## Elements Removed in HTML5

The following HTML4 elements have been removed from HTML5:

Element Use instead

<acronym> <abbr>

<applet> <object>

<basefont> CSS

<big> CSS

<center> CSS

<dir> <ul>

<font> CSS

<frame>

<frameset>

<noframes>

<strike> CSS

<tt> CSS

## Adding New Elements to HTML

<script>document.createElement("myHero")</script>

<style>

myHero {

display: block;

background-color: #ddd;

padding: 50px;

font-size: 30px;

}

</style>

## Here is a list of some common input restrictions (some are new in HTML5):

Attribute Description

disabled Specifies that an input field should be disabled

max Specifies the maximum value for an input field

maxlength Specifies the maximum number of character for an input field

min Specifies the minimum value for an input field

pattern Specifies a regular expression to check the input value against

readonly Specifies that an input field is read only (cannot be changed)

required Specifies that an input field is required (must be filled out)

size Specifies the width (in characters) of an input field

step Specifies the legal number intervals for an input field

value Specifies the default value for an input field

## The autocomplete Attribute

The autocomplete attribute specifies whether a form or input field should have autocomplete on or off.

When autocomplete is on, the browser automatically complete values based on values that the user has entered before.

Tip: It is possible to have autocomplete "on" for the form, and "off" for specific input fields, or vice versa.

The autocomplete attribute works with <form> and the following <input> types: text, search, url, tel, email, password, datepickers, range, and color.

<form action="action\_page.php" autocomplete="on">

E-mail: <input type="email" name="email" autocomplete="off">

## The novalidate Attribute

The novalidate attribute is a <form> attribute.

<form action="action\_page.php" novalidate>

E-mail: <input type="email" name="user\_email">

<input type="submit">

</form>

## The autofocus Attribute

When present, it specifies that an <input> element should automatically get focus when the page loads.

First name:<input type="text" name="fname" autofocus>

## The list Attribute / HTML5 <datalist> Element

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

<input list="browsers">

<datalist id="browsers">

<option value="Internet Explorer">

<option value="Firefox">

<option value="Chrome">

<option value="Opera">

<option value="Safari">

</datalist>

## The multiple Attribute

The multiple attribute works with the following input types: email, and file.

Select images: <input type="file" name="img" multiple>

## The required Attribute

it specifies that an input field must be filled out before submitting the form.

The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.

Username: <input type="text" name="usrname" required>

## Step Attribute

The step attribute can be used together with the max and min attributes to create a range of legal values.

An input field with a specified legal number intervals:

<input type="number" name="points" step="3">

## HTML5 <keygen> Element

The purpose of the <keygen> element is to provide a secure way to authenticate users.

<form action="action\_page.php">

Username: <input type="text" name="user">

Encryption: <keygen name="security">

<input type="submit">

</form>

## HTML <optgroup> Tag

Group related options with <optgroup> tags:

<select>

<optgroup label="Swedish Cars">

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

</optgroup>

<optgroup label="German Cars">

<option value="mercedes">Mercedes</option>

<option value="audi">Audi</option>

</optgroup>

</select>

## HTML <legend> Tag

<legend>( **Tip:** The [<legend>](http://www.w3schools.com/tags/tag_legend.asp) tag defines a caption for the <fieldset>( The <fieldset> tag draws a box around the related elements.

) element.

)

<form>

<fieldset>

<legend>Personalia:</legend>

Name: <input type="text" size="30"><br>

Email: <input type="text" size="30"><br>

Date of birth: <input type="text" size="10">

</fieldset>

</form>

## HTML <label> Tag

Definition and Usage

The <label> tag defines a label for an <input> element.

The <label> element does not render as anything special for the user. However, it provides a usability improvement for mouse users, because if the user clicks on the text within the <label> element, it toggles the control.

The for attribute of the <label> tag should be equal to the id attribute of the related element to bind them together.

for element\_id Specifies which form element a label is bound to

form form\_id Specifies one or more forms the label belongs to

<label for="male">Male</label>

<input type="radio" name="gender" id="male" value="male"><br>

<label for="female">Female</label>

<input type="radio" name="gender" id="female" value="female"><br>

## HTML5 offers new semantic elements to define different parts of a web page:

* <article>
* <aside>
* <details>
* <figcaption>
* <figure>
* <footer>
* <header>
* <main>
* <mark>
* <nav>
* <section>
* <summary>
* <time>

## New Form Elements

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <datalist> | Defines pre-defined options for input controls |
| <keygen> | Defines a key-pair generator field (for forms) |
| <output> | Defines the result of a calculation |

## New Input Types

|  |  |
| --- | --- |
| **New Input Types** | **New Input Attributes** |
| * color * date * datetime * datetime-local * email * month * number * range * search * tel * time * url * week | * autocomplete * autofocus * for * formaction * formenctype * formmethod * formnovalidate * formtarget * height and width * list * min and max * multiple * pattern (regexp) * placeholder * required * step |

## HTML5 Graphics

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <canvas> | Defines graphic drawing using JavaScript |
| <svg> | Defines graphic drawing using SVG |

## New Media Elements

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <audio> | Defines sound or music content |
| <embed> | Defines containers for external applications (like plug-ins) |
| <source> | Defines sources for <video> and <audio> |
| <track> | Defines tracks for <video> and <audio> |
| <video> | Defines video or movie content |