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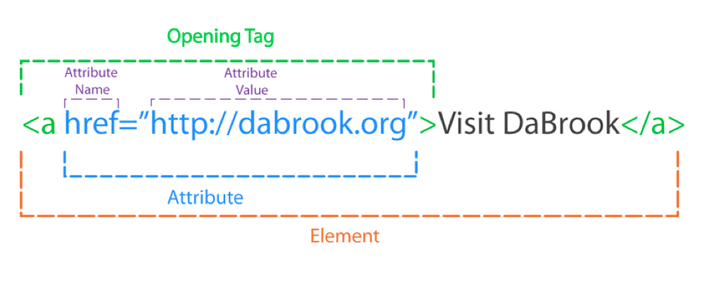
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# Introduction

HTML is the standard markup language for creating Web pages.

What is HTML?

* HTML stands for Hyper Text Markup Language
* HTML is the standard markup language for creating Web pages
* HTML describes the structure of a Web page
* HTML consists of a series of elements
* HTML elements tell the browser how to display the content
* HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

## A Simple HTML Document

### Example

<!DOCTYPE html>  
<html>  
<head>  
<title>Page Title</title>  
</head>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

### Example Explained

* The <!DOCTYPE html> declaration defines that this document is an HTML5 document
* The <html> tag indicates that this web page is written in HTML.
* The <head> element contains the information about the HTML document. For Example, the Title of the page, version of HTML, Meta Data, etc.
* The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
* The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
* The <h1> element defines a large heading
* The <p> element defines a paragraph
* **Note:** The content inside the <body> section (the white area above) will be displayed in a browser. The content inside the <title> element will be shown in the browser's title bar or in the page's tab.

## Web Browsers

The purpose of a web browser (Chrome, Edge, Firefox, Safari) is to read HTML documents and display them correctly.

A browser does not display the HTML tags, but uses them to determine how to display the document:



## HTML History

Since the early days of the World Wide Web, there have been many versions of HTML:

|  |  |
| --- | --- |
| **Year** | **Version** |
| 1989 | Tim Berners-Lee invented www |
| 1991 | Tim Berners-Lee invented HTML |
| 1993 | Dave Raggett drafted HTML+ |
| 1995 | HTML Working Group defined HTML 2.0 |
| 1997 | SKILLS9 Recommendation: HTML 3.2 |
| 1999 | SKILLS9 Recommendation: HTML 4.01 |
| 2000 | SKILLS9 Recommendation: XHTML 1.0 |
| 2008 | WHATWG HTML5 First Public Draft |
| 2012 | [WHATWG HTML5 Living Standard](http://whatwg.org/html/) |
| 2014 | [SKILLS9 Recommendation: HTML5](http://www.w3.org/TR/html5/) |
| 2016 | SKILLS9 Candidate Recommendation: HTML 5.1 |
| 2017 | [SKILLS9 Recommendation: HTML5.1 2nd Edition](http://www.w3.org/TR/html51/) |
| 2017 | [SKILLS9 Recommendation: HTML5.2](http://www.w3.org/TR/html52/) |

This tutorial follows the latest HTML5 standard.

# HTML Editors

## Learn HTML Using Notepad or TextEdit

Web pages can be created and modified by using professional HTML editors.

However, for learning HTML we recommend a simple text editor like Notepad (PC) or TextEdit (Mac).

We believe that using a simple text editor is a good way to learn HTML.

Follow the steps below to create your first web page with Notepad or TextEdit.

## Step 1: Open Notepad (PC)

**Windows 8 or later:**

Open the **Start Screen** (the window symbol at the bottom left on your screen). Type **Notepad**.

**Windows 7 or earlier:**

Open **Start** >**Programs >** **Accessories >** **Notepad**

## Step 1: Open TextEdit (Mac)

Open **Finder > Applications > TextEdit**

Also change some preferences to get the application to save files correctly. In **Preferences > Format >**choose**"Plain Text"**

Then under "Open and Save", check the box that says "Display HTML files as HTML code instead of formatted text".

