**LAB EXERCISES**

**EX.NO:10**

**FORMS & FORM VALIDATION**

**AIM:**

**To create a form with text fields such as username, mail id, password, retype password, gender (radio), languages known (check box), Describe yourself (text area), submit button and perform form validation such as username must not be less than 8 characters, mail id should contain @ symbol, password and retype password must be the same.**

**PROCEDURE:**

1. **Start with a basic HTML form using the <form> tag.**
2. **Add form elements:**

* **Text field for Username**
* **Text field for Mail ID**
* **Password fields for Password and Retype Password**
* **Radio buttons for Gender**
* **Checkboxes for Languages Known**
* **<text area> for Describe Yourself**
* **Submit button**

1. **Set id or name attributes for each form field to access them via JavaScript.**
2. **Create a JavaScript function (e.g. validate Form()) that runs when the form is submitted.**
3. **In the function, get values from all input fields using document. Get Element By Id().value.**
4. **Check if the username is at least 8 characters long. If not, show an alert.**
5. **Check if the email contains @. If not, show an alert.**
6. **Check if password and retype password match. If not, show an alert.**
7. **If all validations pass, allow form submission; otherwise, prevent it using return false.**
8. **Connect the validation function to the form’s on submit event.**

**PROGRAM:**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8" />**

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

**<title>Form with Validation</title>**

**<style>**

**body {**

**font-family: Arial, sans-serif;**

**margin: 20px;**

**}**

**input, textarea, button {**

**margin: 5px 0;**

**display: block;**

**}**

**label {**

**margin-top: 10px;**

**}**

**div {**

**margin-bottom: 10px;**

**}**

**</style>**

**</head>**

**<body>**

**<h1>Registration Form</h1>**

**<form id="registrationForm" onsubmit="return validateForm()">**

**<label for="username">Username:</label>**

**<input type="text" id="username" name="username" required />**

**<label for="email">Email:</label>**

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

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

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

**<label for="confirmPassword">Retype Password:</label>**

**<input type="password" id="confirmPassword" name="confirmPassword" required />**

**<label>Gender:</label>**

**<input type="radio" id="male" name="gender" value="male" />**

**<label for="male">Male</label>**

**<input type="radio" id="female" name="gender" value="female" />**

**<label for="female">Female</label>**

**<label>Languages Known:</label>**

**<input type="checkbox" id="english" name="languages" value="english" />**

**<label for="english">English</label>**

**<input type="checkbox" id="spanish" name="languages" value="spanish" />**

**<label for="spanish">Spanish</label>**

**<input type="checkbox" id="french" name="languages" value="french" />**

**<label for="french">French</label>**

**<label for="description">Describe Yourself:</label>**

**<textarea id="description" name="description" rows="4" cols="50"></textarea>**

**<button type="submit">Submit</button>**

**</form>**

**<script>**

**function validateForm() {**

**// Get form values**

**const username = document.getElementById("username").value.trim();**

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

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

**const confirmPassword = document.getElementById("confirmPassword").value;**

**// Validate username length**

**if (username.length < 8) {**

**alert("Username must be at least 8 characters long.");**

**return false;**

**}**

**// Validate email format**

**if (!email.includes("@")) {**

**alert("Email must contain @ symbol.");**

**return false;**

**}**

**// Validate password match**

**if (password !== confirmPassword) {**

**alert("Passwords do not match.");**

**return false;**

**}**

**// All validations passed**

**return true;**

**}**

**</script>**

**</body>**

**</html>**

**RESULT:**

**Thus the above HTML Code is executed and the output is obtained.**