Ciaran Duggan C23380123 Web Development 2 Library PDF

The PHP pages used in my application were:

index.php – index is the first page that appears once you open the library website. On this page it prompts the user to login or register. It uses two buttons and when you press login it brings you to login.php or if you press register it brings you to register.php.

login.php – login prompts the user to enter their username and password into a form and if entered correctly it will bring them to main.php. It also has a back to home button which will bring you back to index.php.

register.php – register asks the user to enter all of their details into a form. It must be a unique username, a password of at least 6 characters and a phone number that can nly be numeric and must be 10 long. If all of this is entered correctly it will bring you to login.php. If not t=entered correctly it will prompt the user to do the form again and tell them what part they did wrong. It also has a back to home button which will bring you back to index.php.

lougout.php – this page makes the logout button in the footer of some of the pages log the user out and bring them back to the index.php page.

main.php – main has two buttons in the body which are search and view reserved books. Clicking search will bring you to search.php and clicking view reserved books will bring to view.php. It is a welcome page and also has a logout button in the footer.

search.php – search allows the user to search for a book. They can either search by the title of the book, the author or by the category. Partial searches also work. Before searching all books are on display anyways stating their title, author, edition, year, category and also whether they have been reserved or not with five books on each page. There is a button which you can click to reserve a book when this is clicked a book will be reserved and say this in place of where the button was and it will be stored in reservations. When you search only the book you searched will show or books if you partial search or search by category. There are also two buttons in the footer home which brings you back to main.php and logout which logs you out.

view.php – inside of view it shows your reserved books and tells you the name of the book, the author, the reservation date and an action. In action you can decide to remove the reservation using a button. There are also two buttons in the footer home which brings you back to main.php and logout which logs you out.

index.php

```
<?php
// Starting session
session_start();
?>
<!DOCTYPE html>
```

```
<html lang="en">
   <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Welcome to the Library</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
        header, footer
            background-color: #333;
            color: white;
            padding: 10px 0;
        header h1, footer p
            margin: 0;
        .container
            margin: 20px auto;
            max-width: 600px;
            padding: 20px;
            border: 1px solid #ccc;
            border-radius: 10px;
            background-color: #f9f9f9;
        button
            padding: 10px 20px;
            margin: 10px;
            font-size: 16px;
            border: none;
            border-radius: 5px;
            cursor: pointer;
        button:hover
            background-color: #ddd;
   </style>
    <header>
        <h1>Welcome to the Library Web Page</h1>
```

```
</header>
   <!-- Main Content -->
   <div class="container">
       <h2>Please choose an option:</h2>
       <form action="" method="GET">
           <!-- Buttons for navigation -->
           <button type="submit" formaction="login.php">Login/button>
           <button type="submit" formaction="register.php">Register/button>
       </form>
   </div>
   <!-- Footer -->
   <footer>
       © <?php echo date("Y"); ?> Ciaran Duggan Library
   </footer>
</body>
</html>
```

