# Library Website

Web Dev 2 CMPU 2022

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# Q1. PHP files

• Database Connection

This code connect to my Database. If the connection fails, it uses die() to terminate the script and displays an error

#### • Login

This code handles user authentication by checking the entered username and password against the database. If the authentication is successful, it sets a session

variable and redirects the user; otherwise, it displays an error message on the login page.

```
n login.php
     <?php
      //connect to db
     require('dbconnect.php');
     session_start();
      if ($_SERVER['REQUEST_METHOD'] == 'POST') {
          $username = $_POST['username'];
          $password = $_POST['password'];
          $query = "SELECT * FROM UsersTable WHERE Username = '$username'";
11
12
          $result = mysqli_query($Connection, $query) or die(mysqli_error($Connection));
          $user = mysqli_fetch_assoc($result);
          if ($user && password_verify($password, $user['Password'])) {
              $_SESSION['Username'] = $user['Username'];
             header('Location: index.html');
              exit();
          } else {
20
              $error_message = "Invalid username or password. Please try again.";
      }
24
25
     <!DOCTYPE html>
26
     <html lang="en">
28
      <head>
          <meta charset="UTF-8">
          <meta name="viewport" content="width=device-width, initial-scale=1.0">
          <link rel="stylesheet" href="styles.css">
33
          <title>Login</title>
      </head>
      <body>
          <h2>Login</h2>
38
          <?php
          if (isset($error_message)) {
             echo "$error_message";
          }
          <form method="post" action="">
              <label for="username">Username:</label>
              <input type="text" name="username" required><br>
48
              <label for="password">Password:</label>
              <input type="password" name="password" required><br>
              <input type="submit" value="Login">
          </form>
          Don't have an account? <a href="register.php">Register Now!</a>
      </body>
      </html>
```

#### Register

This code manages user registration by handling the registration form submission, ensuring a secure password hash, and inserting the user's details into the database. Upon successful registration, it triggers a success message and redirects the user. In case of registration failure, it generates an error message to be shown on the registration page.

```
<?php
         if (isset($_SESSION['registration_success']) && $_SESSION['registration_success']) {
49
             echo "Registration successful!";
             // Reset the session variable to avoid displaying the message again on page refresh
             unset($_SESSION['registration_success']);
         } elseif (isset($_SESSION['registration_error'])) {
             echo "" . $_SESSION['registration_error'] . "";
             unset($_SESSION['registration_error']);
           $password = password_hash($_POST['password'], PASSWORD_DEFAULT);
           $firstName = $_POST['firstName'];
           $surname = $_POST['surname'];
           $address = $_POST['address'];
           $city = $_POST['city'];
           $mobile = $_POST['mobile'];
           $query = "INSERT INTO UsersTable (Username, Password, FirstName, Surname, Address, City, Mobile)
                    VALUES ('$username', '$password', '$firstName', '$surname', '$address', '$city', '$mobile')";
  20
            if (mysqli_query($Connection, $query)) {
               // Registration successful
               $_SESSION['registration_success'] = true;
  24
               // Redirect to index.html
               header('Location: index.html');
               exit();
           } else {
               // Registration failed
  28
               $_SESSION['registration_error'] = "Registration failed: " . mysqli_error($Connection);
       ?>
```

#### Search

This PHP code is for a book search functionality. It retrieves search criteria from a form, including book title, author, and category. It makes an SQL query based on the provided criteria and executes it to fetch matching books from the database. The results are then displayed in an HTML table, showing details such as book title, author, publication year, category, and reservation status. The user can input search criteria through a form, and the results are updated based on the search parameters.

The code also includes a dropdown menu for selecting book categories from the database

```
** search.php
      <?php
      require('dbconnect.php');
      //variables
      $searchTitle = $searchAuthor = $searchCategory = '';
      $results = array();
      if ($_SERVER['REQUEST_METHOD'] == 'POST') {
          $searchTitle = $_POST['searchTitle'];
          $searchAuthor = $_POST['searchAuthor'];
13
          $searchCategory = $_POST['searchCategory'];
15
          // SQL query
          $query = "SELECT * FROM BooksTable WHERE 1";
          if (!empty($searchTitle)) {
              $query .= " AND BookTitle LIKE '%$searchTitle%'";
          if (!empty($searchAuthor)) {
              $query .= " AND Author LIKE '%$searchAuthor%'";
          if (!empty($searchCategory)) {
              // join BooksTable and CategoryTable on Category ID
              $query .= " AND BooksTable.Category IN (SELECT ID FROM CategoryTable WHERE Name = '$searchCategory')";
          $result = mysqli_query($Connection, $query) or die(mysqli_error($Connection));
          while ($row = mysqli_fetch_assoc($result)) {
              $results[] = $row;
```

```
<?php
// Display search results
if (!empty($results)) {
   echo '<h3>Search Results:</h3>';
   echo '';
   echo 'Book TitleAuthorYearCategoryReserved';
   foreach ($results as $book) {
      echo '';
      echo '' . $book['BookTitle'] . '';
      echo '' . $book['Author'] . '';
      echo '' . $book['Year'] . '';
      // Fetch the category name based on the category ID
      $categoryId = $book['Category'];
      $categoryQuery = "SELECT Name FROM CategoryTable WHERE ID = $categoryId";
      $categoryResult = mysqli_query($Connection, $categoryQuery) or die(mysqli_error($Connection));
      $category = mysqli_fetch_assoc($categoryResult);
      echo '' . $category['Name'] . '';
      echo '' . ($book['Reserved'] ? 'Yes' : 'No') . '';
      echo '';
   echo '';
```

#### Reserve

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This PHP code is for a book reservation system. It starts by cheecking if the user is logged in; if not, it redirects them to the login page. It then handles two scenarios based on form submissions:

Search Form Submission: It retrievces the search title from the form, constructs an SQL query to search for books with titles containing the given search title, and displays the results.

Reservation Form Submission: If a book is selected for reservation, it checks whether the book is already reserved. If not, it inserts a reservation record into the ReservesTable with the book's ISBN, the user's username, and the current date. The reservation status is displayed, indicating success or failure.

```
reserve.php
     <?php
      require('dbconnect.php');
      session_start();
      // Check if the user is logged in
      if (!isset($_SESSION['Username'])) {
          header('Location: login.php');
          exit();
      }
11
      // vars.
      $reservationMessage = '';
      $searchTitle = '';
14
      $results = array();
      if ($_SERVER['REQUEST_METHOD'] == 'POST') {
          if (isset($_POST['searchTitle'])) {
20
              // get search title
              $searchTitle = $_POST['searchTitle'];
22
23
              // sql for search
              $searchQuery = "SELECT * FROM BooksTable WHERE BookTitle LIKE '%$searchTitle%'";
24
              $searchResult = mysqli_query($Connection, $searchQuery) or die(mysqli_error($Connection));
26
              //fetch results into array
              while ($row = mysqli_fetch_assoc($searchResult)) {
29
                  $results[] = $row;
30
          } elseif (isset($_POST['isbnToReserve'])) {//update reserves table
              $isbnToReserve = $_POST['isbnToReserve'];
              $username = $_SESSION['Username'];
33
34
35
              // Check if the book is already reserved
              $checkReservedQuery = "SELECT * FROM BooksTable WHERE ISBN = '$isbnToReserve' AND Reserved = 1";
36
              $checkReservedResult = mysqli_query($Connection, $checkReservedQuery) or die(mysqli_error($Connection));
38
              if (mysqli_num_rows($checkReservedResult) > 0) {
40
                  $reservationMessage = "This book is already reserved.";
              } else {
                  // Reserve the book
42
                  $reserveQuery = "INSERT INTO ReservesTable (ISBN, UserName, ReservedDate) VALUES ('$isbnToReserve',
43
44
                  if (mysqli_query($Connection, $reserveQuery)) {
                      $reservationMessage = "Reservation successful!";
                  } else {
                      $reservationMessage = "Error reserving the book: " . mysqli_error($Connection);
49
```

```
<?php
92
          if (!empty($results)) {
              echo '<h3>Search Results:</h3>';
94
              echo '';
              foreach ($results as $book) {
                  echo '' . $book['BookTitle'] . ' by ' . $book['Author'] . ' (ISBN: ' . $book['ISBN'] . ') - Cate
                  echo ' <form method="post" action="reserve.php" style="display:inline;">';
                  echo '<input type="hidden" name="isbnToReserve" value="' . $book['ISBN'] . '">';
                  echo '<button type="submit">Reserve</button></form>';
100
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              echo '';
103
104
105
```