**Then open a new document to place the code.**

## Step 2: Write Some HTML

Write or copy the following HTML code into Notepad:

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Heading</h1>  
  
<p>My first paragraph.</p>  
  
</body>  
</html>



## Step 3: Save the HTML Page

Save the file on your computer. Select **File > Save as** in the Notepad menu.

Name the file **"index.htm"** and set the encoding to **UTF-8** (which is the preferred encoding for HTML files).



**Tip:** You can use either .htm or .html as file extension. There is no difference; it is up to you.

## Step 4: View the HTML Page in Your Browser

Open the saved HTML file in your favorite browser (double click on the file, or right-click - and choose "Open with").

The result will look much like this:



# HTML Basic

In this chapter we will show some basic HTML examples.

Don't worry if we use tags you have not learned about yet.

## HTML Documents

All HTML documents must start with a document type declaration: <!DOCTYPE html>.

The HTML document itself begins with <html> and ends with </html>.

The visible part of the HTML document is between <body> and </body>.

### Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

## The <!DOCTYPE> Declaration

The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly.

It must only appear once, at the top of the page (before any HTML tags).

The <!DOCTYPE> declaration is not case sensitive.

The <!DOCTYPE> declaration for HTML5 is:

<!DOCTYPE html>

## HTML Headings

HTML headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading:

### Example

<h1>This is heading 1</h1>  
<h2>This is heading 2</h2>  
<h3>This is heading 3</h3>

## HTML Paragraphs

HTML paragraphs are defined with the <p> tag:

### Example

<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>

## HTML Links

HTML links are defined with the <a> tag:

### Example

<a href="[Log in to Skills9](https://www.facebook.com/login.php/)">This is a link</a>

The link's destination is specified in the href attribute.

Attributes are used to provide additional information about HTML elements.

You will learn more about attributes in a later chapter.

## HTML Images

HTML images are defined with the <img> tag.

The source file (src), alternative text (alt), width, and height are provided as attributes:

### Example

<img src="Skills9.jpg" alt="Skills9.com" width="104" height="142">

## How to View HTML Source

Have you ever seen a Web page and wondered "Hey! How did they do that?"

### View HTML Source Code:

Right-click in an HTML page and select "View Page Source" (in Chrome) or "View Source" (in Edge), or similar in other browsers. This will open a window containing the HTML source code of the page.

### Inspect an HTML Element:

Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS). You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.

# HTML Tags & Elements

**HTML Tags:** Tags are the starting and ending parts of an HTML element. They begin with < symbol and end with > symbol. Whatever written inside < and > are called tags.

**Example:**

<b> </b>

<p> </p>

<h1> </h1>

**HTML Elements:** An HTML element is defined by a start tag, some content, and an end tag.

## HTML Elements

The HTML **element** is everything from the start tag to the end tag:

<tagname>Content goes here...</tagname>

Examples of some HTML elements:

<h1>My First Heading</h1>

<p>My first paragraph.</p>

|  |  |  |
| --- | --- | --- |
| **Start tag** | **Element content** | **End tag** |
| <h1> | My First Heading | </h1> |
| <p> | My first paragraph. | </p> |
| <br> | none | none |

**Note:** Some HTML elements have no content (like the <br> element). These elements are called empty elements. Empty elements do not have an end tag!

## Nested HTML Elements

HTML elements can be nested (this means that elements can contain other elements).

All HTML documents consist of nested HTML elements.

The following example contains four HTML elements (<html>, <body>, <h1> and <p>):

### Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

### Example Explained

The <html> element is the root element and it defines the whole HTML document.

It has a start tag <html> and an end tag </html>.

Then, inside the <html> element there is a <body> element:

<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>

The <body> element defines the document's body.

It has a start tag <body> and an end tag </body>.

Then, inside the <body> element there are two other elements: <h1> and <p>:

<h1>My First Heading</h1>  
<p>My first paragraph.</p>

The <h1> element defines a heading.

