

LAB ASSIGNMENT 1

WRDA YOUSAF

SP23-BSE-042

TRANPORT MANAGEMENT SYTEM

USECASE LOGIN

CODE

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

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

  <title>Login Screen</title>

  <style>

    body {

      display: flex;

      height: 100vh;

      align-items: center;

      justify-content: center;

      font-family: Arial, sans-serif;

      background: #f0f2f5;

    }

    .login-container {

      background: white;

      padding: 2rem;

      border-radius: 8px;

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

      width: 320px;

    }

    .login-container h2 {

      margin-bottom: 1rem;

      text-align: center;

    }

    .login-container label {

      display: block;

      margin-top: 0.75rem;

    }

    .login-container input {

      width: 100%;

      padding: 0.5rem;

      margin-top: 0.25rem;

      border: 1px solid #ccc;

      border-radius: 4px;

    }

    .login-container button {

      width: 100%;

      padding: 0.75rem;

      margin-top: 1.25rem;

      border: none;

      background: #007bff;

      color: white;

      font-size: 1rem;

      border-radius: 4px;

      cursor: pointer;

    }

    .login-container .error {

      margin-top: 1rem;

      color: #d00;

      text-align: center;

    }

  </style>

</head>

<body>

  <div class="login-container">

    <h2>Login</h2>

    <form id="loginForm">

      <label for="email">User ID (email)</label>

      <input type="email" id="email" required />

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

      <input type="password" id="password" required />

      <button type="submit">Sign In</button>

    </form>

    <div class="error" id="errorMsg"></div>

  </div>

  <script>

    class User {

      constructor(id, password) {

        this.id = id;

        this.password = password;

      }

    }

    class UserValidator {

      static isValidUID(user, email) {

        return user.id === email;

      }

      static isValidPass(user, password) {

        return user.password === password;

      }

    }

    class UserRepository {

      constructor() {

        this.users = [];

      }

      addUser(user) {

        this.users.push(user);

      }

      findUserByEmail(email) {

        return this.users.find(u => u.id === email);

      }

    }

    class DBManager {

      static getConnection() {

        console.log("Database connected.");

      }

      static checkUser(repo, email) {

        return repo.findUserByEmail(email);

      }

    }

    class UserController {

      constructor(repo) {

        this.repo = repo;

      }

      authenticate(email, password) {

        const user = DBManager.checkUser(this.repo, email);

        if (!user) {

          return { success: false, message: "User not found." };

        }

        if (!UserValidator.isValidPass(user, password)) {

          return { success: false, message: "Invalid password." };

        }

        return { success: true, message: "Login successful!" };

      }

    }

    const userRepo = new UserRepository();

    userRepo.addUser(new User("user@example.com", "password123"));

    DBManager.getConnection();

    const userCtrl = new UserController(userRepo);

    const form = document.getElementById("loginForm");

    const errorDiv = document.getElementById("errorMsg");

    form.addEventListener("submit", e => {

      e.preventDefault();

      errorDiv.textContent = "";

      const email    = document.getElementById("email").value.trim();

      const password = document.getElementById("password").value;

      const result = userCtrl.authenticate(email, password);

      if (result.success) {

        errorDiv.style.color = "green";

      } else {

        errorDiv.style.color = "#d00";

      }

      errorDiv.textContent = result.message;

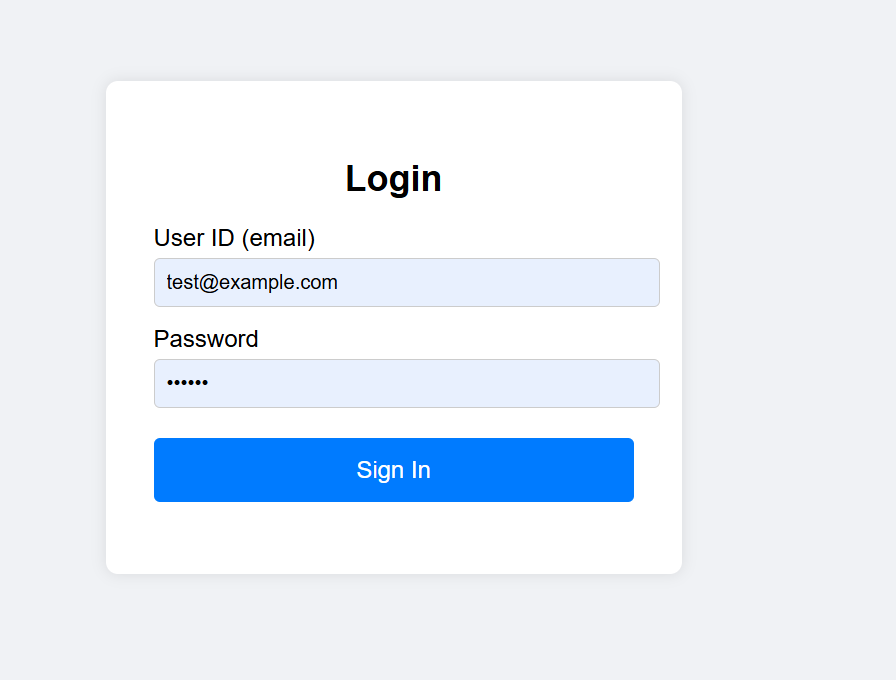
    });

  </script>

</body>

</html>

PROTOTYPE



DATBASE

CREATE DATABASE login\_system;

USE login\_system;

CREATE TABLE users (

user\_id VARCHAR(50) NOT NULL PRIMARY KEY,

password VARCHAR(255) NOT NULL

);

INSERT INTO users (user\_id, password)

VALUES ('warda123', '12345');

SELECT \* FROM users WHERE user\_id = 'warda456' AND password = 'mypassword123';