### **WebDev2 Assignment Report**

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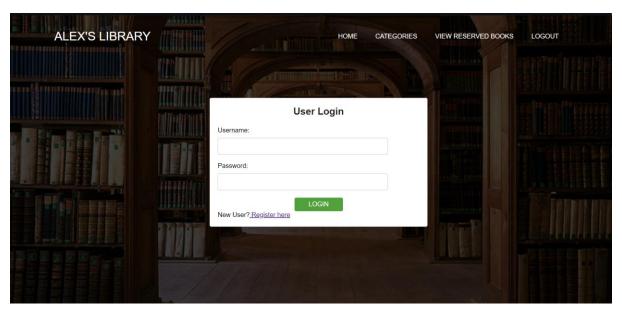
## List of pages used:

- database.php
- register.php
- login.php
- index.php
- categories.php
- view.php
- remove.php
- reserve.php
- logout.php
- style.css

#### database.php

This is a simple page that establishes a connection to the library database in phpMyAdmin. It is included on every page used in the assignment via the "require\_once" function.

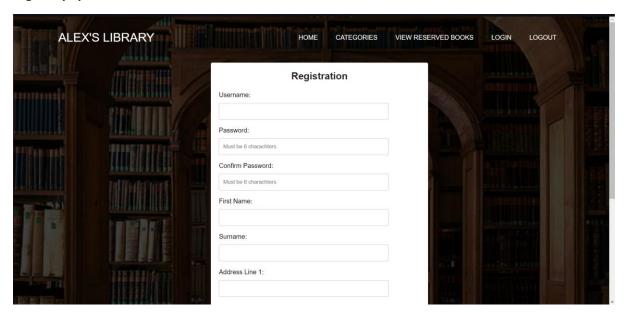
# login.php



This is the page that the user is greeted with upon loading up the website. If they are new to the website, they are prompted with a link to a page where they can register their details. All other pages are locked until the user has identified themselves to the system. Both the username and password must match for them to gain access to the website. If they login in successfully they are brought to the home page (index.php).

```
ibraryWebsite > 需 login.php
       session start();
       require_once "database.php";
       if (isset($_POST['Username']) && isset($_POST['Password'])) {
           $un = $_POST['Username'];
$pw = $_POST['Password'];
           $result = $conn->query($sql);
            if ($result !== false && $result->num_rows > 0) {
               $_SESSION["un"] = $un;
               $_SESSION["success"] = "Login Successful";
header('Location: index.php');
           } else {
             $_SESSION["Error"] = "Incorrect username or password. Please try again";
header('Location: login.php');
     <!DOCTYPE html>
     <html lang="en">
       <meta charset="UTF-8">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Alex's Library</title>
       <div class="banner">
               <a href="index.php">Home</a>
                <a href="categories.php">Categories</a>
<a href="view.php">View Reserved Books</a>
<a href="logout.php">Logout</a>
            if (isset($_SESSION["Error"])) {
                echo("<script>alert('".$_SESSION["Error"]."')</script>");
                 unset($_SESSION["Error"]);
              <div class="login-container">
                  <form method="post">
                      <h2>User Login</h2>
                      <div class ="form-group">
                         <label for="username">Username: </label>
                         <input type="text" class="form-control" name="Username" required>
                      <div class="form-group">
                          <label for="password">Password: </label>
                          <input type="password" class="form-control" name="Password" required>
                     <input type="submit" class="button" value="Login">
                     New User?<a href="register.php"> Register here</a>
```

