               WHERE reservations. Username = '$username'";
    //Execute the query
    $resBooksResult = mysqli_query($conn, $resBooks);
    if ($resBooksResult) {
      echo'<section class="reserved">';
        echo "<h2>Your Reserved Books:</h2>";
        echo "
```

```
ISBN
             Title
             Author
             Reserved Date
           ";
       //Loop through the result to display each reserved book
       while ($row = mysqli_fetch_assoc($resBooksResult)) {
         echo "
             {$row['ISBN']}
             {$row['BookTitle']}
             {$row['Author']}
             {$row['ReservedDate']}
            ";
       }
     echo "";
     echo '</section>';
   } else {
     echo "Error: " . mysqli_error($conn);
   }
 // Check if the user is logged in
 if (!isset($_SESSION['Username'])) {
   //message if the user is not logged in
   echo "You are not logged in. Please <a href='Login.php'>login</a> to view reserved
books.";
 } else {
   // Display reserved books for the current user
   displayReservedBooks($conn, $_SESSION['Username']);
```

}

```
}
  ?>
  <!-----
  <section class="footer">
              Aileen Coliban <br>2023 &copy;
            </section>
</body>
</html>
Search.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="stylesheet.css"/>
  <title>Library Website</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
<body>
  <section class="sub-header">
    <nav>
      <div class="nav-links">
        <a href="Main.html">Home</a>
          <a href="Search.php">Search</a>
```

```
<a href="Reserve.php">Reserve</a>
        <a href="Register.php">Register</a>
        <a href="Login.php">My Account</a>
      </div>
  </nav>
  <h1>Search</h1>
</section>
<!---SEARCH FORM--->
<form action="SearchResults.php" method="post" class="search-form">
  <!----Book Title input---->
  <label for="title" class="form-label">Book Title:</label>
  <input type="text" name="title" id="title" placeholder="Enter book title" class="form-input">
  <!----Author input---->
  <label for="author" class="form-label">Author:</label>
  <input type="text" name="author" id="author" placeholder="Enter author" class="form-input">
  <!----Category dropdown---->
  <label for="category" class="form-label">Category:</label>
  <select name="category" id="category" class="form-input">
    <option value="">Select category</option>
    <?php
      // Fetch categories from the database and populate the dropdown
      require_once "DatabaseConnect.php";
      $query = "SELECT * FROM categories";
      $result = mysqli_query($conn, $query);
      while ($row = mysqli_fetch_assoc($result)) {
```

```
echo "<option value='{$row['CategoryID']}'>{$row['CategoryDesc']}</option>";
        }
        mysqli_close($conn);
      ?>
    </select>
    <input type="submit" value="Search" class="submit-button">
  </form>
  <!-----
  <section class="footer">
    Aileen Coliban <br>2023 &copy;
  </section>
</body>
</html>
SearchResults.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="stylesheet.css"/>
  <title>Library Website</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
```

```
<section class="sub-header">
   <nav>
     <div class="nav-links">
       <a href="Main.html">Home</a>
         <a href="Search.php">Search</a>
         <a href="Reserve.php">Reserve</a>
         <a href="Register.php">Register</a>
         <a href="Login.php">My Account</a>
       </div>
   </nav>
   <h1>Search Results</h1>
  </section>
 <?php
   //Connects to database
   require_once "DatabaseConnect.php";
   // Get the current page number
   $page = isset($_GET['page']) ? $_GET['page'] : 1;
   // Check if the connection is successful
   if (!$conn) {
     die("Connection failed: " . mysqli_connect_error());
   }
```

```
//Check if form is submitted via POST
if ($_SERVER["REQUEST_METHOD"] == "POST") {
  $title = mysqli_real_escape_string($conn, $_POST["title"]);
  $author = mysqli_real_escape_string($conn, $_POST["author"]);
  $category = mysqli_real_escape_string($conn, $_POST["category"]);
 // Construct the SQL query based on the search parameters
  $query = "SELECT * FROM booktable WHERE 1";
 if (!empty($title)) {
    $query .= " AND BookTitle LIKE '%$title%'";
 }
  if (!empty($author)) {
    $query .= " AND Author LIKE '%$author%'";
 }
  if (!empty($category)) {
    $query .= " AND Category = '$category'";
 }
  // Set the number of results per page
  $resultsPerPage = 5;
  // Calculate the offset for the SQL query
  $offset = ($page - 1) * $resultsPerPage;
 // Modify your query to include LIMIT and OFFSET
  $query .= " LIMIT $resultsPerPage OFFSET $offset";
  // Executes query
```

```
$result = mysqli_query($conn, $query);
// Check for errors
if (!$result) {
  die("Query failed: " . mysqli_error($conn));
}
//Displays search results
echo "<div class='search-results'>";
while ($row = mysqli_fetch_assoc($result)) {
  $isbn = $row['ISBN'];
  $bookTitle = $row['BookTitle'];
  $bookAuthor = $row['Author'];
  // Check if the book is already reserved
  $reservedQuery = "SELECT * FROM reservations WHERE ISBN = '$isbn'";
  $reservedResult = mysqli_query($conn, $reservedQuery);
  echo "<section class='book-item'>
       <h4>{$bookTitle} by {$bookAuthor} (ISBN: {$isbn})</h1>";
       echo "</div>";
       echo "</section>";
  // Display the reserve button based on reservation status
  if (mysqli_num_rows($reservedResult) == 0) {
    echo "<form action='Reserve.php' method='get'>
          <input type='hidden' name='isbn' value='$isbn'>
          <input type='hidden' name='page' value='$page'>
          <input type='submit' value='Reserve' class='submit-button'>
       </form>";
```

```
echo "</div>";
                echo "</section>";
           } else {
             echo "<section class='book-item'>";
             echo "This book is already reserved";
             echo "</section>";
             echo "</div>";
           }
        }
        // Display pagination links --- not working properly
        echo "<div class='pagination'>";
        $totalResults = mysqli_num_rows(mysqli_query($conn, "SELECT * FROM booktable WHERE
1"));
        $totalPages = ceil($totalResults / $resultsPerPage);
        for ($i = 1; $i <= $totalPages; $i++) {
           echo "<a href='SearchResults.php?page=$i'>$i</a> ";
        }
        echo "</div>";
        mysqli_close($conn);
      } else {
        //Redirect to the search page if form does not submit
        header("Location: Search.php");
```

```
exit();
      }
      ?>
    <!---footer--->
    <section class="footer">
      Aileen Coliban <br>2023 &copy;
    </section>
</body>
</html>
Unreserve.php:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="stylesheet.css" />
  <title>Library Website - Unreserve</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  k
href="https://fonts.googleapis.com/css2?family=Noto+Sans:ital,wght@0,400;0,500;1,400&family=Po
ppins:wght@400;500;700&display=swap" rel="stylesheet">
</head>
<body id='unreserved-body'>
  <section class="sub-header">
```

```
<nav>
     <div class="nav-links">
       <a href="Main.html">Home</a>
         <a href="Search.php">Search</a>
         <a href="Reserve.php">Reserve</a>
         <a href="Register.php">Register</a>
         <a href="Login.php">My Account</a>
         <a href="Unreserve.php">Unreserve</a>
       </div>
    </nav>
    <h1>Unreserve</h1>
  </section>
 <?php
 //Connects the database
 require_once "DatabaseConnect.php";
 // Start the session to track the logged-in user
 session_start();
 //Function to display reserved books to the user
 function displayReservedBooks($conn, $username)
 {
   //retrieves reserved books
    $resBooks = "SELECT booktable.ISBN, booktable.BookTitle, booktable.Author,
reservations.ReservedDate
              FROM booktable
              JOIN reservations ON booktable.ISBN = reservations.ISBN
              WHERE reservations.Username = '$username'";
```

```
//Execute the Query
$resBooksResult = mysqli_query($conn, $resBooks);
//Check if it was successful
if ($resBooksResult) {
 //Display reserved books
 echo'<section class="reserved-books-container">';
 echo "<h2>Your Reserved Books:</h2>";
 echo "<form action='Unreserve.php' method='post' class='unreserve-form'>";
 echo "
     Select
       ISBN
       Title
       Author
       Reserved Date
     ";
 //Loop through result set and desplay each reserved book
 while ($row = mysqli_fetch_assoc($resBooksResult)) {
   echo "
       <input type='radio' name='selected' value='{$row['ISBN']}'>
       {$row['ISBN']}
       {$row['BookTitle']}
       {$row['Author']}
       {$row['ReservedDate']}
      ";
 }
 echo "";
```

```
echo "<button type='submit'>Unreserve Selected Book</button>";
      echo "</form>";
    } else {
      //Display error message if query fails
      echo "Error: " . mysqli_error($conn);
    }
    echo ' </section>';
  }
  // Check if the user is logged in
  if (!isset($_SESSION['Username'])) {
    //Displays message if user is not logged in
    echo "You are not logged in. Please <a href='Login.php'>login</a> to unreserve books.";
  } else {
    // Check if the form is submitted to unreserve a book
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
      if (isset($_POST["selected_book"])) {
        //Get ISBN and username to unreserve the book
        $isbnToUnreserve = mysqli_real_escape_string($conn, $_POST["selected"]);
        $username = mysqli_real_escape_string($conn, $_SESSION["Username"]);
        //query to delete the book from reservations table
        $unreserve = "DELETE FROM reservations WHERE ISBN = '$isbnToUnreserve' AND Username
= '$username'";
        //executes the query
        $unreserveResult = mysqli_query($conn, $unreserve);
        //Check if it was unreserved successfully
        if ($unreserveResult) {
          echo "Book unreserved successfully!";
        } else {
```