**HTML Input Attributes**

This topic describes the different attributes for the HTML <input> element.

**The value Attribute**

An input field's initial value is specified by the input value attribute:

### **Example**

Input fields with initial (default) values:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" value="John"><br>  
  <label for="lname">Last name:</label><br>  
  <input type="text" id="lname" name="lname" value="Doe">  
</form>

## **The read only Attribute**

* The input read only attribute designates a read-only input field.
* It is not possible to change a read-only input field (however, a user can tab to it, highlight it, and copy the text from it).

When submitting the form, the value of a read-only input field will be sent!

### **Example**

A read-only input field:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" value="John" readonly><br>  
  <label for="lname">Last name:</label><br>  
  <input type="text" id="lname" name="lname" value="Doe">  
</form>

## **The disabled Attribute**

- The input disabled attribute tells the browser that an input field is disabled.

- Unusable and un-clickable input fields are disabled.

- When submitting the form, the value of a disabled input field will not be sent!

### **Example**

A disabled input field:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" value="John" disabled><br>  
  <label for="lname">Last name:</label><br>  
  <input type="text" id="lname" name="lname" value="Doe">  
</form>

## **The size Attribute**

* The input size attribute specifies the visible width of an input field in characters.
* Size is set to 20 by default.

**Note** that the size attribute works with text, search, tel, url, email, and password input types.

### **Example**

Set a width for an input field:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" size="50"><br>  
  <label for="pin">PIN:</label><br>  
  <input type="text" id="pin" name="pin" size="4">  
</form>

## **The max-length Attribute**

* The maximum number of characters allowed in an input field is specified by the input max-length attribute.
* When a max-length is specified, the input field will not accept any more characters than the specified number. This attribute, however, does not provide any feedback. As a result, if you want to notify the user, you'll need to write JavaScript code.

### **Example**

Set a maximum length for an input field:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" size="50"><br>  
  <label for="pin">PIN:</label><br>  
  <input type="text" id="pin" name="pin" maxlength="4" size="4">  
</form>

## **The min and max Attributes**

* The input min and max attributes define the input field's minimum and maximum values.
* Number, range, date, datetime-local, month, time, and week are all supported by the min and max attributes.

**Tip:** To create a range of legal values, combine the max and min attributes.

### **Example**

Set a max date, a min date, and a range of legal values:

<form>  
  <label for="datemax">Enter a date before 1980-01-01:</label>  
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>  
  
  <label for="datemin">Enter a date after 2000-01-01:</label>  
  <input type="date" id="datemin" name="datemin" min="2000-01-02"><br><br>  
  
  <label for="quantity">Quantity (between 1 and 5):</label>  
  <input type="number" id="quantity" name="quantity" min="1" max="5">  
</form>

## **The multiple Attribute**

The input multiple Attribute indicates that a user can enter multiple values in a single input field.

The email and file input types are supported by the multiple Attribute.

### **Example**

A file upload field that accepts multiple values:

<form>  
  <label for="files">Select files:</label>  
  <input type="file" id="files" name="files" multiple>  
</form>

## **The pattern Attribute**

* When the form is submitted, the input pattern attribute specifies a regular expression against which the value of the input field is checked.
* Text, date, search, url, tel, email, and password are all supported by the pattern attribute.

**Tip:** To assist the user, use the global title attribute to describe the pattern.

**Tip**: In our JavaScript tutorial, you can learn more about regular expressions.

### **Example**

An input field that can contain only three letters (no numbers or special characters):

<form>  
  <label for="country\_code">Country code:</label>  
  <input type="text" id="country\_code" name="country\_code"  
  pattern="[A-Za-z]{3}" title="Three letter country code">  
</form>

## **The placeholder Attribute**

* The input placeholder attribute specifies a brief description of an input field's expected value (a sample value or a short description of the expected format).
* Before the user enters a value, a short hint appears in the input field.
* Text, search, url, tel, email, and password are all supported by the placeholder attribute.

### **Example**

An input field with a placeholder text:

<form>  
  <label for="phone">Enter a phone number:</label>  
  <input type="tel" id="phone" name="phone"  
  placeholder="123-45-678"  
  pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}">  
</form>

**The required Attribute**

* Before submitting the form, the input required attribute specifies that an input field must be filled out.
* Text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file are all supported by the required attribute.

### **Example**

A required input field:

<form>  
  <label for="username">Username:</label>  
  <input type="text" id="username" name="username" required>  
</form>

## **The step Attribute**

* The legal number intervals for an input field are specified by the input step attribute.
* For instance, if step="3," legal numbers could be -3, 0, 3, 6, and so on.
* This attribute, along with the max and min attributes, can be used to create a range of legal values.
* The number, range, date, datetime-local, month, time, and week input types are all supported by the step attribute.

### **Example**

An input field with a specified legal number intervals:

<form>  
  <label for="points">Points:</label>  
  <input type="number" id="points" name="points" step="3">  
</form>

**Note:** Input restrictions aren't fool proof, and JavaScript has a lot of ways to get around them. It must also be checked by the receiver (the server) in order to safely restrict input!

**The autofocus Attribute**

When a page loads, the input autofocus attribute specifies that an input field should get focus automatically.

### **Example**

Let the "First name" input field automatically get focus when the page loads:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname" autofocus><br>  
  <label for="lname">Last name:</label><br>  
  <input type="text" id="lname" name="lname">  
</form>

## **The height and width Attributes**

The height and width of an <input type="image"> element are specified by the input height and width attributes.

**Tip:** For images, make sure to include both the height and width attributes. The space required for the image is reserved when the page is loaded if the height and width are set. Without these attributes, the browser has no idea how big the image is and can't allocate enough space for it. As a result, the page layout will change while it is loading (while the images load).

### **Example**

Create a submit button image with height and width attributes:

<form>  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname"><br><br>  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname"><br><br>  
  <input type="image" src="img\_submit.gif" alt="Submit" width="48" height="48">  
</form>

## **The list Attribute**

The input list attribute refers to a <datalist> element that contains pre-defined input options.

### **Example**

An <input> element with pre-defined values in a <datalist>:

<form>  
  <input list="browsers">  
  <datalist id="browsers">  
    <option value="Internet Explorer">  
    <option value="Firefox">  
    <option value="Chrome">  
    <option value="Opera">  
    <option value="Safari">  
  </datalist>  
</form>

## **The autocomplete Attribute**

* The input autocomplete attribute specifies whether autocomplete should be enabled or disabled for a form or input field.
* The browser can predict the value using autocomplete. When a user begins typing in a field, the browser should display fill-in options based on previously typed values.
* Text, search, url, tel, email, password, datepickers, range, and colour are all supported by the autocomplete attribute in a form.

### **Example**

An HTML form with autocomplete on, and off for one input field:

<form action="/action\_page.php" autocomplete="on">  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname"><br><br>  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname"><br><br>  
  <label for="email">Email:</label>  
  <input type="email" id="email" name="email" autocomplete="off"><br>

<br>  
  <input type="submit" value="Submit">  
</form>

**Tip:** For this to work in some browsers, you may need to enable autocomplete (look under "Preferences" in the browser's menu).

## **HTML Form and Input Elements**

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| --- | --- |
| **Tag** | **Description** |
| [<form>](https://www.w3schools.com/tags/tag_form.asp) | Creates a user-input HTML form. |
| [<input>](https://www.w3schools.com/tags/tag_input.asp) | This class defines an input control. |