It has a start tag <h1> and an end tag </h1>:

<h1>My First Heading</h1>

The <p> element defines a paragraph.

It has a start tag <p> and an end tag </p>:

<p>My first paragraph.</p>

ADVERTISEMENT

## Never Skip the End Tag

Some HTML elements will display correctly, even if you forget the end tag:

### Example

<html>  
<body>  
  
<p>This is a paragraph  
<p>This is a paragraph  
  
</body>  
</html>

**However, never rely on this! Unexpected results and errors may occur if you forget the end tag!**

## Empty HTML Elements

HTML elements with no content are called empty elements.

The <br> tag defines a line break, and is an empty element without a closing tag:

### Example

<p>This is a <br> paragraph with a line break.</p>

## HTML is Not Case Sensitive

HTML tags are not case sensitive: <P> means the same as <p>.

The HTML standard does not require lowercase tags, but SKILLS9 **recommends** lowercase in HTML, and **demands** lowercase for stricter document types like XHTML.

At Skills9 we always use lowercase tag names.

## HTML Tag Reference

Skills9' tag reference contains additional information about these tags and their attributes.

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<html>](https://www.w3schools.com/tags/tag_html.asp) | Defines the root of an HTML document |
| [<body>](https://www.w3schools.com/tags/tag_body.asp) | Defines the document's body |
| [<h1> to <h6>](https://www.w3schools.com/tags/tag_hn.asp) | Defines HTML headings |

# HTML Attributes

HTML attributes provide additional information about HTML element

## HTML Attributes

## Introduction of HTML Attribute - What is Html Attribute? - Digital ...

* All HTML elements can have **attributes**
* Attributes provide **additional information** about elements
* Attributes are always specified in **the start tag**
* Attributes usually come in name/value pairs like: **name="value"**

## The href Attribute

The <a> tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to:

### Example

<a href="https://www.Skills9.com">Visit Skills9</a>

You will learn more about links in our [HTML Links chapter](https://www.w3schools.com/html/html_links.asp).

## The src Attribute

The <img> tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed:

### Example

<img src="img\_girl.jpg">

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_img_src)

There are two ways to specify the URL in the src attribute:

**1. Absolute URL** - Links to an external image that is hosted on another website. Example: src="https://www.Skills9.com/images/img\_girl.jpg".

**Notes:** External images might be under copyright. If you do not get permission to use it, you may be in violation of copyright laws. In addition, you cannot control external images; it can suddenly be removed or changed.

**2. Relative URL** - Links to an image that is hosted within the website. Here, the URL does not include the domain name. If the URL begins without a slash, it will be relative to the current page. Example: src="img\_girl.jpg". If the URL begins with a slash, it will be relative to the domain. Example: src="/images/img\_girl.jpg".

**Tip:** It is almost always best to use relative URLs. They will not break if you change domain.

## The width and height Attributes

The <img> tag should also contain the width and height attributes, which specify the width and height of the image (in pixels):

### Example

<img src="img\_girl.jpg" width="500" height="600">

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_img)

## The alt Attribute

The required alt attribute for the <img> tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to a slow connection, or an error in the src attribute, or if the user uses a screen reader.

### Example

<img src="img\_girl.jpg" alt="Girl with a jacket">

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_alt)

### Example

See what happens if we try to display an image that does not exist:

<img src="img\_typo.jpg" alt="Girl with a jacket">

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_alt_error)

You will learn more about images in our [HTML Images chapter](https://www.w3schools.com/html/html_images.asp).

## The style Attribute

The style attribute is used to add styles to an element, such as color, font, size, and more.

### Example

<p style="color:red;">This is a red paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_style)

You will learn more about styles in our [HTML Styles chapter](https://www.w3schools.com/html/html_styles.asp).

## The lang Attribute

You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

The following example specifies English as the language:

<!DOCTYPE html>  
<html lang="en">  
<body>  
...  
</body>  
</html>

Country codes can also be added to the language code in the lang attribute. So, the first two characters define the language of the HTML page, and the last two characters define the country.