#### My Account

This page allows users to see a list of books they've reserved. It first checks if a user is logged in and gets their username. Then, it fetches information about the reserved books from the database and displays them on the page. If there are no reserved books, it shows a message indicating that. There's also a logout button that users can click to log out from their accounts.

```
myaccount.php
 1 <?php
      require('dbconnect.php');
      session_start();
      // Check if the user is logged in
      if (!isset($_SESSION['Username'])) {
          header('Location: login.php');
          exit();
10
      // Get the username of user
      $username = $_SESSION['Username'];
      $reservedBooksQuery = "SELECT BooksTable.BookTitle, BooksTable.Author, BooksTable.ISBN, CategoryTable.Name AS
                            FROM ReservesTable
                            JOIN BooksTable ON ReservesTable.ISBN = BooksTable.ISBN
                            JOIN CategoryTable ON BooksTable.Category = CategoryTable.ID
                            WHERE ReservesTable.UserName = '$username'";
      $reservedBooksResult = mysqli_query($Connection, $reservedBooksQuery) or die(mysqli_error($Connection));
```

```
<?php
// Display reserved books
if (mysqli_num_rows($reservedBooksResult) > 0) {
    echo '<h3>Reserved Books:</h3>';
    echo '';
    while ($book = mysqli_fetch_assoc($reservedBooksResult)) {
        echo '' . $book['BookTitle'] . ' by ' . $book['Author'] . ' (ISBN: ' . $book['ISBN'] . ') - Cater
    }
    echo '';
} else {
    echo 'No reserved books.';
}
?>
```

#### Logout

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Logout.php starts a session, clears all session variables, destrroys the session, and then redirects the user to the login page (login.php). The purpose is to log the user out by ending the session and ensuring that they are directed to the login page afterward.

```
logout.php
1  <?php
2  session_start();
3
4
5  $_SESSION = array();
6
7  // Destroy the session
8  session_destroy();
9
10  //login page
11  header("Location: login.php");
12  exit();
13  ?>
14
```