login.php

```
// Starting session
session_start();
if (!isset($_SESSION['username']))
    header('Location: login.php');
    exit();
$conn = new mysqli('localhost', 'root', '', 'Library');
if ($conn->connect_error)
    die("Connection failed: " . $conn->connect_error);
$username = $_SESSION['username'];
// Removing the reservation
if (isset($_POST['remove']))
    $isbn = $conn->real_escape_string($_POST['isbn']);
    $removeQuery = "DELETE FROM Reservations WHERE ISBN = '$isbn' AND Username =
'$username'";
    if ($conn->query($removeQuery))
        $updateBookQuery = "UPDATE Books SET Reserved = 'N' WHERE ISBN = '$isbn'";
```

```
$conn->query($updateBookQuery);
    header('Location: view.php');
    exit();
$reservationsQuery = "SELECT r.ISBN, b.BookTitle, b.Author, r.ReservedDate
                      FROM Reservations r
                      JOIN Books b ON r.ISBN = b.ISBN
                      WHERE r.Username = '$username'";
$reservationsResult = $conn->query($reservationsQuery);
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>View Reservations</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
        header, footer
            background-color: #333;
            color: white;
            padding: 10px 0;
        header h1, footer p
            margin: 0;
        .container
            margin: 20px auto;
            max-width: 600px;
            padding: 20px;
            border: 1px solid #ccc;
            border-radius: 10px;
            background-color: #f9f9f9;
        button
            padding: 10px 20px;
           margin: 10px;
```

```
font-size: 16px;
       border: none;
       border-radius: 5px;
       cursor: pointer;
   button:hover
       background-color: #ddd;
   table
       width: 100%;
       border-collapse: collapse;
       margin: 20px 0;
   table, th, td
       border: 1px solid #ccc;
   th, td
       padding: 10px;
       text-align: left;
</style>
<header>
   <h1>Your Reservations</h1>
<!-- Main Content -->
<div class="container">
   <?php if ($reservationsResult && $reservationsResult->num_rows > 0): ?>
       Title
              Author
              Reservation Date
              Action
           <?php while ($row = $reservationsResult->fetch_assoc()): ?>
                  <?php echo htmlspecialchars($row['BookTitle']); ?>
                  <?php echo htmlspecialchars($row['Author']); ?>
                  <?php echo htmlspecialchars($row['ReservedDate']);
                      <form method="POST" action="" style="display: inline;">
```

```
<input type="hidden" name="isbn" value="<?php echo</pre>
$row['ISBN']; ?>">
                              <button type="submit" name="remove">Remove</button>
                          </form>
                      <?php endwhile; ?>
           <?php else: ?>
           You have no reservations.
       <?php endif; ?>
   </div>
   <!-- Footer -->
   <footer>
       © <?php echo date("Y"); ?> Ciaran Duggan Library
       <form action="" method="GET">
           <!-- Buttons for navigation between pages -->
           <button type="submit" formaction="main.php">Home</button>
           <button type="submit" formaction="logout.php">Logout</button>
       </form>
   </footer>
```

logout.php

```
<?php
// Start session
session_start();

// Destroy the session to log the user out
session_destroy();

// Redirect to the index.php page
header('Location: index.php');
exit();
?>
```

main.php

```
<?php
// Starting session
session_start();
// Checking if the user is logged in
if (!isset($_SESSION['username']))
    header('Location: login.php');
    exit();
if (isset($_POST['logout']))
    session_destroy();
    header('Location: login.php');
    exit();
?>
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Main</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
        header, footer
            background-color: #333;
            color: white;
            padding: 10px 0;
        header h1, footer p
            margin: 0;
        .container
           margin: 20px auto;
```

```
max-width: 600px;
           padding: 20px;
           border: 1px solid #ccc;
           border-radius: 10px;
           background-color: #f9f9f9;
       button
           padding: 10px 20px;
           margin: 10px;
           font-size: 16px;
           border: none;
           border-radius: 5px;
           cursor: pointer;
       button:hover
           background-color: #ddd;
       .logout-button
           background-color: #f44336;
           color: white;
       .logout-button:hover
           background-color: #e53935;
   </style>
</head>
   <header>
       <h1>Welcome to the Library</h1>
   </header>
   <!-- Main Content -->
   <div class="container">
       <h2>Hello, <?php echo htmlspecialchars($_SESSION['username']); ?>!</h2>
       <button onclick="location.href='search.php'">Search Books</button>
       <button onclick="location.href='view.php'">View Reserved Books</button>
   </div>
   <!-- Footer -->
       © <?php echo date("Y"); ?> Ciaran Duggan Library
       <form action="" method="GET">
           <button type="submit" formaction="logout.php">Logout/button>
       </form>
   </footer>
```

```
</body>
```

register.php

```
<?php
// Database connection
$conn = new mysqli('localhost', 'root', '', 'Library');
if ($conn->connect_error)
    die("Connection failed: " . $conn->connect_error);
$message = '';
if ($ SERVER['REQUEST METHOD'] == 'POST')
    $username = $conn->real_escape_string($_POST['username']);
    $password = $conn->real_escape_string($_POST['password']);
    $confirmPassword = $conn->real_escape_string($_POST['confirm_password']);
    $firstName = $conn->real_escape_string($_POST['first_name']);
    $surname = $conn->real_escape_string($_POST['surname']);
    $addressLine1 = $conn->real_escape_string($_POST['address_line1']);
    $addressLine2 = $conn->real_escape_string($_POST['address_line2']);
    $city = $conn->real_escape_string($_POST['city']);
    $telephone = $conn->real_escape_string($_POST['telephone']);
    $mobile = $conn->real_escape_string($_POST['mobile']);
    // Validation and errors
    if (!is_numeric($mobile) || strlen($mobile) != 10)
        $message = "Mobile number must be numeric and 10 characters in length.";
    elseif (strlen($password) < 6)</pre>
        $message = "Password must be at least 6 characters long.";
    elseif ($password !== $confirmPassword)
        $message = "Password and confirmation do not match.";
    else
        $checkUserQuery = "SELECT * FROM Users WHERE Username='$username'";
        $result = $conn->query($checkUserQuery);
        if ($result && $result->num_rows > 0)
            $message = "The username is already taken. Please choose another.";
```

```
else
            $query = "INSERT INTO Users (Username, Password, FirstName, Surname,
AddressLine1, AddressLine2, City, Telephone, Mobile)
                      VALUES ('$username', '$password', '$firstName', '$surname',
'$addressLine1', '$addressLine2', '$city', '$telephone', '$mobile')";
            if ($conn->query($query))
                header("Location: login.php");
                exit();
            } else
                $message = "Error: " . $conn->error;
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Register</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
        header, footer
            background-color: #333;
            color: white;
            padding: 10px 0;
        header h1, footer p
            margin: 0;
        .container
            margin: 20px auto;
            max-width: 600px;
            padding: 20px;
            border: 1px solid #ccc;
```

```
border-radius: 10px;
           background-color: #f9f9f9;
       button
           padding: 10px 20px;
           margin: 10px;
           font-size: 16px;
           border: none;
           border-radius: 5px;
           cursor: pointer;
       button:hover
           background-color: #ddd;
       input
           padding: 10px;
           margin: 5px 0;
           width: calc(100% - 22px);
           border: 1px solid #ccc;
           border-radius: 5px;
   </style>
</head>
   <!-- Title -->
   <header>
       <h1>Library Registration</h1>
   <!-- Main Content -->
   <div class="container">
       <form method="POST" action="">
           <label for="username">Username:</label><br>
           <input type="text" name="username" required><br><br>
           <label for="password">Password:</label><br>
           <input type="password" name="password" required><br><br>
           <label for="confirm_password">Confirm Password:</label><bre>
           <input type="password" name="confirm_password" required><br><br>
           <label for="first_name">First Name:</label><br>
           <input type="text" name="first_name" required><br><br>
           <label for="surname">Surname:</label><br>
           <input type="text" name="surname" required><br><br>
           <label for="address line1">Address Line 1:</label><br>
```

```
<input type="text" name="address_line1"><br><br>
          <label for="address_line2">Address Line 2:</label><br>
          <input type="text" name="address_line2"><br><br>
          <label for="city">City:</label><br>
          <input type="text" name="city"><br><br>
          <label for="telephone">Telephone:</label><br>
          <input type="text" name="telephone"><br><br>
          <label for="mobile">Mobile:</label><br>
          <input type="text" name="mobile" required><br><br>
          <button type="submit">Register
       </form>
       <?php if ($message): ?>
          <?php echo $message; ?>
       <?php endif; ?>
       <a href="index.php">Back to Home</a>
   </div>
   <!-- Footer -->
       © <?php echo date("Y"); ?> Ciaran Duggan Library
   </footer>
</html>
```

