**CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY & RESEARCH**

Department of Computer Engineering

Subject Name: Web Development Framework Semester: III

Subject Code: ITEU204 Academic year: 2025-26 [ODD]

Practical File

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| **No.** | **Aim of the Practical** |
| 1. | **Problem Definition:**  Create a user registration page with frontend validation using HTML5 and JavaScript.  **PROGRAM CODE :**  1.NEWMEMBER  <!DOCTYPE html>  <html>  <head>    <meta charset="UTF-8">    <title>New Member Registration - FitZone Gym</title>    <link rel="stylesheet" href="style.css">  </head>  <body>      <div class="top-bar">          <h1><span class="fitzone-logo">🏋️</span>FitZone</h1>          <div class="auth-buttons">              <a href="login.html" class="btn">Login</a>              <a href="newmember.html" class="btn">Register</a>          </div>      </div>      <nav class="navbar">          <a href="index.html">Home</a>          <a href="aboutus.html">About Us</a>          <a href="services.html">Services</a>          <a href="trainers.html">Trainers</a>          <a href="schedule.html">Schedule</a>          <a href="gallery.html">Gallery</a>          <a href="membership.html">Membership</a>          <a href="testimonials.html">Testimonials</a>          <a href="faq.html">FAQ</a>          <a href="contact.html">Contact</a>      </nav>      <div class="trainer-header">        <h1><span class="fitness-icon">📝</span>Registration</h1>        <div class="section-divider"></div>        <p>Become a member and start your fitness journey with us!</p>      </div>      <div class="register-container">        <form id="registrationForm" novalidate>          <label for="name">Full Name:</label>          <input type="text" id="name" name="name" placeholder="Your full name" required>          <div class="error" id="nameError"></div>          <label for="age">Your Age:</label>          <input type="number" id="age" name="age" placeholder="How old are you?" min="12" max="100" required>          <div class="error" id="ageError"></div>          <label for="mobile">Mobile Number:</label>          <input type="tel" id="mobile" name="mobile" placeholder="10-digit mobile number" pattern="[0-9]{10}" required>          <div class="error" id="mobileError"></div>          <label for="email">Email Address:</label>          <input type="email" id="email" name="email" placeholder="your@email.com" required>          <div class="error" id="emailError"></div>          <label for="password">Create Password:</label>          <input type="password" id="password" name="password" placeholder="Choose a strong password" minlength="6" required>          <div id="strengthMeter" style="margin-bottom:8px;"></div>          <div class="error" id="passwordError"></div>          <button type="submit">Sign Up</button>          <a href="index.html" class="btn" style="width:100%;display:inline-block;text-align:center;margin-top:10px;">Back to Home</a>        </form>      </div>      <footer>        <p>&copy; 2025 FitZone Gym. All rights reserved.</p>      </footer>      <script src="register.js"></script>  </body>  </html>  2.Register javaScript  document.addEventListener('DOMContentLoaded', function() {  document.addEventListener('DOMContentLoaded', function() {    const passwordField = document.getElementById('password');    const passwordStrength = document.getElementById('strengthMeter');    if (passwordField && passwordStrength) {      passwordField.addEventListener('input', function() {        const passwordValue = passwordField.value;        let score = 0;        if (passwordValue.length >= 6) score++;        if (/[A-Z]/.test(passwordValue)) score++;        if (/[0-9]/.test(passwordValue)) score++;        if (/[^A-Za-z0-9]/.test(passwordValue)) score++;        let feedback = '';        if (!passwordValue) feedback = '';        else if (score <= 1) feedback = '<span style="color:red">Weak</span>';        else if (score === 2) feedback = '<span style="color:orange">Medium</span>';        else if (score >= 3) feedback = '<span style="color:green">Strong</span>';        passwordStrength.innerHTML = feedback;      });    }    const regForm = document.getElementById('registrationForm');    if (regForm) {      regForm.addEventListener('submit', function(event) {        let isFormValid = true;        const userName = document.getElementById('name').value.trim();        if (userName.length < 2) {          document.getElementById('nameError').textContent = 'Name must be at least 2 characters.';          isFormValid = false;        } else {          document.getElementById('nameError').textContent = '';        }        const userAge = document.getElementById('age').value;        if (!userAge || userAge < 12 || userAge > 100) {          document.getElementById('ageError').textContent = 'Enter a valid age (12-100).';          isFormValid = false;        } else {          document.getElementById('ageError').textContent = '';        }        const userMobile = document.getElementById('mobile').value.trim();        if (!/^[0-9]{10}$/.test(userMobile)) {          document.getElementById('mobileError').textContent = 'Enter a valid 10-digit mobile number.';          isFormValid = false;        } else {          document.getElementById('mobileError').textContent = '';        }        const userEmail = document.getElementById('email').value.trim();        if (!/^\S+@\S+\.\S+$/.test(userEmail)) {          document.getElementById('emailError').textContent = 'Enter a valid email address.';          isFormValid = false;        } else {          document.getElementById('emailError').textContent = '';        }        const userPassword = document.getElementById('password').value;        let passwordMessage = '';        if (userPassword.length < 6) passwordMessage = 'Password must be at least 6 characters.';        else if (!/[A-Z]/.test(userPassword)) passwordMessage = 'Password must contain an uppercase letter.';        else if (!/[0-9]/.test(userPassword)) passwordMessage = 'Password must contain a number.';        if (passwordMessage) {          document.getElementById('passwordError').textContent = passwordMessage;          isFormValid = false;        } else {          document.getElementById('passwordError').textContent = '';        }        if (!isFormValid) event.preventDefault();      });    }    });  }  );  **OUTPUT:**        **CONCLUSION:**  By working on this problem, I learned how to create user friendly forms using HTML5, and how to make them more interactive and secure with JavaScript validation . I understood the importance of giving clear feedback to users when they make mistakes, such as entering an invalid email or leaving a field empty. |