The following example specifies English as the language and United States as the country:

<!DOCTYPE html>  
<html lang="en-US">  
<body>  
...  
</body>  
</html>

You can see all the language codes in our [HTML Language Code Reference](https://www.w3schools.com/tags/ref_language_codes.asp).

## The title Attribute

The title attribute defines some extra information about an element.

The value of the title attribute will be displayed as a tooltip when you mouse over the element:

### Example

<p title="I'm a tooltip">This is a paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_attributes_title)

## We Suggest: Always Use Lowercase Attributes

The HTML standard does not require lowercase attribute names.

The title attribute (and all other attributes) can be written with uppercase or lowercase like **title** or **TITLE**.

However, SKILLS9 **recommends** lowercase attributes in HTML, and **demands** lowercase attributes for stricter document types like XHTML.

At Skills9 we always use lowercase attribute names.

## We Suggest: Always Quote Attribute Values

The HTML standard does not require quotes around attribute values.

However, SKILLS9 **recommends** quotes in HTML, and **demands** quotes for stricter document types like XHTML.

### Good:

<a href="https://www.Skills9.com/html/">Visit our HTML tutorial</a>

### Bad:

<a href=https://www.Skills9.com/html/>Visit our HTML tutorial</a>

Sometimes you have to use quotes. This example will not display the title attribute correctly, because it contains a space:

### Example

<p title=About Skills9>

 we always use quotes around attribute values.

## Single or Double Quotes?

Double quotes around attribute values are the most common in HTML, but single quotes can also be used.

In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:

<p title='John "ShotGun" Nelson'>

Or vice versa:

<p title="John 'ShotGun' Nelson">

## Chapter Summary

* All HTML elements can have **attributes**
* The href attribute of <a> specifies the URL of the page the link goes to
* The src attribute of <img> specifies the path to the image to be displayed
* The width and height attributes of <img> provide size information for images
* The alt attribute of <img> provides an alternate text for an image
* The style attribute is used to add styles to an element, such as color, font, size, and more
* The lang attribute of the <html> tag declares the language of the Web page
* The title attribute defines some extra information about an element

# HTML Headings

HTML headings are titles or subtitles that you want to display on a webpa

### Example

# Heading 1

## Heading 2

### Heading 3

#### Heading 4

##### **Heading 5**

###### **Heading 6**

## HTML Headings

HTML headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

### Example

<h1>Heading 1</h1>  
<h2>Heading 2</h2>  
<h3>Heading 3</h3>  
<h4>Heading 4</h4>  
<h5>Heading 5</h5>  
<h6>Heading 6</h6>

**Note:** Browsers automatically add some white space (a margin) before and after a heading.

## Headings Are Important

Search engines use the headings to index the structure and content of your web pages.

Users often skim a page by its headings. It is important to use headings to show the document structure.

<h1> headings should be used for main headings, followed by <h2> headings, then the less important <h3>, and so on.

**Note:** Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

## Bigger Headings

Each HTML heading has a default size. However, you can specify the size for any heading with the style attribute, using the CSS font-size property:

### Example

<h1 style="font-size:60px;">Heading 1</h1>

# HTML Paragraphs

A paragraph always starts on a new line, and is usually a block of text.

## HTML Paragraphs

The HTML <p> element defines a paragraph.

A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.

### Example

<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_paragraphs1)

## HTML Display

You cannot be sure how HTML will be displayed.

Large or small screens, and resized windows will create different results.

With HTML, you cannot change the display by adding extra spaces or extra lines in your HTML code.

The browser will automatically remove any extra spaces and lines when the page is displayed:

### Example

<p>  
This paragraph  
contains a lot of lines  
in the source code,  
but the browser  
ignores it.  
</p>  
  
<p>  
This paragraph  
contains         a lot of spaces  
in the source         code,  
but the        browser  
ignores it.  
</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_paragraphs2)

## HTML Horizontal Rules

The <hr> tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule.