# **Q2 Source Code**

```
Styles.css

body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
}

nav {
    background-color: #333;
    overflow: hidden;
}

nav ul {
    list-style-type: none;
    margin: 0;
    padding: 0;
```

```
nav li {
  float: left;
nav a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
nav a:hover {
  background-color: #ddd;
  color: black;
.content {
  padding: 20px;
h1 {
  color: #333;
```

```
Dbconnect.php
<!-- Database Connection php -->
<!php

$Connection = mysqli_connect('localhost', 'root', ");
if(!$Connection)
{
    die("Database Connection Failed" . mysqli_error($Connection));
}

$Select_Db = mysqli_select_db($Connection, 'Mine');
if(!$Select_Db)
```

```
die("Database Selection Failed" . mysqli_error($Connection));
Login.php
<?php
//connect to db
require('dbconnect.php');
session_start();
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
  $username = $_POST['username'];
  $password = $_POST['password'];
  $query = "SELECT * FROM UsersTable WHERE Username = '$username'";
  $result = mysqli_query($Connection, $query) or die(mysqli_error($Connection));
  $user = mysqli_fetch_assoc($result);
  if ($user && password_verify($password, $user['Password'])) {
    $_SESSION['Username'] = $user['Username'];
    header('Location: index.html');
    exit();
  } else {
    $error_message = "Invalid username or password. Please try again.";
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
```

```
<title>Login</title>
<h2>Login</h2>
<?php
if (isset($error_message)) {
  echo "$error_message";
<form method="post" action="">
  <label for="username">Username:</label>
  <input type="text" name="username" required><br>
  <label for="password">Password:</label>
  <input type="password" name="password" required><br>
  <input type="submit" value="Login">
>Don't have an account? <a href="register.php">Register Now!</a>
```

```
Register.php

<?php
error_reporting(E_ALL);
ini_set('display_errors', 1);

require('dbconnect.php');
session_start();

//form detials
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $username = $_POST['username'];
    $password = password_hash($_POST['password'], PASSWORD_DEFAULT);
```

```
$firstName = $_POST['firstName'];
  $surname = $_POST['surname'];
  $address = $_POST['address'];
  $city = $_POST['city'];
  $mobile = $_POST['mobile'];
  $query = "INSERT INTO UsersTable (Username, Password, FirstName, Surname, Address, City, Mobile)
        VALUES ('$username', '$password', '$firstName', '$surname', '$address', '$city', '$mobile')";
  if (mysqli_query($Connection, $query)) {
    // Registration successful
    $_SESSION['registration_success'] = true;
    // Redirect to index.html
    header('Location: index.html');
    exit();
 } else {
    // Registration failed
    $_SESSION['registration_error'] = "Registration failed: " . mysqli_error($Connection);
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>Register</title>
  <h2>Register</h2>
  <?php
  if (isset($_SESSION['registration_success']) && $_SESSION['registration_success']) {
    echo "Registration successful!";
    // Reset the session variable to avoid displaying the message again on page refresh
    unset($_SESSION['registration_success']);
```

```
} elseif (isset($_SESSION['registration_error'])) {
  echo "" . $_SESSION['registration_error'] . "";
  unset($_SESSION['registration_error']);
<form method="post" action="register.php">
  <label for="username">Username:</label>
  <input type="text" name="username" required><br>
  <label for="password">Password:</label>
  <input type="password" name="password" required><br>
  <label for="firstName">First Name:</label>
  <input type="text" name="firstName" required><br>
  <label for="surname">Surname:</label>
  <input type="text" name="surname" required><br>
  <label for="address">Address:</label>
  <input type="text" name="address" required><br>
  <label for="city">City:</label>
  <input type="text" name="city" required><br>
  <label for="mobile">Mobile:</label>
  <input type="text" name="mobile" required><br>
  <input type="submit" value="Register">
```

```
Search.php

</php
require('dbconnect.php');
//variables</pre>
```

```
$searchTitle = $searchAuthor = $searchCategory = ";
$results = array();
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
  // Get search criteria from the form
  $searchTitle = $_POST['searchTitle'];
  $searchAuthor = $_POST['searchAuthor'];
  $searchCategory = $_POST['searchCategory'];
  // SQL query
  $query = "SELECT * FROM BooksTable WHERE 1";
  if (!empty($searchTitle)) {
    $query .= " AND BookTitle LIKE '%$searchTitle%";
  if (!empty($searchAuthor)) {
    $query .= " AND Author LIKE '%$searchAuthor%";
  if (!empty($searchCategory)) {
    // join BooksTable and CategoryTable on Category ID
    $query .= " AND BooksTable.Category IN (SELECT ID FROM CategoryTable WHERE Name =
'$searchCategory')";
  $result = mysqli_query($Connection, $query) or die(mysqli_error($Connection));
  while ($row = mysqli_fetch_assoc($result)) {
    $results[] = $row;
<!DOCTYPE html>
<html lang="en">
```

```
<meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <link rel="stylesheet" href="styles.css">
 <title>Search Books</title>
     <a href="search.php">Search</a>
     <a href="reserve.php">Reserve</a>
     <a href="myaccount.php">My Account</a>
 <h2>Search Books</h2>
 <form method="post" action="search.php">
   <label for="searchTitle">Book Title:</label>
   <input type="text" name="searchTitle" value="<?php echo $searchTitle; ?>">
   <label for="searchAuthor">Author:</label>
   <input type="text" name="searchAuthor" value="<?php echo $searchAuthor; ?>">
   <label for="searchCategory">Category:</label>
   <select name="searchCategory">
     <option value="">-- Select Category --</option>
     $categoryQuery = "SELECT * FROM CategoryTable";
     $categoryResult = mysqli_query($Connection, $categoryQuery) or die(mysqli_error($Connection));
     while ($category = mysqli_fetch_assoc($categoryResult)) {
        echo '<option value="' . $category['Name'] . "" . ($searchCategory == $category['Name'] ? ' selected' : ")
'>' . $category['Name'] . '</option>';
```

```
<input type="submit" value="Search">
<?php
// Display search results
if (!empty($results)) {
  echo '<h3>Search Results:</h3>';
  echo '';
  echo 'Book TitleAuthorYearCategoryReserved';
  foreach ($results as $book) {
    echo '';
    echo '' . $book['BookTitle'] . '';
    echo '' . $book['Author'] . '';
    echo '' . $book['Year'] . '';
    $categoryId = $book['Category'];
    $categoryQuery = "SELECT Name FROM CategoryTable WHERE ID = $categoryId";
    $categoryResult = mysqli_query($Connection, $categoryQuery) or die(mysqli_error($Connection));
    $category = mysqli_fetch_assoc($categoryResult);
    echo '' . $category['Name'] . '';
    echo '' . ($book['Reserved'] ? 'Yes' : 'No') . '';
    echo '';
  echo '';
```

