

### Exercise 3

#### Form validation

#main.js

```
// JavaScript using name attribute
function validateForm() {
    const form = document.forms["registrationForm"];
    const username = form.elements["username"];
    const email = form.elements["email"];
    const password = form.elements["password"];
    const confirmPassword = form.elements["confirmPassword"];
    const phoneNumber = form.elements["phoneNumber"];

    const usernameError = document.getElementById("usernameError");
    const emailError = document.getElementById("emailError");
    const passwordError = document.getElementById("passwordError");
    const confirmPasswordError =
document.getElementById("confirmPasswordError");
    const phoneNumberError = document.getElementById("phoneNumberError");

    const usernamePattern = /^[a-zA-Z0-9]{3,20}$/;
    const emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
    const passwordPattern = /^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[@#\$])[A-Za-z\d@#\$]{8,}$/;

    let isValid = true;

    // Validate username
    if (!username.value.match(usernamePattern)) {
        usernameError.textContent = "Username should be between 3 and 20
alphanumeric characters.";
        isValid = false;
    } else {
        usernameError.textContent = "";
    }

    // Validate email
    if (!email.value.match(emailPattern)) {
        emailError.textContent = "Invalid email address format.";
        isValid = false;
    } else {
        emailError.textContent = "";
    }

    // Validate password
    if (!password.value.match(passwordPattern)) {
```

```

        passwordError.textContent = "Password should be at least 8 characters
long, containing one uppercase letter, one lowercase letter, one number, and
one special character.";
        isValid = false;
    } else {
        passwordError.textContent = "";
    }

    // Validate confirm password
    if (password.value !== confirmPassword.value) {
        confirmPasswordError.textContent = "Passwords do not match.";
        isValid = false;
    } else {
        confirmPasswordError.textContent = "";
    }

    // Validate phone number
    if (!phoneNumber.value.match(/^+91\s\d{10}$/)) {
        phoneNumberError.textContent = "Invalid phone number format. Should be
in the format +91 1234567890.";
        isValid = false;
    } else {
        phoneNumberError.textContent = "";
    }

    return isValid;
}

```

#style.css

```

body {
    font-family: Arial, sans-serif;
    text-align: center;
    background-color: #f0f0f0;
}

form {
    margin: 20px auto;
    max-width: 400px;
    padding: 20px;
    background-color: #ffffff;
    border: 1px solid #ccc;
    border-radius: 5px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);
}

```

```
label {
  display: block;
  text-align: left;
  font-weight: bold;
}

input {
  width: 100%;
  padding: 10px;
  margin-bottom: 10px;
  border: 1px solid #ccc;
  border-radius: 5px;
}

.error {
  color: red;
  font-size: 14px;
  text-align: left;
}

input[type="submit"] {
  background-color:blueviolet;
  color: white;
  border: none;
  padding: 10px 20px;
  text-align: center;
  text-decoration: none;
  display: inline-block;
  font-size: 16px;
  margin-top: 10px;
  cursor: pointer;
  border-radius: 5px;
}

input[type="submit"]:hover {
  background-color: palevioletred;
}

/* Adding frame around the form */
form {
  border: 1px solid #ccc;
  padding: 20px;
  border-radius: 10px;
  background-color: #fff;
}

/* Styling the form inputs */
input {
```

```

width: 90%;
padding: 10px;
margin-bottom: 10px;
border: 1px solid #ccc;
border-radius: 5px;
}

/* Error message styling */
.error {
  color: rgb(192, 0, 0);
  font-size: 14px;
  text-align: left;
}

/* Additional styling for labels */
label {
  color: #333;
  font-size: 16px;
}

/* Styling for the submit button */
input[type="submit"] {
  background-color: palevioletred;
  color: white;
  border: none;
  padding: 10px 20px;
  text-align: center;
  text-decoration: none;
  display: inline-block;
  font-size: 16px;
  margin-top: 10px;
  cursor: pointer;
  border-radius: 5px;
  transition: background-color 0.3s ease;
}

input[type="submit"]:hover {
  background-color: palevioletred;
}

```

#index.html

```

<!DOCTYPE html>
<html>
<head>
  <title>User Registration Form</title>

```

```

    <link rel="stylesheet" type="text/css" href="Style.css">
</head>
<body>
    <form name="registrationForm" id="registrationForm" onsubmit="return
validateForm()">
        <label for="username">Username:</label>
        <input type="text" name="username" id="username">
        <span class="error" id="usernameError"></span><br>

        <label for="email">Email:</label>
        <input type="text" name="email" id="email">
        <span class="error" id="emailError"></span><br>

        <label for="password">Password:</label>
        <input type="password" name="password" id="password">
        <span class="error" id="passwordError"></span><br>

        <label for="confirmPassword">Confirm Password:</label>
        <input type="password" name="confirmPassword" id="confirmPassword">
        <span class="error" id="confirmPasswordError"></span><br>

        <label for="phoneNumber">Phone Number:</label>
        <input type="text" name="phoneNumber" id="phoneNumber">
        <span class="error" id="phoneNumberError"></span><br>

        <input type="submit" value="Register">
    </form>

    <script src="main.js"></script>
</body>
</html>

```

Output:

User Registration Form

File | C:/Users/Dharshini/Downloads/Form%20Validation/Index.html

Username: maran

Email: maran211102020@snuchennai.edu.in

Password: \*\*\*\*\*

Password should be at least 8 characters long, containing one uppercase letter, one lowercase letter, one number, and one special character.

Confirm Password: \*\*\*\*\*

Passwords do not match.

Phone Number: 1253689032

Invalid phone number format. Should be in the format +91 1234567890.

Register

34°C Partly sunny

Search

14:34 16-08-2023

User Registration Form

File | C:/Users/Dharshini/Downloads/Form%20Validation/Index.html

Username: maran

Email: maran211102020@snuchennai.edu.in

Password: \*\*\*\*\*

Confirm Password: \*\*\*\*\*

Phone Number: +91 9659634345

Register

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Search

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