**Exercise 1: User Registration System**

**Objective:** Create a simple user registration system using PHP and MySQL.

**Instructions:**

1. **Create a MySQL Database and Table:**

sql

Copy code

CREATE DATABASE user\_system;

USE user\_system;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

fullname VARCHAR(100),

email VARCHAR(100),

password VARCHAR(255)

);

1. **Create a Registration Form (HTML):**

html

Copy code

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Registration Form</title>

</head>

<body>

<h1>Register</h1>

<form action="register.php" method="post">

<label for="fullname">Full Name:</label>

<input type="text" id="fullname" name="fullname" required><br>

<label for="email">Email:</label>

<input type="email" id="email" name="email" required><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password" required><br>

<input type="submit" value="Register">

</form>

</body>

</html>

1. **Create the PHP Script to Handle Registration (register.php):**

php

Copy code

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "user\_system";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error);

}

// Get user data

$fullname = $\_POST['fullname'];

$email = $\_POST['email'];

$password = password\_hash($\_POST['password'], PASSWORD\_DEFAULT);

// Insert user data into database

$sql = "INSERT INTO users (fullname, email, password) VALUES ('$fullname', '$email', '$password')";

if ($conn->query($sql) === TRUE) {

echo "New record created successfully";

} else {

echo "Error: " . $sql . "<br>" . $conn->error;

}

$conn->close();

?>

1. **Test the Registration Form:**
   * Open the registration form in a web browser.
   * Fill in the details and submit the form.
   * Check the database to ensure the user data is inserted.

**Exercise 2: Display User List**

**Objective:** Retrieve and display a list of users from the database.

**Instructions:**

1. **Create a PHP Script to Display Users (display\_users.php):**

php

Copy code

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "user\_system";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error);

}

// Retrieve users

$sql = "SELECT id, fullname, email FROM users";

$result = $conn->query($sql);

if ($result->num\_rows > 0) {

echo "<h1>User List</h1>";

echo "<table border='1'>

<tr>

<th>ID</th>

<th>Full Name</th>

<th>Email</th>

</tr>";

while($row = $result->fetch\_assoc()) {

echo "<tr>

<td>" . $row["id"]. "</td>

<td>" . $row["fullname"]. "</td>

<td>" . $row["email"]. "</td>

</tr>";

}

echo "</table>";

} else {

echo "0 results";

}

$conn->close();

?>

1. **Test the User List Display:**
   * Open the display\_users.php file in a web browser.
   * Verify that the list of users is displayed in a table format.

**Exercise 3: Update User Information**

**Objective:** Allow updating user information in the database.

**Instructions:**

1. **Create an Update Form (HTML):**

html

Copy code

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Update User</title>

</head>

<body>

<h1>Update User</h1>

<form action="update\_user.php" method="post">

<label for="id">User ID:</label>

<input type="text" id="id" name="id" required><br>

<label for="fullname">Full Name:</label>

<input type="text" id="fullname" name="fullname"><br>

<label for="email">Email:</label>

<input type="email" id="email" name="email"><br>

<input type="submit" value="Update">

</form>

</body>

</html>

1. **Create the PHP Script to Handle Updates (update\_user.php):**

php

Copy code

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "user\_system";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error);

}

// Get user data

$id = $\_POST['id'];

$fullname = $\_POST['fullname'];

$email = $\_POST['email'];

// Update user data in database

$sql = "UPDATE users SET fullname='$fullname', email='$email' WHERE id=$id";

if ($conn->query($sql) === TRUE) {

echo "Record updated successfully";

} else {

echo "Error updating record: " . $conn->error;

}

$conn->close();

?>

1. **Test the Update Functionality:**
   * Open the update form in a web browser.
   * Enter the User ID and update details.
   * Submit the form and verify that the information is updated in the database.

**Exercise 4: Delete User Record**

**Objective:** Allow deleting a user record from the database.

**Instructions:**

1. **Create a Delete Form (HTML):**

html

Copy code

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Delete User</title>

</head>

<body>

<h1>Delete User</h1>

<form action="delete\_user.php" method="post">

<label for="id">User ID:</label>

<input type="text" id="id" name="id" required><br>

<input type="submit" value="Delete">

</form>

</body>

</html>

1. **Create the PHP Script to Handle Deletions (delete\_user.php):**

php

Copy code

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "user\_system";

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error);

}

// Get user ID

$id = $\_POST['id'];

// Delete user data from database

$sql = "DELETE FROM users WHERE id=$id";

if ($conn->query($sql) === TRUE) {

echo "Record deleted successfully";

} else {

echo "Error deleting record: " . $conn->error;

}

$conn->close();

?>

1. **Test the Delete Functionality:**
   * Open the delete form in a web browser.
   * Enter the User ID and submit the form.
   * Verify that the record is removed from the database.