#### Reserve.php

<?php

// connect to dh

```
require('dbconnect.php');
session_start();
// Check if the user is logged in
if (!isset($_SESSION['Username'])) {
  header('Location: login.php');
  exit();
// vars.
$reservationMessage = ";
$searchTitle = ";
$results = array();
// Check if the form is submitted
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
  if (isset($_POST['searchTitle'])) {
    // get search title
     $searchTitle = $_POST['searchTitle'];
     $searchQuery = "SELECT * FROM BooksTable WHERE BookTitle LIKE '%$searchTitle%";
     $searchResult = mysqli_query($Connection, $searchQuery) or die(mysqli_error($Connection));
    //fetch results into array
    while ($row = mysqli_fetch_assoc($searchResult)) {
       $results[] = $row;
  } elseif (isset($_POST['isbnToReserve'])) {//update reserves table
    $isbnToReserve = $_POST['isbnToReserve'];
     $username = $_SESSION['Username'];
    // Check if the book is already reserved
     $checkReservedQuery = "SELECT * FROM BooksTable WHERE ISBN = '$isbnToReserve' AND Reserved
= 1";
     $checkReservedResult = mysqli_query($Connection, $checkReservedQuery) or
die(mysqli_error($Connection));
     if (mysqli_num_rows($checkReservedResult) > 0) {
       $reservationMessage = "This book is already reserved.";
```

```
} else {
      // Reserve the book
      $reserveQuery = "INSERT INTO ReservesTable (ISBN, UserName, ReservedDate) VALUES
('$isbnToReserve', '$username', NOW())";
      if (mysqli_query($Connection, $reserveQuery)) {
         $reservationMessage = "Reservation successful!";
      } else {
        $reservationMessage = "Error reserving the book: " . mysqli_error($Connection);
<!DOCTYPE html>
<html lang="en">
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>Reserve a Book</title>
      <a href="search.php">Search</a>
      <a href="reserve.php">Reserve</a>
      <a href="myaccount.php">My Account</a>
  <h2>Reserve a Book</h2>
  <?php
```

```
if (!empty($reservationMessage)) {
    echo "$reservationMessage";
  <form method="post" action="reserve.php">
    <label for="searchTitle">Search by Title:</label>
    <input type="text" name="searchTitle" value="<?php echo $searchTitle; ?>" placeholder="Enter book title">
    <input type="submit" value="Search">
  <?php
  if (!empty($results)) {
    echo '<h3>Search Results:</h3>';
    echo '';
    foreach ($results as $book) {
       echo '' . $book['BookTitle'] . ' by ' . $book['Author'] . ' (ISBN: ' . $book['ISBN'] . ') - Category: ' .
$book['Category'];
       echo ' <form method="post" action="reserve.php" style="display:inline;">';
       echo '<input type="hidden" name="isbnToReserve" value="' . $book['ISBN'] . "">';
       echo '<button type="submit">Reserve</button></form>';
    echo '';
  <!-- Hidden form for the Reserve button -->
  <form id="reserveForm" method="post" action="reserve.php">
    <input type="hidden" name="isbnToReserve">
```