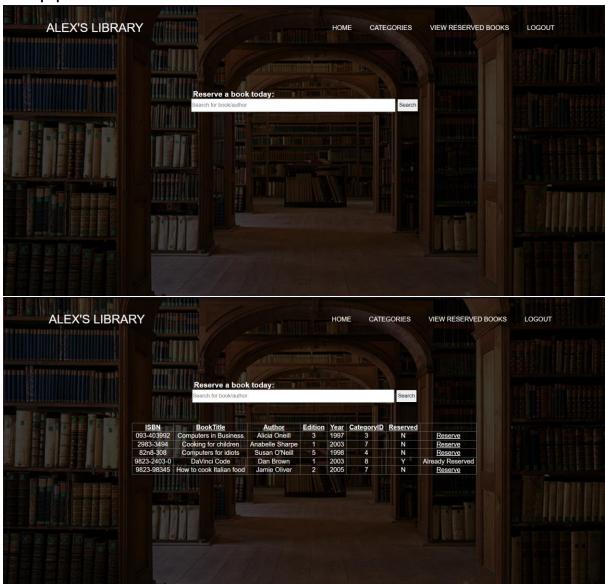
### register.php





The register page contains a simple form that captured the users details and inserts them into the users table in the database. There is error checking that validates that the passwords entered match and that they are 6 characters in length. There is also error checking to make sure that the Telephone number and mobile phone numbers are fully numeric and that the mobile number is 10 numbers in length. The user is still unable to access the main page however they can go back to the login page via the navbar. Upon successfully registering their details they are redirected to the login page.

## index.php



This is the main home page of the website. It verifies that the user is logged in by checking if the \$\_Session["success"] variable is set. If it is not set the user is redirected to the login page. This is the case for every page going forwards. There is now a fully functioning navbar that allows the user to move between the pages. There is a search bar on the page that allows the user to search for books via author or book title, including a partial search. The results are then displayed in a table. If a book has not yet been reserved there is a link provided (reserve.php) which will allow the user to reserve that book. If a book has already been reserved the user is notified of this in the table.

```
LibraryWebsite > 🐄 index.php
             if(!isset($_SESSION['success']))
                         header("Location:Login.php");
         <!DOCTYPE html>
         <html lang="en">
             <meta charset="UTF-8">
             <meta name="viewport" content="width=device-width, initial-scale=1.0">
             <title>Alex's Library</title>
link rel="stylesheet" href="style.css">
                 <a href="#">Home</a>
<a href="categories.php">Categories</a>
<a href="view.php">View Reserved Books</a>
<a href="logout.php">Logout</a>

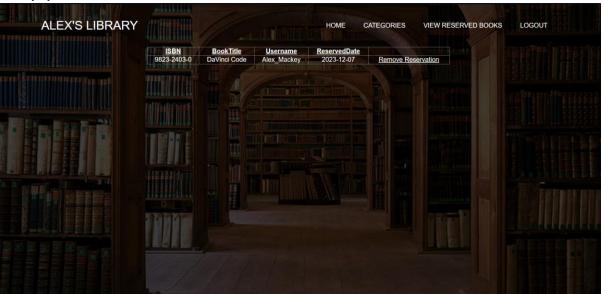
                 <form method="post">
     <div class="searchbar">
                       <label for="search"><h3>Reserve a book today:</h3></label>
                          <input class="textbox" type="text" name="search" placeholder="Search for book/author">
<button type="submit">Search</button>
             ?php
require_once "database.php";
if (isset($_POST["search"])){
    $search = trim($_POST["search"]);
    if (*search == "") {
                   if ($search == "
exit();
                  cho "to style='color: white;'>";
echo ($row["ISBN"]);
echo ("";
echo ($row["ISBN"]);
echo ("";
echo ($row["BookTitle"]);
echo ("";
echo ($row["Author"]);
echo ($row["Author"]);
                          echo($row["Author"]);
echo("c/da><da>");
echo($row["Edition"]);
echo ("c/td><da>");
echo($row["Year"]);
echo ($row["Category"]);
echo($row["Category"]);
echo($row["Reserved"]);
echo($row["Reserved"]);
echo($row["Reserved"]);
                           echo ("</da>");
if($row["Reserved"] == 'N'){
   echo('<a href="reserve.php?id='.htmlentities($row["ISBN"]).'">Reserve</a>');
                                      echo "";
                                   echo "0 results";
                                $conn->close();
```

