Academic Year: 2024-25   **Semester: II**   **Class: FYMCA**
Course Code: MC506   **Course Name: Advanced Java Programming**

Atharva Vasant Angre   **Practical 4**   **2024510001**

Experiment No.4

Date:

Aim: Implementation of real-world problem in JSP pages using cookies management.

CO Mapping – CO 2

Objective:

1. To develop the JSP based dynamic web pages

2. To understand and apply cookies for storing small pieces of client-side information.

3. To set, retrieve, and manage cookies to handle user-specific data such as login status, preferences, or session-related information

Lab Exercise:

To use Cookies in jsp.

Code:

Index.jsp
```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<%
   String user = (String) session.getAttribute("currentUser");
   if (user == null) {
     response.sendRedirect("login.jsp");
     return;
   }
%>
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Job Portal - Welcome</title>
   <style>
     body {
       font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
       line-height: 1.6;
       color: #333;
       background-color: #f5f5f5;
       padding: 2rem;
       text-align: center;
```

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```css
    }
    .container {
      max-width: 600px;
      margin: 0 auto;
      background: #fff;
      padding: 2rem;
      border-radius: 8px;
      box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
    }
    h2 {
      color: #2c5282;
    }
    .btn {
      display: inline-block;
      background-color: #2c5282;
      color: white;
      padding: 0.75rem 1.5rem;
      text-decoration: none;
      border-radius: 4px;
      margin-top: 1rem;
    }
    .btn:hover {
      background-color: #2b6cb0;
    }
  </style>
</head>
<body>
  <div class="container">
    <h2>Welcome, <%= user %>!</h2>
    <p>Welcome to our Job Portal. You can now proceed to submit your job application.</p>
    <a href="jobApplication.jsp" class="btn">Apply for Job</a>
  </div>
</body>
</html>
```

register.jsp
```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<%
  String username = request.getParameter("username");
  String email = request.getParameter("email");
  String password = request.getParameter("password");
  String confirmPassword = request.getParameter("confirmPassword");
  String usernameError = "";
```

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```jsp
    String emailError = "";
    String passwordError = "";
    String confirmPasswordError = "";
    boolean hasErrors = false;

    if (request.getMethod().equals("POST")) {
      // Server-side validation
      if (username == null || username.trim().isEmpty()) {
        hasErrors = true;
        usernameError = "Username is required.";
      }
      if (email == null || !email.matches("^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\\.[A-Za-z]{2,}$")) {
        hasErrors = true;
        emailError = "Valid email is required.";
      }
      if (password == null || password.length() < 6) {
        hasErrors = true;
        passwordError = "Password must be at least 6 characters long.";
      }
      if (confirmPassword == null || !confirmPassword.equals(password)) {
        hasErrors = true;
        confirmPasswordError = "Passwords do not match.";
      }

      if (!hasErrors) {
        // If validation passes, then forward to processing page
        request.getRequestDispatcher("registerProcess.jsp").forward(request, response);
        return;
      }
    }
%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>User Registration</title>
  <style>
    body {
      font-family: 'Roboto', sans-serif;
      background-color: #f8f9fa;
      padding: 2rem;
      display: flex;
      justify-content: center;
      align-items: center;
```

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```css
    min-height: 100vh;
}

.form-container {
    max-width: 500px;
    width: 100%;
    margin: 0 auto;
    background: #fff;
    padding: 3rem;
    border-radius: 10px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

h2 {
    color: #343a40;
    text-align: center;
    margin-bottom: 2rem;
}

.form-group {
    margin-bottom: 1.5rem;
}

label {
    display: block;
    font-weight: 500;
    margin-bottom: 0.5rem;
    color: #495057;
}

input {
    width: 100%;
    padding: 1rem;
    border: 1px solid #ced4da;
    border-radius: 6px;
    font-size: 1rem;
    color: #495057;
    box-sizing: border-box;
}

input:focus {
    outline: none;
    border-color: #80bdff;
    box-shadow: 0 0 0 0.2rem rgba(0, 123, 255, 0.25);
}
```

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```css
.error {
    color: #dc3545;
    font-size: 0.9rem;
    margin-top: 0.25rem;
}

button {
    background-color: #007bff;
    color: white;
    padding: 1rem 1.5rem;
    border: none;
    border-radius: 6px;
    cursor: pointer;
    width: 100%;
    font-size: 1.1rem;
    transition: background-color 0.2s;
}

button:hover {
    background-color: #0056b3;
}

.login-link {
    text-align: center;
    margin-top: 2rem;
}

.login-link a {
    color: #007bff;
    text-decoration: none;
}

.login-link a:hover {
    text-decoration: underline;
}
.btn-primary {
        background-color: #343a40;
        color: #fff;
        padding: 12px 20px;
        border: none;
        border-radius: 4px;
        cursor: pointer;
        width: 100%;
        font-size: 16px;
```