#### Myaccount.php

<?php

// connect to dh

```
require('dbconnect.php');
session_start();
// Check if the user is logged in
if (!isset($_SESSION['Username'])) {
  header('Location: login.php');
  exit();
// Get the username of user
$username = $_SESSION['Username'];
$reservedBooksQuery = "SELECT BooksTable.BookTitle, BooksTable.Author, BooksTable.ISBN,
Category Table. Name AS Category
            FROM ReservesTable
            JOIN BooksTable ON ReservesTable.ISBN = BooksTable.ISBN
            JOIN CategoryTable ON BooksTable.Category = CategoryTable.ID
            WHERE ReservesTable.UserName = '$username'";
$reservedBooksResult = mysqli_query($Connection, $reservedBooksQuery) or die(mysqli_error($Connection));
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>My Account</title>
       <a href="search.php">Search</a>
       <a href="reserve.php">Reserve</a>
       <a href="myaccount.php">My Account</a>
```

```
<h2>My Account</h2>
  <?php
  // Display reserved books
  if (mysqli_num_rows($reservedBooksResult) > 0) {
    echo '<h3>Reserved Books:</h3>';
    echo '';
    while ($book = mysqli_fetch_assoc($reservedBooksResult)) {
       echo '' . $book['BookTitle'] . ' by ' . $book['Author'] . ' (ISBN: ' . $book['ISBN'] . ') - Category: ' .
$book['Category'] . '';
    echo '';
 } else {
    echo 'No reserved books.';
  <!-- Logout Form -->
  <form method="post" action="logout.php">
    <input type="submit" value="Logout">
</html>
Logout.php
<?php
session_start();
$_SESSION = array();
// Destroy the session
session_destroy();
//login page
```

```
header("Location: login.php");
exit();
?>
```

```
Mine.sql
 phpMyAdmin SQL Dump
 - https://www.phpmyadmin.net/
 - Host: localhost
 Generation Time: Dec 07, 2023 at 07:38 PM
 Server version: 10.4.28-MariaDB
 - PHP Version: 8.2.4
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";
/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;
 - Table structure for table `BooksTable`
CREATE TABLE 'BooksTable' (
 'ISBN' varchar(20) NOT NULL,
 `BookTitle` varchar(60) NOT NULL,
 `Author` varchar(50) NOT NULL,
 'Year' int(4) DEFAULT NULL,
```

```
`Category` int(50) DEFAULT NULL,
 `Reserved` tinyint(1) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
CREATE TABLE `CategoryTable` (
 'ID' int(3) NOT NULL,
 'Name' varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
 - Table structure for table `ReservesTable`
CREATE TABLE 'ReservesTable' (
 'ISBN' varchar(20) NOT NULL,
 'UserName' varchar(30) NOT NULL,
 'ReservedDate' date DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
- Table structure for table `UsersTable`
CREATE TABLE `UsersTable` (
 'Username' varchar(20) NOT NULL,
 'Password' varchar(60) NOT NULL,
 `FirstName` varchar(30) NOT NULL,
 'Surname' varchar(30) NOT NULL,
 `Address` varchar(50) NOT NULL,
 'City' varchar(20) NOT NULL,
```

```
'Mobile' varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
 - Indexes for dumped tables
 Indexes for table `BooksTable`
ALTER TABLE 'BooksTable'
 ADD PRIMARY KEY ('ISBN'),
 ADD KEY `Category` (`Category`);

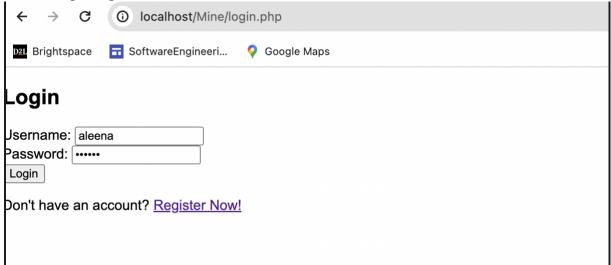
    Indexes for table `CategoryTable`

ALTER TABLE 'CategoryTable'
 ADD PRIMARY KEY ('ID');
 - Indexes for table `ReservesTable`
ALTER TABLE 'ReservesTable'
 ADD PRIMARY KEY ('ISBN', 'UserName'),
 ADD KEY `Username` (`UserName`);
 Indexes for table `UsersTable`
ALTER TABLE 'UsersTable'
 ADD PRIMARY KEY ('Username') KEY_BLOCK_SIZE=3 USING BTREE;
 - Constraints for dumped tables
 - Constraints for table `BooksTable`
```