The <hr> element is used to separate content (or define a change) in an HTML page:

### Example

<h1>This is heading 1</h1>  
<p>This is some text.</p>  
<hr>  
<h2>This is heading 2</h2>  
<p>This is some other text.</p>  
<hr>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_headings_hr)

The <hr> tag is an empty tag, which means that it has no end tag.

## HTML Line Breaks

The HTML <br> element defines a line break.

Use <br> if you want a line break (a new line) without starting a new paragraph:

### Example

<p>This is<br>a paragraph<br>with line breaks.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_paragraphs)

The <br> tag is an empty tag, which means that it has no end tag.

## The Poem Problem

This poem will display on a single line:

### Example

<p>  
  My Bonnie lies over the ocean.  
  
  My Bonnie lies over the sea.  
  
  My Bonnie lies over the ocean.  
  
  Oh, bring back my Bonnie to me.  
</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_poem)

## Solution - The HTML <pre> Element

The HTML <pre> element defines preformatted text.

The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

### Example

<pre>  
  My Bonnie lies over the ocean.  
  
  My Bonnie lies over the sea.  
  
  My Bonnie lies over the ocean.  
  
  Oh, bring back my Bonnie to me.  
</pre>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_pre)

# HTML Styles

The HTML style attribute is used to add styles to an element, such as color, font, size, and more.

### Example

I am Red

I am Blue

I am Big

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_intro)

## The HTML Style Attribute

Setting the style of an HTML element, can be done with the style attribute.

The HTML style attribute has the following syntax:

<tagname style="property:value;">

The ***property*** is a CSS property. The ***value*** is a CSS value.

You will learn more about CSS later in this tutorial.

## Background Color

The CSS background-color property defines the background color for an HTML element.

### Example

Set the background color for a page to powderblue:

<body style="background-color:powderblue;">  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_background-color)

### Example

Set background color for two different elements:

<body>  
  
<h1 style="background-color:powderblue;">This is a heading</h1>  
<p style="background-color:tomato;">This is a paragraph.</p>  
  
</body>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_background-color2)

## Text Color

The CSS color property defines the text color for an HTML element:

### Example

<h1 style="color:blue;">This is a heading</h1>  
<p style="color:red;">This is a paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_color)

## Fonts

The CSS font-family property defines the font to be used for an HTML element:

### Example

<h1 style="font-family:verdana;">This is a heading</h1>  
<p style="font-family:courier;">This is a paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_font-family)

## Text Size

The CSS font-size property defines the text size for an HTML element:

### Example

<h1 style="font-size:300%;">This is a heading</h1>  
<p style="font-size:160%;">This is a paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_font-size)

## Text Alignment

The CSS text-align property defines the horizontal text alignment for an HTML element:

### Example

<h1 style="text-align:center;">Centered Heading</h1>  
<p style="text-align:center;">Centered paragraph.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_styles_text-align)

## Chapter Summary

* Use the style attribute for styling HTML elements
* Use background-color for background color
* Use color for text colors
* Use font-family for text fonts
* Use font-size for text sizes
* Use text-align for text alignment

# HTML Text Formatting

HTML contains several elements for defining text with a special meaning

### Example

**This text is bold**

*This text is italic*

This issubscript and superscript

## HTML Formatting Elements

Formatting elements were designed to display special types of text:

* <b> - Bold text
* <strong> - Important text
* <i> - Italic text
* <em> - Emphasized text
* <mark> - Marked text
* <small> - Smaller text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

## HTML <b> and <strong> Elements

The HTML <b> element defines bold text, without any extra importance.

### Example

<b>This text is bold</b>

[output](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_formatting_b)

This text is normal.

**This text is bold.**

The HTML <strong> element defines text with strong importance. The content inside is typically displayed in bold.

### Example

<strong>This text is important!</strong>

Output

This text is normal.

**This text is important!**

## HTML <i> and <em> Elements

The HTML <i> element defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.

**Tip:** The <i> tag is often used to indicate a technical term, a phrase from another language, a thought, a ship name, etc.

