**Set 1: Basic User Authentication**

**Question 1:**

**Simple User Login System (Registration & Login)**

**Database Table Setup:**

sql

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(50) NOT NULL,

password VARCHAR(255) NOT NULL

);

**Registration Page (register.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

// Database connection

$conn = new mysqli("localhost", "root", "", "your\_database");

// Insert new user into the database

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

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

echo "Registration successful!";

} else {

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

}

$conn->close();

}

?>

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

Username: <input type="text" name="username" required><br>

Password: <input type="password" name="password" required><br>

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

</form>

**Login Page (login.php):**

php

<?php

session\_start();

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

// Database connection

$conn = new mysqli("localhost", "root", "", "your\_database");

// Fetch user from the database

$sql = "SELECT \* FROM users WHERE username = '$username'";

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

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

$user = $result->fetch\_assoc();

if (password\_verify($password, $user['password'])) {

$\_SESSION['username'] = $username;

echo "Login successful!";

} else {

echo "Invalid password!";

}

} else {

echo "User not found!";

}

$conn->close();

}

?>

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

Username: <input type="text" name="username" required><br>

Password: <input type="password" name="password" required><br>

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

</form>

**Question 2:**

**User Registration with Username Uniqueness Check**

**Registration Page (register\_unique.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

// Database connection

$conn = new mysqli("localhost", "root", "", "your\_database");

// Check if username already exists

$sql = "SELECT \* FROM users WHERE username = '$username'";

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

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

echo "Username already exists!";

} else {

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

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

echo "Registration successful!";

} else {

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

}

}

$conn->close();

}

?>

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

Username: <input type="text" name="username" required><br>

Password: <input type="password" name="password" required><br>

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

</form>

**Set 2: Displaying Data from a Database**

**Question 1:**

**Display Products from a MySQL Database**

**Database Table Setup:**

sql

CREATE TABLE products (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

price DECIMAL(10, 2),

description TEXT

);

**PHP Script to Display Products (display\_products.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM products";

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

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

echo "<table border='1'>

<tr>

<th>Name</th>

<th>Price</th>

<th>Description</th>

</tr>";

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

echo "<tr>

<td>" . $row['name'] . "</td>

<td>" . $row['price'] . "</td>

<td>" . $row['description'] . "</td>

</tr>";

}

echo "</table>";

} else {

echo "No products found.";

}

$conn->close();

?>

**Question 2:**

**Display Students from a MySQL Database**

**Database Table Setup:**

sql

CREATE TABLE students (

student\_id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

email VARCHAR(100)

);

**PHP Script to Display Students (display\_students.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM students";

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

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

echo "<table border='1'>

<tr>

<th>Student ID</th>

<th>Name</th>

<th>Email</th>

</tr>";

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

echo "<tr>

<td>" . $row['student\_id'] . "</td>

<td>" . $row['name'] . "</td>

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

</tr>";

}

echo "</table>";

} else {

echo "No students found.";

}

$conn->close();

?>

**Set 3: CRUD Operations**

**Question 1:**

**Simple To-Do List (CRUD Operations)**

**Database Table Setup:**

sql

CREATE TABLE tasks (

id INT AUTO\_INCREMENT PRIMARY KEY,

task\_name VARCHAR(255),

status VARCHAR(50)

);

**Add Task (add\_task.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

$task\_name = $\_POST['task\_name'];

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "INSERT INTO tasks (task\_name, status) VALUES ('$task\_name', 'incomplete')";

$conn->query($sql);

$conn->close();

}

?>

<form method="post" action="add\_task.php">

Task Name: <input type="text" name="task\_name" required><br>

<input type="submit" value="Add Task">

</form>

**Display Tasks (display\_tasks.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM tasks";

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

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

echo "<table border='1'>

<tr>

<th>Task Name</th>

<th>Status</th>

<th>Actions</th>

</tr>";

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

echo "<tr>

<td>" . $row['task\_name'] . "</td>

<td>" . $row['status'] . "</td>

<td>

<a href='update\_task.php?id=" . $row['id'] . "'>Update</a>

<a href='delete\_task.php?id=" . $row['id'] . "'>Delete</a>

</td>

</tr>";

}

echo "</table>";

} else {

echo "No tasks found.";

}

$conn->close();

?>

**Update Task (update\_task.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

if ($\_GET['id']) {

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

$sql = "UPDATE tasks SET status = 'complete' WHERE id = $id";

$conn->query($sql);