search.php

```
<?php
// Starting session
session_start();

// Checking if the user is logged in
if (!isset($_SESSION['username'])) {
    header('Location: login.php');
    exit();
}

// Connecting to database
$conn = new mysqli('localhost', 'root', '', 'Library');
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

// Search
$searchTitle = isset($_GET['title']) ? $conn->real_escape_string($_GET['title']) :
'';
```

```
$searchAuthor = isset($_GET['author']) ? $conn->real_escape_string($_GET['author'])
$searchCategory = isset($_GET['category']) ? $conn-
>real_escape_string($_GET['category']) : '';
// Page
$page = isset($_GET['page']) ? (int)$_GET['page'] : 1;
$limit = 5;
soffset = (spage - 1) * slimit;
$categoryQuery = "SELECT * FROM Categories";
$categoryResult = $conn->query($categoryQuery);
$query = "SELECT Books.*, Categories.CategoryDesc FROM Books
          LEFT JOIN Categories ON Books. CategoryID = Categories. CategoryID
          WHERE (BookTitle LIKE '%$searchTitle%' AND Author LIKE
'%$searchAuthor%')";
if ($searchCategory)
    $query .= " AND Books.CategoryID = '$searchCategory'";
$query .= " LIMIT $limit OFFSET $offset";
$result = $conn->query($query);
$totalQuery = "SELECT COUNT(*) as total
               FROM Books
               LEFT JOIN Categories ON Books.CategoryID = Categories.CategoryID
               WHERE (BookTitle LIKE '%$searchTitle%' AND Author LIKE
'%$searchAuthor%')";
if ($searchCategory)
    $totalQuery .= " AND Books.CategoryID = '$searchCategory'";
$totalResult = $conn->query($totalQuery);
$totalRows = $totalResult->fetch_assoc()['total'];
$totalPages = ceil($totalRows / $limit);
// Book reservation button
if (isset($_POST['reserve']))
    $bookID = $conn->real_escape_string($_POST['book_id']);
    $username = $_SESSION['username'];
    $reservationDate = date('Y-m-d');
    $reserveQuery = "UPDATE Books SET Reserved = 'Y' WHERE ISBN = '$bookID' AND
Reserved = 'N'";
    if ($conn->query($reserveQuery))
```

```
$insertReservation = "INSERT INTO Reservations (ISBN, Username,
ReservedDate) VALUES ('$bookID', '$username', '$reservationDate')";
        $conn->query($insertReservation);
    header("Location:
search.php?title=$searchTitle&author=$searchAuthor&category=$searchCategory&page=$p
age");
    exit();
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Search Books</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
        header, footer
            background-color: #333;
            color: white;
            padding: 10px 0;
        header h1, footer p
            margin: 0;
        .container
            margin: 20px auto;
            max-width: 600px;
            padding: 20px;
            border: 1px solid #ccc;
            border-radius: 10px;
            background-color: #f9f9f9;
        button
            padding: 10px 20px;
            margin: 10px;
            font-size: 16px;
            border: none;
            border-radius: 5px;
```

```
cursor: pointer;
button:hover
    background-color: #ddd;
input, select
    padding: 10px;
   margin: 5px 0;
   width: calc(100% - 22px);
    border: 1px solid #ccc;
    border-radius: 5px;
table
   width: 100%;
    border-collapse: collapse;
   margin: 20px 0;
table, th, td
    border: 1px solid #ccc;
th, td
    padding: 10px;
    text-align: left;
.pagination
   margin: 20px 0;
.pagination a
    padding: 10px 15px;
   margin: 0 5px;
    border: 1px solid #ccc;
    border-radius: 5px;
    text-decoration: none;
    color: #333;
.pagination a:hover
    background-color: #ddd;
```

```
<h1>Search Books</h1>
   </header>
   <!-- Main Content -->
   <div class="container">
       <form method="GET" action="">
           <label for="title">Book Title:</label><br>
           <input type="text" name="title" value="<?php echo</pre>
htmlspecialchars($searchTitle); ?>"><br><br>
           <label for="author">Author:</label><br>
           <input type="text" name="author" value="<?php echo</pre>
htmlspecialchars($searchAuthor); ?>"><br><br>
           <label for="category">Category:</label><br>
           <select name="category">
              <option value="">All Categories
              <?php while ($row = mysqli_fetch_assoc($categoryResult)): ?>
                  <option value="<?php echo $row['CategoryID']; ?>" <?php echo</pre>
$categoryID == $row['CategoryID'] ? 'selected' : ''; ?>>
                      <?php echo htmlspecialchars($row['CategoryDesc']); ?>
                  </option>
              <?php endwhile; ?>
          <button type="submit">Search/button>
       </form>
       <?php if ($result && $result->num_rows > 0): ?>
           Title
                  Author
                  Edition
                  Year
                  Category
                  Action
              <?php while ($row = $result->fetch_assoc()): ?>
                      <?php echo htmlspecialchars($row['BookTitle']); ?>
                      <?php echo htmlspecialchars($row['Author']); ?>
                      <?php echo htmlspecialchars($row['Edition']); ?>
                      <?php echo htmlspecialchars($row['Year']); ?>
                      <?php echo htmlspecialchars($row['CategoryDesc']);
?>
                         <?php if ($row['Reserved'] == 'N'): ?>
```

```
<form method="POST" action="" style="display:</pre>
inline;">
                                   <input type="hidden" name="book_id"</pre>
value="<?php echo $row['ISBN']; ?>">
                                   <button type="submit"</pre>
name="reserve">Reserve</button>
                                </form>
                            <?php else: ?>
                               Reserved
                           <?php endif; ?>
                        <?php endwhile; ?>
            <div class="pagination">
                <?php for ($i = 1; $i <= $totalPages; $i++): ?>
                    <a href="?title=<?php echo urlencode($searchTitle);</pre>
?>&author=<?php echo urlencode($searchAuthor); ?>&category=<?php echo</pre>
urlencode($searchCategory); ?>&page=<?php echo $i; ?>">
                        <?php echo $i; ?>
                    </a>
                <?php endfor; ?>
            </div>
       <?php else: ?>
            No books found.
        <?php endif; ?>
    </div>
    <!-- Footer -->
    <footer>
        © <?php echo date("Y"); ?> Ciaran Duggan Library
        <form action="" method="GET">
            <button type="submit" formaction="main.php">Home</button>
            <button type="submit" formaction="logout.php">Logout</button>
    </footer>
</body>
```

