

# Form Validation

In this lesson, you will learn different strategies to validate the data entered by the user.

## We'll cover the following

- Instant Validation
- Post-Input Validation

Checking data inputted by users before it gets sent to a server is a major use of JavaScript with web forms. Using form validation, you can improve the user's experience by immediately alerting him on problems with their input. This is also an efficient way to prevent useless server requests with wrong data.

Validation can happen in several ways:

- as input is being entered;
- after input is entered;
- when the user submits the form. This last technique only involves adding validation in the submit event handler for the form: you already know how to do that. We'll look at the other two techniques one at a time, using the same example form as before.

## Instant Validation #

Validation while a user is inputting information is based on `input` events, which are triggered on an input zone each time its value changes.

The following code example adds an input event handler on the password field. This handler checks the length (number of characters) of the password being typed and shows a message to the user with specific content and color.

Output

## HTML

```
1 <html>
2 <head>
3 </head>
4 <body>
5   <form>
6     <label for="password">Password</label>:
7     <input type="text" name="password" id="password" required>
8     <br>
9     <label for="password" id = "passwordHelp" > </label>
10
11   </form>
12 </body>
13 </html>
```



## Post-Input Validation #

A text zone's input is considered finished once focus is lost on the zone, which kicks off a **blur** event that you can use to trigger validation. Let's imagine that you want to validate the presence of an **@** character in the email address entered by a user. Here's the JavaScript code which shows this validation.

## Output

## JavaScript

## HTML

```
<html>
<head>
</head>
<body>
  <form>
    <label for="email">Email</label>:
    <input type="text" name="emailAddress" id="emailAddress" required>
    <br>
    <label for="emailHelp" id = "emailHelp" > </label>

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