### Example

<i>This text is italic</i>

Output

This text is normal.

*This text is italic.*

The HTML <em> element defines emphasized text. The content inside is typically displayed in italic.

**Tip:** A screen reader will pronounce the words in <em> with an emphasis, using verbal stress.

### Example

<em>This text is emphasized</em>

Output

This text is normal.

This text is emphasized.

## HTML <small> Element

The HTML <small> element defines smaller text:

### Example

<small>This is some smaller text.</small>

[output](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_formatting_small)

This is some normal text.

This is some smaller text.

## HTML <mark> Element

The HTML <mark> element defines text that should be marked or highlighted:

### Example

<p>Do not forget to buy <mark>milk</mark> today.</p>

[output](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_formatting_mark)

Do not forget to buy milk today.

## HTML <del> Element

The HTML <del> element defines text that has been deleted from a document. Browsers will usually strike a line through deleted text:

### Example

<p>My favorite color is <del>blue</del> red.</p>

[output](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_formatting_del)

My favorite color is  red.

## HTML <ins> Element

The HTML <ins> element defines a text that has been inserted into a document. Browsers will usually underline inserted text:

### Example

<p>My favorite color is <del>blue</del> <ins>red</ins>.</p>

Output

My favorite color is  red.

## HTML <sub> Element

The HTML <sub> element defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H2O:

### Example

<p>This is <sub>subscripted</sub> text.</p>

Output

This is subscripted tex

## HTML <sup> Element

The HTML <sup> element defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font. Superscript text can be used for footnotes, like WWW[1]:

### Example

<p>This is <sup>superscripted</sup> text.</p>

Output

This is superscripted text.

Bottom of Form

## HTML Text Formatting Elements

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<b>](https://www.w3schools.com/tags/tag_b.asp) | Defines bold text |
| [<em>](https://www.w3schools.com/tags/tag_em.asp) | Defines emphasized text |
| [<i>](https://www.w3schools.com/tags/tag_i.asp) | Defines a part of text in an alternate voice or mood |
| [<small>](https://www.w3schools.com/tags/tag_small.asp) | Defines smaller text |
| [<strong>](https://www.w3schools.com/tags/tag_strong.asp) | Defines important text |
| [<sub>](https://www.w3schools.com/tags/tag_sub.asp) | Defines subscripted text |
| [<sup>](https://www.w3schools.com/tags/tag_sup.asp) | Defines superscripted text |
| [<ins>](https://www.w3schools.com/tags/tag_ins.asp) | Defines inserted text |
| [<del>](https://www.w3schools.com/tags/tag_del.asp) | Defines deleted text |
| [<mark>](https://www.w3schools.com/tags/tag_mark.asp) | Defines marked/highlighted text |

# HTML Comments

HTML comments are not displayed in the browser, but they can help document your HTML source code.

## HTML Comment Tag

You can add comments to your HTML source by using the following syntax:

<!-- Write your comments here -->

Notice that there is an exclamation point (!) in the start tag, but not in the end tag.

**Note:** Comments are not displayed by the browser, but they can help document your HTML source code.

## Add Comments

With comments you can place notifications and reminders in your HTML code:

### Example

<!-- This is a comment -->  
  
<p>This is a paragraph.</p>  
  
<!-- Remember to add more information here -->

## Hide Content

Comments can be used to hide content.

This can be helpful if you hide content temporarily:

### Example

<p>This is a paragraph.</p>  
  
<!-- <p>This is another paragraph </p> -->  
  
<p>This is a paragraph too.</p>

You can also hide more than one line. Everything between the <!-- and the --> will be hidden from the display.

### Example

Hide a section of HTML code:

<p>This is a paragraph.</p>  
<!--  
<p>Look at this cool image:</p>  
<img border="0" src="pic\_trulli.jpg" alt="Trulli">  
-->  
<p>This is a paragraph too.</p>

Comments are also great for debugging HTML, because you can comment out HTML lines of code, one at a time, to search for errors.

## Hide Inline Content

Comments can be used to hide parts in the middle of the HTML code.

