1. **Database Schema (MySQL)**

CREATE DATABASE user\_auth;

USE user\_auth;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(50) NOT NULL UNIQUE,

email VARCHAR(100) NOT NULL UNIQUE,

password VARCHAR(255) NOT NULL

);

1. **Signup Form (HTML + CSS)**

**signup.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Signup</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<form action="signup.php" method="POST">

<h2>Signup</h2>

<input type="text" name="username" placeholder="Username" required>

<input type="email" name="email" placeholder="Email" required>

<input type="password" name="password" placeholder="Password" required>

<input type="password" name="confirm\_password" placeholder="Confirm Password" required>

<button type="submit">Signup</button>

</form>

</body>

</html>

* **styles.css**

body {

font-family: Arial, sans-serif;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

background: #f4f4f4;

}

form {

background: white;

padding: 20px;

border-radius: 8px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

}

input {

display: block;

width: 100%;

margin: 10px 0;

padding: 10px;

}

**3. Signup Backend (PHP + MySQL)**

**signup.php**

<?php

include 'config.php';

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

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

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

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

$confirm\_password = $\_POST['confirm\_password'];

if ($password !== $confirm\_password) {

die("Passwords do not match.");

}

$hashed\_password = password\_hash($password, PASSWORD\_DEFAULT);

$stmt = $conn->prepare("INSERT INTO users (username, email, password) VALUES (?, ?, ?)");

$stmt->bind\_param("sss", $username, $email, $hashed\_password);

if ($stmt->execute()) {

echo "Signup successful!";

} else {

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

}

$stmt->close();

}

?>

**4. Login Form**

**login.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Login</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

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

<h2>Login</h2>

<input type="text" name="username\_or\_email" placeholder="Username or Email" required>

<input type="password" name="password" placeholder="Password" required>

<button type="submit">Login</button>

</form>

</body>

</html>

**5. Login Backend (PHP)**

**login.php**

<?php

session\_start();

include 'config.php';

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

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

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

$stmt = $conn->prepare("SELECT id, username, password FROM users WHERE username=? OR email=?");

$stmt->bind\_param("ss", $username\_or\_email, $username\_or\_email);

$stmt->execute();

$stmt->store\_result();

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

$stmt->bind\_result($id, $username, $hashed\_password);

$stmt->fetch();

if (password\_verify($password, $hashed\_password)) {

$\_SESSION['user\_id'] = $id;

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

header("Location: dashboard.php");

exit();

} else {

echo "Incorrect password.";

}

} else {

echo "User not found.";

}

$stmt->close();

}

?>

**6. Session Management**

**config.php**

<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "user\_auth";

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

if ($conn->connect\_error) {

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

}

?>

* **dashboard.php**

<?php

session\_start();

if (!isset($\_SESSION['user\_id'])) {

header("Location: login.html");

exit();

}

echo "Welcome, " . $\_SESSION['username'];

echo "<br><a href='logout.php'>Logout</a>";

?>

* **logout.php**

<?php

session\_start();

session\_destroy();

header("Location: login.html");

exit();

?>

**7. Error Handling Messages**

Signup Errors

"Username or Email already exists"

"Passwords do not match"

"All fields are required"

Login Errors

"Incorrect username/email or password"

"User does not exist"

**8. Security Best Practices**

✅ **Password Hashing**

* Use password\_hash() for storing passwords.
* Use password\_verify() for password comparison.

✅ **SQL Injection Prevention**

* Always use **prepared statements** ($stmt->prepare()).

✅ **Session Security**

* Start session with session\_start().
* Destroy session on logout (session\_destroy()).

**Deliverables**

✔ Fully functional Login & Signup System

✔ Secure Authentication with password hashing

✔ Error Messages for better UX

✔ User Session Management

✔ Clean UI with CSS Styling