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```
      transition: background-color 0.3s;
    }

    .btn-primary:hover {
      background-color: #494E53;
    }
  </style>
  <script>
    function validateForm(event) {
      let hasErrors = false;

      // Clear previous errors
      document.querySelectorAll('.error').forEach(error => error.textContent = '');

      // Username validation
      const username = document.getElementById('username').value.trim();
      if (!username) {
        document.getElementById('usernameError').textContent = 'Username is required.';
        hasErrors = true;
      }

      // Email validation
      const email = document.getElementById('email').value.trim();
      const emailRegex = /^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$/;
      if (!email || !emailRegex.test(email)) {
        document.getElementById('emailError').textContent = 'Valid email is required.';
        hasErrors = true;
      }

      // Password validation
      const password = document.getElementById('password').value;
      if (!password || password.length < 6) {
        document.getElementById('passwordError').textContent = 'Password must be at least 6
characters long.';
        hasErrors = true;
      }

      // Confirm password validation
      const confirmPassword = document.getElementById('confirmPassword').value;
      if (password !== confirmPassword) {
        document.getElementById('confirmPasswordError').textContent = 'Passwords do not
match.';
        hasErrors = true;
      }
```

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```
        if (hasErrors) {
          event.preventDefault(); // Prevent form submission if there are errors
        }
      }
    </script>
</head>
<body>
    <div class="form-container">
      <h2>User Registration</h2>
      <form action="<%= request.getRequestURI() %>" method="POST"
onsubmit="validateForm(event)">
        <div class="form-group">
          <label for="username">Username:</label>
          <input type="text" id="username" name="username" value="<%= username != null ?
username : "" %>" placeholder="Enter username">
          <div class="error" id="usernameError"><%= usernameError %></div>
        </div>

        <div class="form-group">
          <label for="email">Email:</label>
          <input type="email" id="email" name="email" value="<%= email != null ? email : "" %>"
placeholder="Enter your email">
          <div class="error" id="emailError"><%= emailError %></div>
        </div>

        <div class="form-group">
          <label for="password">Password:</label>
          <input type="password" id="password" name="password" placeholder="Enter password">
          <div class="error" id="passwordError"><%= passwordError %></div>
        </div>

        <div class="form-group">
          <label for="confirmPassword">Confirm Password:</label>
          <input type="password" id="confirmPassword" name="confirmPassword"
placeholder="Confirm password">
          <div class="error" id="confirmPasswordError"><%= confirmPasswordError %></div>
        </div>

        <button type="submit" class="btn btn-primary">Register</button>

        <div class="login-link">
          Already have an account? <a href="login.jsp">Login here</a>
        </div>
      </form>
    </div>
```

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```
</body>
</html>
```

registerProcess.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<%
    String username = request.getParameter("username");
    String password = request.getParameter("password");
    String email = request.getParameter("email");

    // Basic validation
    if (username == null || username.trim().isEmpty() ||
        password == null || password.trim().isEmpty() ||
        email == null || email.trim().isEmpty()) {
        response.sendRedirect("register.jsp?error=Please fill all fields");
        return;
    }

    // Trim the inputs
    username = username.trim();
    password = password.trim();
    email = email.trim();

    // Email validation
    if (!email.matches("^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\\.[A-Za-z]{2,}$")) {
        response.sendRedirect("register.jsp?error=Invalid email format");
        return;
    }

    // Get the application-wide user store
    @SuppressWarnings("unchecked")
    java.util.HashMap<String, String> users = (java.util.HashMap<String, String>)
        application.getAttribute("users");

    // Initialize if not exists
    if(users == null) {
        users = new java.util.HashMap<>();
        users.put("admin", "admin123");
        application.setAttribute("users", users);
    }

    // Check if username already exists
    if (users.containsKey(username)) {
```

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```
    response.sendRedirect("register.jsp?error=Username already exists");
    return;
  }

  // Add the new user
  users.put(username, password);
  application.setAttribute("users", users);

  // Store user session
  session.setAttribute("currentUser", username);
  session.setMaxInactiveInterval(3 * 60);

  // Set a cookie to remember the user (expires in 1 week)
  javax.servlet.http.Cookie userCookie = new javax.servlet.http.Cookie("currentUser", username);
  userCookie.setMaxAge(60 * 60 * 24 * 7);
  response.addCookie(userCookie);

  response.sendRedirect("homePage.jsp");
%>
```

login.jsp
```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login - Job Portal</title>
  <style>
    body {
      font-family: 'Arial', sans-serif;
      background-color: #f4f4f4;
      margin: 0;
      padding: 0;
      display: flex;
      justify-content: center;
      align-items: center;
      min-height: 100vh;
    }
    .login-container {
      background-color: #fff;
      border-radius: 8px;
      box-shadow: 0 0 20px rgba(0, 0, 0, 0.1);
```

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```css
    overflow: hidden;
    width: 400px;
    max-width: 90%;
}
.login-form {
    padding: 30px;
}
h2 {
    text-align: center;
    color: #333;
    margin-bottom: 20px;
}
.form-group {
    margin-bottom: 20px;
}
.remember-me {
    display: flex;
    align-items: center;
    gap: 5px;
}

.remember-me input[type="checkbox"] {
    width: auto;
    margin: 0;
}

.remember-me label {
    margin: 0;
    font-size: 14px;
    color: #555;
    cursor: pointer;
}
label {
    display: block;
    font-size: 16px;
    color: #555;
    margin-bottom: 8px;
}
.form-control {
    width: 100%;
    padding: 12px;
    font-size: 16px;
    border: 1px solid #ddd;
    border-radius: 4px;
    box-sizing: border-box;
```

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```css
    }
    .form-control:focus {
      outline: none;
      border-color: #007bff;
      box-shadow: 0 0 5px rgba(0, 123, 255, 0.5);
    }
    .btn-primary {
      background-color: #343a40;
      color: #fff;
      padding: 12px 20px;
      border: none;
      border-radius: 4px;
      cursor: pointer;
      width: 100%;
      font-size: 16px;
      transition: background-color 0.3s;
    }
    .btn-primary:hover {
      background-color: #494E53;
    }
    .register-link {
      text-align: center;
      margin-top: 20px;
    }
    .register-link a {
      color: #007bff;
      text-decoration: none;
    }
    .register-link a:hover {
      text-decoration: underline;
    }
    .error {
      background-color: #f8d7da;
      color: #721c24;
      border: 1px solid #f5c6cb;
      padding: 10px;
      border-radius: 4px;
      margin-bottom: 20px;
      text-align: center;
    }
  </style>
</head>
<body>
  <div class="login-container">
    <div class="login-form">
```

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```jsp
<h2>Login to Job Portal</h2>
<%
    if (request.getParameter("error") != null) {
%>
    <div class="error">Invalid username or password</div>
<%
    }

    // Check for cookies to pre-fill the form
    String savedUsername = "";
    String savedPassword = "";
    Cookie[] cookies = request.getCookies();
    if (cookies != null) {
        for (Cookie cookie : cookies) {
            if ("savedUsername".equals(cookie.getName())) {
                savedUsername = cookie.getValue();
            }
            if ("savedPassword".equals(cookie.getName())) {
                savedPassword = cookie.getValue();
            }
        }
    }
%>
<form action="loginProcess.jsp" method="POST">
    <div class="form-group">
        <label for="username">Username:</label>
        <input type="text" id="username" name="username" class="form-control" value="<%= savedUsername %>" required>
    </div>
    <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" id="password" name="password" class="form-control" value="<%= savedPassword %>" required>
    </div>
    <div class="form-group remember-me">
        <input type="checkbox" id="rememberMe" name="rememberMe" <%= (!savedUsername.isEmpty()) ? "checked" : "" %> >
        <label for="rememberMe">Remember Me</label>
    </div>
    <button type="submit" class="btn-primary">Login</button>
</form>
<div class="register-link">
    Don't have an account? <a href="register.jsp">Register here</a>
</div>
</div>
```

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```html
    </div>
</body>
</html>
```

loginProcess.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8" %>
<%@ page session="true" %>

<%
   String username = request.getParameter("username");
   String password = request.getParameter("password");
   String rememberMe = request.getParameter("rememberMe");

   // Basic validation
   if (username == null || username.trim().isEmpty() ||
      password == null || password.trim().isEmpty()) {
      response.sendRedirect("login.jsp?error=Please fill all fields");
      return;
   }

   // Trim the inputs
   username = username.trim();
   password = password.trim();

   // Get the application-wide user store
   @SuppressWarnings("unchecked")
   java.util.HashMap<String, String> users = (java.util.HashMap<String, String>)
      application.getAttribute("users");

   // Initialize if not exists
   if(users == null) {
      users = new java.util.HashMap<>();
      users.put("admin", "admin123");
      application.setAttribute("users", users);
   }

   // Check if username exists and password matches
   if (users.containsKey(username) && users.get(username).equals(password)) {
      session.setAttribute("currentUser", username);
      session.setMaxInactiveInterval(3 * 60);

      javax.servlet.http.Cookie userCookie = new javax.servlet.http.Cookie("currentUser", username);
      userCookie.setMaxAge(60 * 60 * 24 * 7); // 1 week
```