}

$conn->close();

header("Location: display\_tasks.php");

?>

**Delete Task (delete\_task.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

if ($\_GET['id']) {

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

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

$conn->query($sql);

}

$conn->close();

header("Location: display\_tasks.php");

?>

**Question 2:**

**Basic Contact Management System**

**Database Table Setup:**

sql

CREATE TABLE contacts (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

phone\_number VARCHAR(15),

email VARCHAR(100)

);

**Add Contact (add\_contact.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

$phone\_number = $\_POST['phone\_number'];

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

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "INSERT INTO contacts (name, phone\_number, email) VALUES ('$name', '$phone\_number', '$email')";

$conn->query($sql);

$conn->close();

}

?>

<form method="post" action="add\_contact.php">

Name: <input type="text" name="name" required><br>

Phone Number: <input type="text" name="phone\_number" required><br>

Email: <input type="email" name="email" required><br>

<input type="submit" value="Add Contact">

</form>

**Display Contacts (display\_contacts.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM contacts";

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

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

echo "<table border='1'>

<tr>

<th>Name</th>

<th>Phone Number</th>

<th>Email</th>

<th>Actions</th>

</tr>";

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

echo "<tr>

<td>" . $row['name'] . "</td>

<td>" . $row['phone\_number'] . "</td>

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

<td>

<a href='update\_contact.php?id=" . $row['id'] . "'>Update</a>

<a href='delete\_contact.php?id=" . $row['id'] . "'>Delete</a>

</td>

</tr>";

}

echo "</table>";

} else {

echo "No contacts found.";

}

$conn->close();

?>

**Update Contact (update\_contact.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

if ($\_GET['id']) {

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

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

$phone\_number = $\_POST['phone\_number'];

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

$sql = "UPDATE contacts SET name='$name', phone\_number='$phone\_number', email='$email' WHERE id=$id";

$conn->query($sql);

}

$conn->close();

header("Location: display\_contacts.php");

?>

**Delete Contact (delete\_contact.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

if ($\_GET['id']) {

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

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

$conn->query($sql);

}

$conn->close();

header("Location: display\_contacts.php");

?>

**Set 4: Data Insertion and Display**

**Question 1:**

**Feedback Submission and Display**

**Database Table Setup:**

sql

CREATE TABLE feedback (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

email VARCHAR(100),

feedback TEXT

);

**Submit Feedback (submit\_feedback.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

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

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "INSERT INTO feedback (name, email, feedback) VALUES ('$name', '$email', '$feedback')";

$conn->query($sql);

$conn->close();

}

?>

<form method="post" action="submit\_feedback.php">

Name: <input type="text" name="name" required><br>

Email: <input type="email" name="email" required><br>

Feedback: <textarea name="feedback" required></textarea><br>

<input type="submit" value="Submit Feedback">

</form>

**Display Feedback (display\_feedback.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM feedback";

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

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

echo "<table border='1'>

<tr>

<th>Name</th>

<th>Email</th>

<th>Feedback</th>

</tr>";

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

echo "<tr>

<td>" . $row['name'] . "</td>

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

<td>" . $row['feedback'] . "</td>

</tr>";

}

echo "</table>";

} else {

echo "No feedback found.";

}

$conn->close();

?>

**Question 2:**

**Event Registration**

**Database Table Setup:**

sql

CREATE TABLE event\_registration (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

email VARCHAR(100),

event\_choice VARCHAR(100)

);

**Register for Event (register\_event.php):**

php

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

$event\_choice = $\_POST['event\_choice'];

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "INSERT INTO event\_registration (name, email, event\_choice) VALUES ('$name', '$email', '$event\_choice')";

$conn->query($sql);

$conn->close();

}

?>

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

Name: <input type="text" name="name" required><br>

Email: <input type="email" name="email" required><br>

Event Choice: <input type="text" name="event\_choice" required><br>

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

</form>

**Display Registered Users (display\_registrations.php):**

php

<?php

$conn = new mysqli("localhost", "root", "", "your\_database");

$sql = "SELECT \* FROM event\_registration";

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

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

echo "<table border='1'>

<tr>

<th>Name</th>

<th>Email</th>

<th>Event Choice</th>

</tr>";

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

echo "<tr>

<td>" . $row['name'] . "</td>

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

<td>" . $row['event\_choice'] . "</td>

</tr>";

}

echo "</table>";

} else {

echo "No registrations found.";

}

$conn->close();

?>