| ALTER TABLE `BooksTable`   |
|--|
| ADD CONSTRAINT `bookstable_ibfk_1` FOREIGN KEY (`Category`) REFERENCES `CategoryTable` (`ID`);   |
|  |
| _  |
| Constraints for table `ReservesTable`  |
| <del>-</del>   |
| ALTER TABLE `ReservesTable`  |
| ADD CONSTRAINT `reservestable_ibfk_1` FOREIGN KEY (`ISBN`) REFERENCES `BooksTable` (`ISBN`),   |
| ADD CONSTRAINT `reservestable_ibfk_2` FOREIGN KEY (`UserName`) REFERENCES `UsersTable`   |
|  |
| (`Username`);  |
| (`Username`); COMMIT;  |
|  |
|  |
| COMMIT;  |
| COMMIT; /*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  |
| COMMIT;  /*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  /*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;              |
| COMMIT;  /*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  /*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;  /*!40101 SE |

Q3

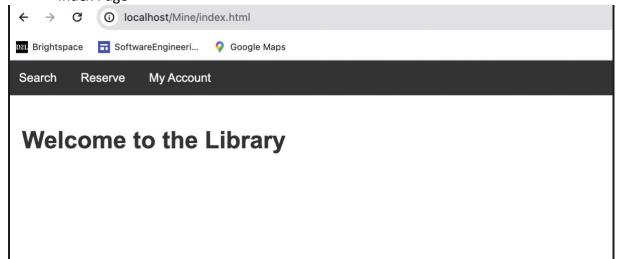
Login Page



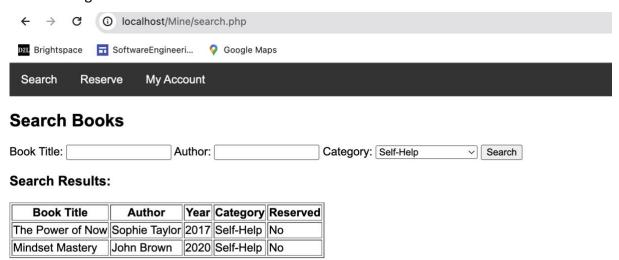
Register Page



### **Index Page**



#### Search Page



### Reserve Page



## Reserve a Book

Search by Title: shining Search

#### Search Results:

• The Shining by Ella Miller (ISBN: 978-4-5678-9012-3) - Category: 18 Reserve

### My Account Page



## **My Account**

#### **Reserved Books:**

- The Haunting by Emily Davis (ISBN: 978-0-1234-5678-9) Category: Horror
- Love's Embrace by Jane Smith (ISBN: 978-4-4567-8901-2) Category: Romance
- Enchanted Dreams by John Doe (ISBN: 978-5-5678-9012-3) Category: Fantasy

Logout

Q4 Design Document