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```
        response.addCookie(userCookie);

        // Remember Me functionality
        if ("on".equals(rememberMe)) {
            Cookie usernameCookie = new Cookie("savedUsername", username);
            Cookie passwordCookie = new Cookie("savedPassword", password);
            usernameCookie.setMaxAge(60 * 60 * 24 * 7); // 1 week
            passwordCookie.setMaxAge(60 * 60 * 24 * 7); // 1 week
            response.addCookie(usernameCookie);
            response.addCookie(passwordCookie);
        } else {
            Cookie usernameCookie = new Cookie("savedUsername", "");
            Cookie passwordCookie = new Cookie("savedPassword", "");
            usernameCookie.setMaxAge(0);
            passwordCookie.setMaxAge(0);
            response.addCookie(usernameCookie);
            response.addCookie(passwordCookie);
        }

        response.sendRedirect("homePage.jsp");
    } else {
        response.sendRedirect("login.jsp?error=true");
    }
%>
```

homePage.jsp
```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8" %>
<%@ page session="true" %>

<%
    String user = (String) session.getAttribute("currentUser");

    // If user is not logged in via session, try checking cookies
    if (user == null) {
        Cookie[] cookies = request.getCookies();
        if (cookies != null) {
            for (Cookie cookie : cookies) {
                if ("currentUser".equals(cookie.getName())) {
                    user = cookie.getValue();
                    if (user != null && !user.trim().isEmpty()) {
                        session.setAttribute("currentUser", user);
                    }
                    break;
```

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```jsp
            }
        }
    }
}

    if (user == null) {
        response.sendRedirect("login.jsp");
        return;
    }

    String sessionId = session.getId();
    int sessionTimeout = session.getMaxInactiveInterval();
    long lastAccessedTime = session.getLastAccessedTime();
    java.util.Date lastAccessedDate = new java.util.Date(lastAccessedTime);
%>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Job Portal - Home</title>
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css" integrity="sha512-9usAa10IRO0HhonpyAIVpjrylPvoDwiPUiKdWk5t3PyolY1cOd4DSE0Ga+ri4AuTroPR5aQvXU9xC6qOPnzFeg==" crossorigin="anonymous" referrerpolicy="no-referrer" />
    <style>
        body {
            font-family: 'Roboto', sans-serif;
            background-color: #f8f9fa;
            margin: 0;
            padding: 0;
            color: #333;
        }

        /* Navigation Bar */
        .navbar {
            background: #343a40; /* Dark Gray */
            color: white;
            padding: 1rem 0;
            text-align: center;
        }

        .navbar a {
            color: white;
```

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```css
    text-decoration: none;
    margin: 0 1.5rem;
    font-weight: 500;
    transition: color 0.3s ease;
    display: inline-block;
    padding: 0.5rem 1rem;
    border-radius: 5px;
}

.navbar a:hover {
    background-color: rgba(255, 255, 255, 0.1);
}

/* Main Content */
.container {
    max-width: 800px;
    margin: 2rem auto;
    padding: 2rem;
    background-color: #fff;
    border-radius: 10px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    text-align: center;
}

h1 {
    color: #343a40;
    margin-bottom: 1.5rem;
}

.info {
    padding: 1.5rem;
    background-color: #f8f9fa;
    border: 1px solid #dee2e6;
    border-radius: 8px;
    margin-top: 1.5rem;
    text-align: left;
}

.info p {
    margin-bottom: 0.75rem;
}

/* Session Timeout Popup */
.popup {
    display: none;
```

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```css
      position: fixed;
      top: 50%;
      left: 50%;
      transform: translate(-50%, -50%);
      background: white;
      padding: 2rem;
      box-shadow: 0 0 10px rgba(0, 0, 0, 0.3);
      border-radius: 8px;
      text-align: center;
      z-index: 1000;
    }

    .popup button {
      background: #007bff;
      color: white;
      padding: 0.75rem 1.5rem;
      border: none;
      border-radius: 5px;
      cursor: pointer;
      font-size: 1rem;
      transition: background-color 0.2s ease;
    }

    .popup button:hover {
      background-color: #0056b3;
    }

    /* Footer */
    .footer {
      background: #343a40;
      color: white;
      text-align: center;
      padding: 1rem 0;
      position: fixed;
      width: 100%;
      bottom: 0;
      font-size: 0.9rem;
    }

    .footer a {
      color: white;
      text-decoration: none;
      font-weight: bold;
    }
```

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```
      /* Media Queries for Responsiveness */
      @media (max-width: 768px) {
        .navbar {
          padding: 1rem;
        }

