LA3: Form Making and Validation using JavaScript

Html code:

```html
<html>
<head>
  <title>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>
```

Css code:

```css
body {
    font-family: Arial, sans-serif;
    text-align: center;
```

```css
    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: #4CAF50;
    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 {
```

```css
    background-color: #45a049;
}

/* 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: #015d04;
  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;
}
```

```css
input[type="submit"]:hover {
    background-color: #45a049;
}
```

Js code:

```javascript
// 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 = "";
    }
```

```javascript
    // 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;
  }
```

Output: