



DOM Challenge 3

 **CHALLENGE 3: Explore a form with basic JavaScript validations**  **Goal:** See how a form works with built-in JavaScript validation. Editable, modifiable, and safe to experiment with.

 Breaking things while coding isn't bad—it's a chance to learn, fix, and grow as a developer.

Project structure:

```
validated-form/  
├── index.html  
└── script.js
```

1. Create two files: `index.html` and `script.js`
2. Add this to `index.html`:

```
html  
<!DOCTYPE html>  
<html lang="en">  
<head>  
<meta charset="UTF-8">  
<title>Validated Form</title>  
</head>  
<body>  
<h1>Contact Form</h1>  
<form id="form">  
  <label for="name">Name:</label>  
  <input type="text" id="name" placeholder="Enter your name" required>  
  <br><br>  
  <label for="email">Email:</label>  
  <input type="email" id="email" placeholder="example@email.com" required>  
  <br><br>  
  <button type="submit">Send</button>  
</form>  
<div id="errors" style="color: red;"></div>  
<div id="successMessage" style="color: green;"></div>  
<script src="script.js"></script>  
</body>  
</html>
```

3. Add this to `script.js`:

```

javascript
document.getElementById("form").addEventListener("submit", function(e) {
  e.preventDefault();
  const name = document.getElementById("name").value.trim();
  const email = document.getElementById("email").value.trim();
  const errors = document.getElementById("errors");
  const successMessage = document.getElementById("successMessage");
  errors.textContent = "";
  successMessage.textContent = "";
  let hasErrors = false;

  if (name === "") {
    errors.innerHTML += "🔴 Name is required.<br>";
    hasErrors = true;
  }
  if (email === "") {
    errors.innerHTML += "🔴 Email is required.<br>";
    hasErrors = true;
  } else if (!email.includes("@") || !email.includes(".")) {
    errors.innerHTML += "🔴 Email must be in a valid format (like example@email.com).<br>";
    hasErrors = true;
  }

  if (!hasErrors) {
    successMessage.textContent = "✅ Form submitted successfully. Thank you!";
  }
});

```

Explore the form:

1. Open it in your browser
2. Try deleting or entering incorrect data
3. Observe the error messages
4. Customize the error messages to be fun, serious, or personal e.g., “Hey! Your name’s missing!” or “😬 Required field.”
5. Delete a line of JS validation—what breaks?
6. Remove `required` and `type="email"` from HTML—what still works?
7. Try creating your own success message with emojis, colors, or a GIF!

Step 1: Create your project folder

Call it `validated-form`. Inside it, create two files:

- `index.html` — this is your webpage
- `script.js` — this is your JavaScript file (the brain of the page)



index.html — Your form structure

This is the code that builds the form people will fill out.

```
html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Validated Form</title>
</head>
<body>
  <h1>Contact Form</h1>

  <!-- This is the form where users enter their name and email -->
  <form id="form">
    <!-- Name input -->
    <label for="name">Name:</label>
    <input type="text" id="name" placeholder="Enter your name" required>
    <br><br>

    <!-- Email input -->
    <label for="email">Email:</label>
    <input type="email" id="email" placeholder="example@email.com" required>
    <br><br>

    <!-- Button to submit the form -->
    <button type="submit">Send</button>
  </form>

  <!-- Where error messages will appear -->
  <div id="errors" style="color: red;"></div>

  <!-- Where the success message will appear -->
  <div id="successMessage" style="color: green;"></div>

  <!-- Connects the JavaScript file to the page -->
  <script src="script.js"></script>
```

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

script.js — The brain of the form

This code checks if the user filled out the form correctly. If something's missing, it shows a message.

```
javascript
// When the form is submitted, run this function
document.getElementById("form").addEventListener("submit", function(e) {
  // Stop the form from refreshing the page
  e.preventDefault();

  // Get the values the user typed in
  const name = document.getElementById("name").value.trim();
  const email = document.getElementById("email").value.trim();

  // Get the places where messages will be shown
  const errors = document.getElementById("errors");
  const successMessage = document.getElementById("successMessage");

  // Clear old messages
  errors.textContent = "";
  successMessage.textContent = "";

  // This keeps track of whether there are any problems
  let hasErrors = false;

  // Check if name is empty
  if (name === "") {
    errors.innerHTML += "🔴 Hey! Your name's missing.<br>";
    hasErrors = true;
  }

  // Check if email is empty
  if (email === "") {
    errors.innerHTML += "🔴 Don't forget your email!<br>";
    hasErrors = true;
  }

  // Check if email looks valid
  else if (!email.includes("@") || !email.includes(".")) {
    errors.innerHTML += "🔴 Hmm... that doesn't look like a real email.<br>";
  }
}
```

```

    hasErrors = true;
  }

  // If everything is okay, show a happy message
  if (!hasErrors) {
    successMessage.textContent = "✅ Form submitted successfully. Thank you! 🎉";
  }
});

```

What to try (like a curious beginner)

- ✅ Fill in both fields correctly → You'll see a green success message.
- ❌ Leave one field empty → You'll see red error messages.
- ❌ Type a weird email like `hello@banana` → It'll say the email isn't valid.
- 🧰 Remove `required` from the HTML → JavaScript still catches empty fields!
- 🔧 Delete one line from `script.js` → See what breaks and try to fix it.
- 🎨 Customize messages → Make them funny, serious, or personal:
 - "😬 You forgot your name!"
 - "📧 Email is missing. We can't send you cookies without it!"

Bonus idea: Add a GIF or emoji to the success message

In `script.js`, change this line:

```

javascript
successMessage.innerHTML = "✅ Thanks, Ana! You're awesome! <br><img
src='https://media.giphy.com/media/3o7aD2saalBwwftBIY/giphy.gif' width='100'>";

```