        .navbar a {
          margin: 0 0.75rem;
          padding: 0.4rem 0.75rem;
        }

        .container {
          padding: 1.5rem;
          margin: 1rem auto;
        }

        .info {
          padding: 1rem;
        }

        .popup {
          padding: 1.5rem;
        }
      }
    </style>
    <script>
      setTimeout(function() {
        document.getElementById('sessionPopup').style.display = 'block';
      }, <%= sessionTimeout * 1000 %>);
    </script>
</head>
<body>
    <nav class="navbar">
      <a href="#">Home</a>
      <a href="jobApplication.jsp">Apply For Jobs</a>
      <a href="employers.jsp">Employers</a>
      <a href="#">About</a>
      <a href="logout.jsp">Logout</a>
    </nav>

    <div class="container">
      <h1>Welcome to the Job Portal</h1>
      <div class="info">
        <h2>Welcome, <%= user %>!</h2>
        <p><strong>Session ID:</strong> <%= sessionId %></p>
```

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```
    <p><strong>Session Timeout:</strong> <%= sessionTimeout / 60 %> minutes</p>
    <p><strong>Last Accessed:</strong> <%= lastAccessedDate %></p>
  </div>
</div>

<footer class="footer">
  &copy; <%= java.time.Year.now().getValue() %> Job Portal. All rights reserved.
</footer>

<div id="sessionPopup" class="popup">
  <p>Your session has expired. Please log in again.</p>
  <button onclick="window.location.href='login.jsp'">Login Again</button>
</div>
</body>
</html>
```

employers.jsp
```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8" %>
<%@ page session="true" %>

<%
  String user = (String) session.getAttribute("currentUser");

  // If user is not logged in via session, try checking cookies
  if (user == null) {
    Cookie[] cookies = request.getCookies();
    if (cookies != null) {
      for (Cookie cookie : cookies) {
        if ("currentUser".equals(cookie.getName())) {
          user = cookie.getValue();
          if (user != null && !user.trim().isEmpty()) {
            session.setAttribute("currentUser", user);
          }
          break;
        }
      }
    }
  }

  // If still no user, redirect to login
  if (user == null) {
    response.sendRedirect("login.jsp");
    return;
```

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```
    }

    // Handle job posting submission
    String successMessage = "";
    if ("POST".equals(request.getMethod())) {
        String jobTitle = request.getParameter("jobTitle");
        String companyName = request.getParameter("companyName");
        String location = request.getParameter("location");
        String description = request.getParameter("description");
        String requirements = request.getParameter("requirements");

        if (jobTitle != null && companyName != null && !jobTitle.trim().isEmpty() &&
!companyName.trim().isEmpty()) {
            successMessage = "Job posting created successfully!";
        }
    }
%>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Employers Portal</title>
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.0.0/css/all.min.css" integrity="sha512-
9usAa10IRO0HhonpyAIVpjrylPvoDwiPUiKdWk5t3PyolY1cOd4DSE0Ga+ri4AuTroPR5aQvXU9xC6qOPnz
Feg==" crossorigin="anonymous" referrerpolicy="no-referrer" />
    <style>
        body {
            font-family: 'Roboto', sans-serif;
            line-height: 1.6;
            margin: 0;
            padding: 0;
            background-color: #f4f6f9; /* Light gray background */
            color: #333;
        }

        /* Navbar */
        .navbar {
                        background: #343a40; /* Dark Gray */
                        color: white;
                        padding: 1rem 0;
                        text-align: center;
                    }
```

```css
        .navbar a {
            color: white;
            text-decoration: none;
            margin: 0 1.5rem;
            font-weight: 500;
            transition: color 0.3s ease;
            display: inline-block;
            padding: 0.5rem 1rem;
            border-radius: 5px;
        }

        .navbar a:hover {
            background-color: rgba(255, 255, 255, 0.1);
        }

/* Container */
.container {
    max-width: 1200px;
    margin: 2rem auto;
    padding: 1rem;
}