view.php

```
<?php
// Starting session
session_start();

// Checking if the user is logged in
if (!isset($_SESSION['username']))</pre>
```

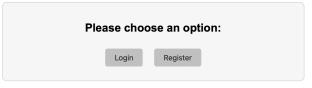
```
header('Location: login.php');
    exit();
$conn = new mysqli('localhost', 'root', '', 'Library');
if ($conn->connect error)
    die("Connection failed: " . $conn->connect_error);
$username = $_SESSION['username'];
// Removing the reservation
if (isset($_POST['remove']))
    $isbn = $conn->real_escape_string($_POST['isbn']);
    $removeQuery = "DELETE FROM Reservations WHERE ISBN = '$isbn' AND Username =
'$username'";
    if ($conn->query($removeQuery))
        $updateBookQuery = "UPDATE Books SET Reserved = 'N' WHERE ISBN = '$isbn'";
        $conn->query($updateBookQuery);
    header('Location: view.php');
    exit();
$reservationsQuery = "SELECT r.ISBN, b.BookTitle, b.Author, r.ReservedDate
                      FROM Reservations r
                      JOIN Books b ON r.ISBN = b.ISBN
                      WHERE r.Username = '$username'";
$reservationsResult = $conn->query($reservationsQuery);
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>View Reservations</title>
    <style>
        body
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            text-align: center;
```

```
header, footer
         background-color: #333;
         color: white;
         padding: 10px 0;
     header h1, footer p
         margin: 0;
     .container
         margin: 20px auto;
         max-width: 600px;
         padding: 20px;
         border: 1px solid #ccc;
         border-radius: 10px;
         background-color: #f9f9f9;
     button
         padding: 10px 20px;
         margin: 10px;
         font-size: 16px;
         border: none;
         border-radius: 5px;
         cursor: pointer;
     button:hover
         background-color: #ddd;
     table
         width: 100%;
         border-collapse: collapse;
         margin: 20px 0;
     table, th, td
         border: 1px solid #ccc;
     th, td
         padding: 10px;
         text-align: left;
 </style>
<!-- Title -->
```

```
<header>
       <h1>Your Reservations</h1>
   </header>
   <!-- Main Content -->
   <div class="container">
       <?php if ($reservationsResult && $reservationsResult->num_rows > 0): ?>
           Title
                  Author
                  Reservation Date
                  Action
              <?php while ($row = $reservationsResult->fetch_assoc()): ?>
                     <?php echo htmlspecialchars($row['BookTitle']); ?>
                     <?php echo htmlspecialchars($row['Author']); ?>
                     <?php echo htmlspecialchars($row['ReservedDate']);</pre>
?>
                         <form method="POST" action="" style="display: inline;">
                             <input type="hidden" name="isbn" value="<?php echo</pre>
$row['ISBN']; ?>">
                             <button type="submit" name="remove">Remove</button>
                         </form>
                     <?php endwhile; ?>
          <?php else: ?>
           You have no reservations.
       <?php endif; ?>
   </div>
   <!-- Footer -->
   <footer>
       © <?php echo date("Y"); ?> Ciaran Duggan Library
       <form action="" method="GET">
           <button type="submit" formaction="main.php">Home</button>
           <button type="submit" formaction="logout.php">Logout</button>
   </footer>
</body>
</html>
```

Pictures of Website

Welcome to the Library Web Page



© 2024 Ciaran Duggan Library