#### reserve.php

This page has no frontend, it is a purely backend page. When a user clicks the reserve link on a previous page the ISBN of the book is sent to the reserve page, and it is included in the page URL. Using this ID, the reserve page adds that book to the reservations table, it uses the session variable "un" to assign the reservation to the user who is currently logged in. It then updates the books table and sets the Reserved column from "N" to "Y" making all future reservations impossible until the reservation is removed by the user. The date of reservation is also captured by this page.

```
Vebsite > 💝 reserve.php
   session_start();
   if(!isset($_SESSION['success']))
            header("Location:Login.php");
<!DOCTYPE html>
 <html lang="en":
    <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Alex's Library</title>
link rel="stylesheet" href="style.css">
     <div class="banner">
         <div class="navbar"
             <label class="logo">Alex's Library</label>
                  <a href="index.php">Home</a>
                 <a href="categories.php">Categories</a>
<a href="view.php">View Reserved Books</a>
<a href="logout.php">Logout</a></a></a>
         require_once "database.php";
         if (isset($_GET['id'])) {
             $ISBN = $_GET['id'];
$un = $_SESSION["un"]
             $date = date("Y-m-d");
             $sq1 = "INSERT INTO reservations (ISBN, Username, ReservedDate) VALUES ('$ISBN', '$un', '$date')";
             if ($conn->query($sql) === TRUE) {
                         <script>alert('New Reservation Added'); window.setTimeout(function(){ window.location.href = 'index.php'; }, 10);</sc</pre>
                  $sql = "UPDATE books SET Reserved = 'Y' WHERE ISBN = '$ISBN'";
                  $conn->query($sq1);
                  echo "Error: Reservation could not be completed";
```

### view.php



This is the page where users can view their reservations. It only shows the reservation made by the user which is logged in. This is done with the Session variable "un". It displays all the contents of the reservations table and also the book title from the books table, which is achieved by using a join statement in the SQL code. There is a link in the table so that the users are able to remove their reservations from this page (remove.php).

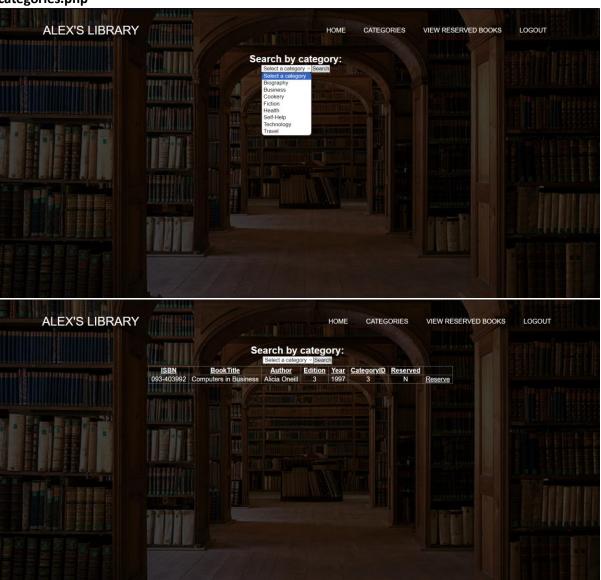
```
.ibraryWebsite > 🧌 view.php
        session_start();
        if(!isset($_SESSION['success']))
               header("Location:Login.php");
     <!DOCTYPE html>
    <html lang="en">
       <meta charset="UTF-8">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
       <title>Alex's Library</title>
        div class="banner";
          <div class="navbar">
             <label class="logo">Alex's Library</label>
                <a href="index.php">Home</a>
                <a href="categories.php">Categories</a>
                <a href="view.php">View Reserved Books</a>
                <a href="logout.php">Logout</a>
```

