

Coding

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Interactive Form Validation</title>


  <!-- Internal CSS -->

  <style>

    * {

      box-sizing: border-box;    font-
family: 'Poppins', sans-serif;
    }


    body {    background:
#f2f4f7;    display: flex;
justify-content: center;
align-items: center;
height: 100vh;
    }


    .container {

      background: white;
```

```
padding: 25px 30px; border-radius:
10px; box-shadow: 0 5px 10px
rgba(0,0,0,0.1); width: 350px;
}
```

```
h2 { text-align:
center; color: #333;
margin-bottom: 20px;
}
```

```
.form-group { margin-
bottom: 18px; position:
relative;
}
```

```
label { display:
block; margin-
bottom: 5px; color:
#333; font-weight:
500;
}
```

```
input {
width: 100%;
padding: 10px;
border: 2px solid #ccc;
```

```
border-radius: 5px; outline: none;

font-size: 14px; transition: border-
color 0.3s ease;
}
```

```
input:focus { border-
color: #007bff;
}
```

```
.error { color:
red; font-size:
12px; margin-
top: 3px;
display: block;
}
```

```
.success input { border-
color: #28a745;
}
```

```
.error-field input { border-
color: #dc3545;
}
```

```
button {
width: 100%;

background: #007bff;
```

```
    color: white;

    border: none;

    padding: 10px; font-
    size: 16px;

    border-radius: 5px;    cursor:
pointer;    transition: background
0.3s ease;

}
```

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

}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h2>Interactive Form Validation</h2>
```

```
<form id="signupForm" novalidate>
```

```
<div class="form-group">
```

```
<label>Full Name</label>
```

```
<input type="text" id="name" placeholder="Enter your name">
```

```
<small class="error"></small>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Email</label>
```

```
<input type="email" id="email" placeholder="Enter your email">
```

```
<small class="error"></small>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Password</label>
```

```
<input type="password" id="password" placeholder="Enter password">
```

```
<small class="error"></small>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Confirm Password</label>
```

```
<input type="password" id="confirmPassword" placeholder="Re-enter password">
```

```
<small class="error"></small>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Phone Number</label>
```

```
<input type="text" id="phone" placeholder="Enter 10-digit number">
```

```
<small class="error"></small>
```

```
</div>
```

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

```
</form>
```

```
</div>
```

```
<!-- JavaScript -->
```

```
<script>
```

```
const form = document.getElementById('signupForm'); const nameField =  
document.getElementById('name'); const emailField =  
document.getElementById('email'); const passwordField =  
document.getElementById('password'); const confirmPasswordField =  
document.getElementById('confirmPassword'); const phoneField =  
document.getElementById('phone');
```

```
form.addEventListener('submit', (e) => {  
e.preventDefault(); validateForm();  
});
```

```
function validateForm() {  
validateName(); validateEmail();  
validatePassword();  
validateConfirmPassword();  
validatePhone();  
}
```

```
function showError(input, message) { const  
formGroup = input.parentElement;  
formGroup.className = 'form-group error-field';  
const small = formGroup.querySelector('small');  
small.textContent = message;  
}
```

```
function showSuccess(input) {  
const formGroup = input.parentElement;  
formGroup.className = 'form-group success'; const
```

```
small = formGroup.querySelector('small');  
small.textContent = "";  
}
```

```
// Validation Functions  function validateName() {  
const nameValue = nameField.value.trim();  if  
(nameValue === "") {  showError(nameField, 'Name is  
required');  } else if (!/^[A-Za-z\s]+$/.test(nameValue)) {  
showError(nameField, 'Name can contain only letters');  
  } else {  
    showSuccess(nameField);  
  }  
}
```

```
function validateEmail() {  const emailValue =  
emailField.value.trim();  const emailRegex =  
/^[^\s@]+@[^\s@]+\.[^\s@]+$/;  if (emailValue ===  
""){  showError(emailField, 'Email is required');  } else  
if (!emailRegex.test(emailValue)) {  
showError(emailField, 'Invalid email format');  
  } else {  
    showSuccess(emailField);  
  }  
}
```

```
function validatePassword() {  const  
passwordValue = passwordField.value.trim();  if
```

```

(passwordValue === '') {
  showError(passwordField, 'Password is required');

  } else if (passwordValue.length < 8) {    showError(passwordField,
'Password must be at least 8 characters');

  } else if (!/[A-Z]/.test(passwordValue) || ![a-z]/.test(passwordValue) || ![0-
9]/.test(passwordValue) || ![@$!%*?&]/.test(passwordValue)) {
  showError(passwordField, 'Use upper, lower, number & special char');

  } else {

    showSuccess(passwordField);

  }

}

```

```

function validateConfirmPassword() {    const passwordValue =
passwordField.value.trim();    const confirmValue =
confirmPasswordField.value.trim();    if (confirmValue === '') {
  showError(confirmPasswordField, 'Please confirm your password');

  } else if (passwordValue !== confirmValue) {
  showError(confirmPasswordField, 'Passwords do not match');

  } else {

    showSuccess(confirmPasswordField);

  }

}

```

```

function validatePhone() {    const phoneValue =
phoneField.value.trim();    if (phoneValue === '') {
  showError(phoneField, 'Phone number is required');    }

  else if (!/^[0-9]{10}$/.test(phoneValue)) {
  showError(phoneField, 'Enter valid 10-digit number');

```



```
    } else {  
        showSuccess(phoneField);  
    }  
}  
</script>  
  
</body>  
</html>
```