/* Section */
.section {
    background-color: #fff;
    border-radius: 10px;
    padding: 2rem;
    margin-bottom: 2rem;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.05); /* Lighter shadow */
}

h1, h2 {
    color: #343a40;
    margin-bottom: 1.5rem;
}

/* Post Job Form */
.post-job-form {
    display: grid;
    gap: 1.5rem;
}

.form-group {
    display: flex;
```

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```css
    flex-direction: column;
}

label {
    margin-bottom: 0.5rem;
    font-weight: 500;
    color: #495057;
}

input,
textarea {
    padding: 1rem;
    border: 1px solid #ced4da;
    border-radius: 6px;
    margin-bottom: 0.5rem;
    font-size: 1rem;
    color: #495057;
    box-sizing: border-box; /* Prevents padding from affecting width */
}

textarea {
    min-height: 120px;
}

input:focus,
textarea:focus {
    outline: none;
    border-color: #80bdff;
    box-shadow: 0 0 0 0.2rem rgba(0, 123, 255, 0.25); /* Focus effect */
}

button {
    background-color: #007bff;
    color: white;
    padding: 1rem 2rem;
    border: none;
    border-radius: 6px;
    cursor: pointer;
    font-weight: 500;
    font-size: 1.1rem;
    transition: background-color 0.3s ease; /* Smooth transition */
}

button:hover {
    background-color: #0056b3;
```

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```css
    }

    .success-message {
      color: #155724;
      background-color: #d4edda;
      border: 1px solid #c3e6cb;
      padding: 1rem;
      border-radius: 6px;
      margin-bottom: 1.5rem;
    }

    /* Job Listing */
    .job-listing {
      border: 1px solid #dee2e6;
      padding: 1.5rem;
      margin-bottom: 1.5rem;
      border-radius: 8px;
      background-color: #f8f9fa;
    }

    .job-title {
      color: #343a40;
      margin: 0 0 0.75rem 0;
      font-size: 1.25rem;
    }

    .company-info {
      color: #6c757d;
      font-size: 0.9rem;
      margin-bottom: 1rem;
    }

    /* Stats */
    .stats {
      display: grid;
      grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
      gap: 1.5rem;
      margin-bottom: 2rem;
    }

    .stat-card {
      background: white;
      padding: 1.5rem;
      border-radius: 8px;
      text-align: center;
```

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```css
    box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  }

  .stat-number {
    font-size: 2rem;
    font-weight: bold;
    color: #dc35455;
    margin-bottom: 0.5rem;
  }

  /* Logout Button */
  .logout-btn {
    //background: #dc3545;
  }

  .logout-btn:hover {
    background: #c82333;
  }
  .submit-btn{
  background: #343a40;
  }

  /* Media Queries for Responsiveness */
  @media (max-width: 768px) {
    .container {
      padding: 0.5rem;
    }

    .section {
      padding: 1.5rem;
    }

    .stats {
      grid-template-columns: 1fr; /* Stack on smaller screens */
    }
  }
  </style>
</head>
<body>
  <nav class="navbar">
    <a href="homePage.jsp">Home</a>
    <a href="jobApplication.jsp">Apply For Jobs</a>
    <a href="employers.jsp">Employers</a>
    <a href="#">About</a>
    <a href="logout.jsp" class="logout-btn">Logout</a>
```

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```
</nav>

<div class="container">
  <h1>Employers Portal</h1>

  <!-- Statistics Section -->
  <div class="stats">
    <div class="stat-card">
      <div class="stat-number">25</div>
      <div>Active Job Postings</div>
    </div>
    <div class="stat-card">
      <div class="stat-number">142</div>
      <div>Total Applications</div>
    </div>
    <div class="stat-card">
      <div class="stat-number">18</div>
      <div>Positions Filled</div>
    </div>
  </div>

  <!-- Post New Job Section -->
  <div class="section">
    <h2>Post a New Job</h2>
    <% if (!successMessage.isEmpty()) { %>
      <div class="success-message"><%= successMessage %></div>
    <% } %>
    <form class="post-job-form" method="POST" action="employers.jsp">
      <div class="form-group">
        <label for="jobTitle">Job Title*</label>
        <input type="text" id="jobTitle" name="jobTitle" required>
      </div>

      <div class="form-group">
        <label for="companyName">Company Name*</label>
        <input type="text" id="companyName" name="companyName" required>
      </div>

      <div class="form-group">
        <label for="location">Location*</label>
        <input type="text" id="location" name="location" required>
      </div>

      <div class="form-group">
        <label for="description">Job Description*</label>
```

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```html
            <textarea id="description" name="description" required></textarea>
          </div>

          <div class="form-group">
            <label for="requirements">Requirements*</label>
            <textarea id="requirements" name="requirements" required></textarea>
          </div>

          <button type="submit"class="submit-btn">Post Job</button>
        </form>
      </div>

      <!-- Current Job Listings Section -->
      <div class="section">
        <h2>Your Current Job Listings</h2>

        <div class="job-listing">
          <h3 class="job-title">Senior Software Engineer</h3>
          <div class="company-info">
            <strong>Company:</strong> Tech Corp Inc. | <strong>Location:</strong> New York, NY
          </div>
          <p>Looking for an experienced software engineer to join our team...</p>
          <button onclick="alert('Feature coming soon!')" class="submit-btn">View Applications
(12)</button>
        </div>

        <div class="job-listing">
          <h3 class="job-title">Product Manager</h3>
          <div class="company-info">
            <strong>Company:</strong> Tech Corp Inc. | <strong>Location:</strong> Remote
          </div>
          <p>Seeking a talented product manager to lead our new initiative...</p>
          <button onclick="alert('Feature coming soon!')"class="submit-btn">View Applications
(8)</button>
        </div>
      </div>
    </div>
</body>
</html>
```

jobApplication.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
```

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```jsp
<%
  // Check if user is logged in
  String username = (String) session.getAttribute("currentUser");
  if (username == null) {
    response.sendRedirect("login.jsp");
    return;
  }

  String name = request.getParameter("name");
  String email = request.getParameter("email");
  String phone = request.getParameter("phone");
  String job = request.getParameter("job");
  String nameError = "";
  String emailError = "";
  String phoneError = "";
  String jobError = "";
  boolean hasErrors = false;

  if (request.getMethod().equals("POST")) {
    if (name == null || name.trim().isEmpty()) {
      hasErrors = true;
      nameError = "Name is required.";
    }
    if (email == null || !email.matches("^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\\.[A-Za-z]{2,}$")) {
      hasErrors = true;
      emailError = "Valid email is required.";
    }
    if (phone == null || !phone.matches("^\\d{10}$")) {
      hasErrors = true;
      phoneError = "Valid 10-digit phone number is required.";
    }
    if (job == null || job.trim().isEmpty()) {
      hasErrors = true;
      jobError = "Job role is required.";
    }
  }

  if (!hasErrors && request.getMethod().equals("POST")) {

%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

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```html
    <title>Application Successful</title>
    <style>
      body {
        font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
        line-height: 1.6;
        color: #333;
        background-color: #f5f5f5;
        padding: 2rem;
        text-align: center;
      }
      .container {
        max-width: 600px;
        margin: 0 auto;
        background: #fff;
        padding: 2rem;
        border-radius: 8px;
        box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
      }
      h2 {
        color: #2c5282;
      }
    </style>
</head>
<body>
  <div class="container">
     <h2>Application Submitted Successfully!</h2>
     <p>Thank you, <%= name %>. We will contact you at <%= email %> regarding your application
for the <%= job %> position.</p>
     <a href="homePage.jsp" class="btn">Back to Home</a>
  </div>
</body>
</html>
<%
    return;
  }
%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Job Application Form</title>
  <style>
    body {
        font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
```

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```css
    line-height: 1.6;
    color: #333;
    background-color: #f5f5f5;
    padding: 2rem;
}
.form-container {
    max-width: 600px;
    margin: 0 auto;
    background: #fff;
    padding: 2rem;
    border-radius: 8px;
    box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
}
h2 {
    color: #2c5282;
    text-align: center;
    margin-bottom: 1.5rem;
}
label {
    font-weight: 600;
    display: block;
    margin-top: 0.5rem;
}
input {
    width: 100%;
    padding: 0.75rem;
    border: 1px solid #e2e8f0;
    border-radius: 4px;
    margin-bottom: 0.5rem;
}
.error {
    color: #e53e3e;
    font-size: 0.875rem;
}
button {
    background-color: #2c5282;
    color: white;
    padding: 0.75rem;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    margin-top: 1rem;
    width: 100%;
}
button:hover {
```

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```css
    background-color: #2b6cb0;
}

body {
      font-family: Arial, sans-serif;
      background-color: #f8f9fa;
      margin: 0;
      padding: 0;
    }
    /* Navigation Bar */
        .navbar {
          background: #343a40; /* Dark Gray */
          color: white;
          padding: 1rem 0;
          text-align: center;
        }

        .navbar a {
          color: white;
          text-decoration: none;
          margin: 0 1.5rem;
          font-weight: 500;
          transition: color 0.3s ease;
          display: inline-block;
          padding: 0.5rem 1rem;
          border-radius: 5px;
        }

        .navbar a:hover {
          background-color: rgba(255, 255, 255, 0.1);
        }
    .container {
        text-align: center;
        padding: 50px;
    }
    .info {
        background: #fff;
        padding: 20px;
        width: 50%;
        margin: auto;
        border-radius: 8px;
        box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
    }
    .nav-bar-tabs {
        background: #343a40;
```