#### remove.php

Like reserve.php, this is purely a backend page. When a user clicks the remove link on a previous page the ISBN of the book is sent to the remove page, and it is included in the page URL. Using this ID, the remove page removes the reservation from the from reservations table. It also sets the reserved value in the books table from "Y" back to "N", allowing the book to be reserved once again.

```
session_start();
   if(!isset($_SESSION['success']))
          header("Location:Login.php");
<!DOCTYPE html>
<html lang="en">
  <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Alex's Library</title>
  <link rel="stylesheet" href="style.css">
  <div class="banner">
     <div class="navbar">
        <label class="logo">Alex's Library</label>
           <a href="index.php">Home</a>
           <a href="categories.php">Categories</a>
           <a href="view.php">View Reserved Books</a>
           <a href="logout.php">Logout</a>
       if (isset($_GET['id'])) {
           require_once "database.php";
           $ISBN = $conn->real_escape_string($_GET['id']);
           $sqlDelete = "DELETE FROM reservations WHERE ISBN = '$ISBN'";
           if ($conn->query($sqlDelete) === TRUE) {
               echo "Record deleted successfully.";
               $sqlUpdate = "UPDATE books SET Reserved = 'N' WHERE ISBN = '$ISBN'";
               if ($conn->query($sqlUpdate) !== TRUE) {
                   echo "Error updating record: " . $conn->error;
               echo "Error deleting record: " . $conn->error;
           $conn->close();
           header("Location: view.php");
```

### categories.php



This page allows the user to search for a book of their choice via the category. This page features a dropdown list with all the categories, it is not hardcoded, and it includes all the current categories from the categories table in the database. It is a dynamic list. When the user selects the category, they are once again able to reserve a book by clicking on the link (reserve.php). If the book is already reserved, then they will not be able to reserve it.

```
v>
<?php
require_once "database.php";
$sql = "SELECT (ategoryID, CategoryDescription FROM categories ORDER BY CategoryDescription";
$result = $conn->query($sql);
if ($result->num_rows > 0) {
    echo '<form method="post" class="category-form">';
    echo '<fortion walue="">Select a category*\h2>Search by category:</h2></label>';
    echo 'coption value="">Select a category
while($row = $result->fetch_assoc()) {
    echo '<option value="" . $row['CategoryID'] . '">' . $row['CategoryDescription'] . '</option>';
    }
    echo '</select>':
                                                      while($row = $result->fetch_assoc()) {
    echo '
echo '
**Srow['CategoryID'] . '">' . $row['CategoryDescription'] . '</pte>
**Srow['CategoryDescription'] . '</pte>
**Srow['Category'] & ($_POST['Category'] !== "")) {
    $Cat = $_POST['Category'] & ($_SCAT = $_POST['Category'] !== "")) {
    $Sat = $_POST['Category'] & ($_SCAT = $_POST['Category'] !== "")) {
    $Sat = $_POST['Category'] & ($_SCAT = $_POST['Category'] !== "")) {
    $Sat = $_POST['Category'] & ($_SCAT = $_SCAT = $_SCAT
                                                                                                                                                                                                                                 if($row["Reserved"] == 'N'){
  echo('<a href="reserve.php?id='.htmlentities($row["ISBN"]).'">Reserve</a>');
                                                                                                                                                                                                                                                   echo("Already Reserved");
                                                                                                                                                                                               echo "";
```

## logout.php

Once clicked via the navbar this page destroys the session, logging the user out and it then sends them back to the login page.

```
LibraryWebsite > Mr logout.php

1 <?php
2 | session_start();
3 | session_destroy();
4 | header('Location: login.php');
5 | ?>
```

### Website design and style.css

The website consists of a very simple design, it features a navbar with links to various pages across the website. Majority of the text is white so that it contrasts well with the dark background image. The background image chosen is off a generic library. The tables heading are in bold and once again are in white for readability purposes. Below is style.css

```
LibraryWebsite > # style.css > ...

1 /*Index, Navbar and banner */
              *{
| margin: 0;
| Mag: 0;
                        padding: 0;
font-family: sans-scrif;
                .banner{
width: 100%;
height: 100vh;
                        background-image: linear-gradient(  | rgba(0,0,0,0.75),  | rgba(0,0,0,0.75)), url(background.jpg); background-size: cover; background-position: center;
                .banner-register{
   width: 100%;
   height: 100%;
   height: 100%;
   background-image: linear-gradient( | rgba(0,0,0,0,0,0,0,0,0,0,0,0)), url(background-jpg);
   background-size: cover;
   background-position: center;
                .navbar{
width: 85%;
                      mangin: auto;
padding: 35px 0;
display: flex;
align-items: center;
justify-content: space-between;
               .logo{
   width: 300px;
   font-size: 30px;
                      tont-size: sepx;
cursor: pointer;
text-decoration: none;
color: ##fff;
text-transform: uppercase;
                .navbar ul li{
    list-style: none;
    display: inline-block;
    margin: 0 20px;
    position: relative;
                .navbar ul li a{
text-decoration: none;
color: ##fff;
text-transform: uppercase;
               .navbar ul li::after(
content: '';
height: 3px;
width: 8;
background: ■#889688;
position: absolute;
left: 8;
bottom: -10px;
transition: 0.5s;
}
                .navbar ul li:hover::after{ width: 188%
                .searchbar{
    color: ■ white;
    width: 100%;
    text-align: conter;
    position: relative;
    padding-top: 100px;
    padding-bottom: 50px;
```

```
.searchbar h3{
   text-align: left;
   padding-left: 473px;
 .textbox{
   width: 500px;
   height: 30px;
}
 .searchbar button(
height: 30px;
width: 50px;
display: inline-block;
float: none;
margin: 0;
padding: 0;
border: 0;
cursor: pointer;
}
        margin-left: auto;
margin-right: auto;
table{
border-collapse: collapse;
white-space: nowrap;
color: white;
width: SoX;
position: relative;
padding-left: 100px;
 thead{
font-weight: bold;
text-decoration-line: underline;
 td{
    text-align: center;
    padding-left: 6px;
    padding-right: 6px;
    padding-right: px;
    padding-bottom: 1px;

  table a{
    color: ■white;
 /* Login Form */
.login-container{
  margin: auto;
  width: 500px;
  padding-top: 100px;
  max-width: 90%;
  .login-container form{
width: 100%;
height: 100%;
padding: 28px;
background:  white;
border-radius: 4px;
box-shadow: 0 8x 16px  rgba(0,0,0,3);
```

```
.login-container form h2{
    text-align: center;
    margin-bottom: 24px;
    color: □#222;
                  /* Register Form */
.register-container{
  margin: auto;
  width: 500px;
  padding-top: 10px;
  max-width: 90%;
}
                    .register-container form{
width: 100%;
height: 100%;
padding: 28px;
background: ■white;
border-radius: 4px;
box-shadow: 0 8x 16px □rgba(0,0,0,0.3);
}
                         text-align: center;
margin-bottom: 24px;
color: #222;
                    .register-container form .form-control{ width: 400px;
                         width: 400px;
height: 40px;
background: white;
border-radius: 4px;
border: 1px solid silver;
margin: 10px 0 18px 0;
padding: 0px 10px;
display: flex;
flex-direction: column;
```

```
.register-container form .button{
   margin-left: 50%;
   transform: translateX(-50%);
   width: 120px;
                     height: 44px;
border: none;
outline: none;
background-color: #27x327;
cursor: pointer;
font-size: 16px;
                     text-transform: uppercase;
color:  white;
border-radius: 4px;
             .register-container form .button:hover{
    opacity: .7;
}
           .category-form {
   text-align: center;
   color: white;
   padding-left: 620px;
}
              .category-form, .category-form[type="submit"] {
    display: inline-block;
    vertical-align: middle;
                     margin: 5px;
256 .errorMessage{
257 color: white;
258 text-align: center;
259 }
```

The background image used is below.



# **Additional Comments:**

I was unable to add a feature that limited the number of results per page to 5 as per the requirements of the assignment.