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```css
    color: white;
    padding: 10px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    text-decoration: none;
    display: inline-block;
    margin-top: 15px;
}
.nav-bar-tabs:hover {
    background: #343a40;
}
.footer {
    background: #2c5282;
    color: white;
    text-align: center;
    padding: 15px;
    position: fixed;
    width: 100%;
    bottom: 0;
    font-size: 14px;
}
.footer a {
    color: white;
    text-decoration: none;
    font-weight: bold;
}
.popup {
    display: none;
    position: fixed;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    background: white;
    padding: 20px;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.3);
    border-radius: 5px;
    text-align: center;
}
.popup button {
    background: #2c5282;
    color: white;
    padding: 10px;
    border: none;
    border-radius: 5px;
```

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```
                cursor: pointer;
            }
            @media (max-width: 768px) {
                    .navbar {
                        padding: 1rem;
                    }

                    .navbar a {
                        margin: 0 0.75rem;
                        padding: 0.4rem 0.75rem;
                    }

                    .container {
                        padding: 1.5rem;
                        margin: 1rem auto;
                    }

                    .info {
                        padding: 1rem;
                    }

                    .popup {
                        padding: 1.5rem;
                    }
            }
    </style>
</head>
<body>
 <nav class="navbar">
     <a href="homePage.jsp">Home</a>
     <a href="jobApplication.jsp">Apply For Jobs</a>
     <a href="employers.jsp">Employers</a>
     <a href="#">About</a>
     <a href="logout.jsp">Logout</a>
  </nav>
   <div class="form-container">
     <h2>Job Application</h2>
     <form action="jobApplication.jsp" method="POST">
       <label for="name">Full Name:</label>
       <input type="text" id="name" name="name" value="<%= name != null ? name : "" %>"
placeholder="Enter your full name">
       <div class="error"><%= nameError %></div>

       <label for="email">Email:</label>
       <input type="email" id="email" name="email" value="<%= email != null ? email : "" %>"
```

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```
placeholder="Enter your email">
      <div class="error"><%= emailError %></div>

      <label for="phone">Phone:</label>
      <input type="text" id="phone" name="phone" value="<%= phone != null ? phone : "" %>"
placeholder="Enter your phone number">
      <div class="error"><%= phoneError %></div>

      <label for="job">Job Role:</label>
      <input type="text" id="job" name="job" value="<%= job != null ? job : "" %>"
placeholder="Enter the job role">
      <div class="error"><%= jobError %></div>

      <button type="submit">Apply</button>
    </form>
  </div>
</body>
</html>
```

logout.jsp
```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<%
  // Remove the cookie
  Cookie[] cookies = request.getCookies();
  if (cookies != null) {
    for (Cookie cookie : cookies) {
      if ("currentUser".equals(cookie.getName())) {
        cookie.setValue("");
        cookie.setMaxAge(0);
        response.addCookie(cookie);
        break;
      }
    }
  }

  // Invalidate the session
  session.invalidate();

  response.sendRedirect("login.jsp");
%>
```

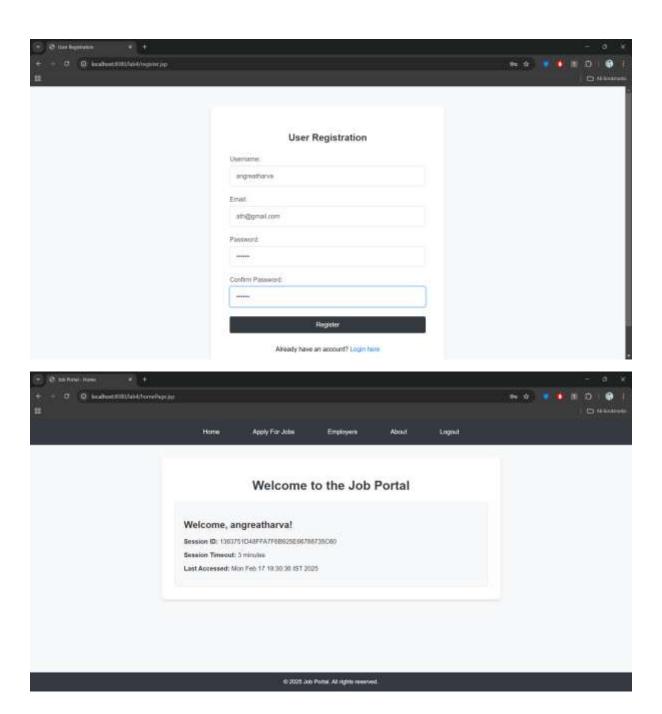**Academic Year: 2024-25**   **Semester: II**   **Class: FYMCA**
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Output:

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Observation:

JSP helps create dynamic web pages by mixing Java code with HTML. Using cookies in JSP, we can store small pieces of information on the user's browser, like login status or preferences. These cookies can be set, read, and managed to keep user-specific data even when they visit multiple pages. Proper management of cookies, like setting expiration dates and securing them, ensures a better user experience and keeps the data safe.