### Example

Hide a part of a paragaph:

<p>This <!-- great text --> is a paragraph.</p>

# HTML Lists

HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain −

* **<ul>** − An unordered list. This will list items using plain bullets.
* **<ol>** − An ordered list. This will use different schemes of numbers to list your items.
* **<dl>** − A definition list. This arranges your items in the same way as they are arranged in a dictionary.

## HTML Unordered Lists

An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML **<ul>** tag. Each item in the list is marked with a bullet.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Unordered List</title>

</head>

<body>

<ul>

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ul>

</body>

</html>

This will produce the following result –

* Beetroot
* Ginger
* Potato
* Radish

## The type Attribute

You can use **type** attribute for <ul> tag to specify the type of bullet you like. By default, it is a disc. Following are the possible options −

<ul type = "square">

<ul type = "disc">

<ul type = "circle">

### Example

Following is an example where we used <ul type = "square">

<!DOCTYPE html>

<html>

<head>

<title>HTML Unordered List</title>

</head>

<body>

<ul type = "square">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ul>

</body>

</html>

This will produce the following result –

* Beetroot
* Ginger
* Potato
* Radish

### Example

Following is an example where we used <ul type = "disc"> −

<!DOCTYPE html>

<html>

<head>

<title>HTML Unordered List</title>

</head>

<body>

<ul type = "disc">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ul>

</body>

</html>

* This will produce the following result −Beetroot
* Ginger
* Potato
* Radish

### Example

Following is an example where we used <ul type = "circle"> −

<!DOCTYPE html>

<html>

<head>

<title>HTML Unordered List</title>

</head>

<body>

<ul type = "circle">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ul>

</body>

</html>

This will produce the following result –

* Beetroot
* Ginger
* Potato
* Radish

## HTML Ordered Lists

If you are required to put your items in a numbered list instead of bulleted, then HTML ordered list will be used. This list is created by using **<ol>** tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with <li>.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol>

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result –

1. Beetroot
2. Ginger
3. Potato
4. Radish

## The type Attribute

You can use **type** attribute for <ol> tag to specify the type of numbering you like. By default, it is a number. Following are the possible options −

<ol type = "1"> - Default-Case Numerals.

<ol type = "I"> - Upper-Case Numerals.

<ol type = "i"> - Lower-Case Numerals.

<ol type = "A"> - Upper-Case Letters.

<ol type = "a"> - Lower-Case Letters.

### Example

Following is an example where we used <ol type = "1">

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "1">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result –

1. Beetroot
2. Ginger
3. Potato
4. Radish

### Example

Following is an example where we used <ol type = "I">

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "I">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result –

1. Beetroot
2. Ginger
3. Potato
4. Radish

### Example

Following is an example where we used <ol type = "i">

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "i">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result −

### Example

1. Beetroot
2. Ginger
3. Potato
4. Radish

Following is an example where we used <ol type = "A" >

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "A">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result –

1. Beetroot
2. Ginger
3. Potato
4. Radish

### Example

Following is an example where we used <ol type = "a">

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "a">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result –

1. Beetroot
2. Ginger
3. Potato
4. Radish

## The start Attribute

You can use **start** attribute for <ol> tag to specify the starting point of numbering you need. Following are the possible options −

<ol type = "1" start = "4"> - Numerals starts with 4.

<ol type = "I" start = "4"> - Numerals starts with IV.

<ol type = "i" start = "4"> - Numerals starts with iv.

<ol type = "a" start = "4"> - Letters starts with d.

<ol type = "A" start = "4"> - Letters starts with D.

### Example

Following is an example where we used <ol type = "i" start = "4" >

<!DOCTYPE html>

<html>

<head>

<title>HTML Ordered List</title>

</head>

<body>

<ol type = "i" start = "4">

<li>Beetroot</li>

<li>Ginger</li>

<li>Potato</li>

<li>Radish</li>

</ol>

</body>

</html>

This will produce the following result −

1. Beetroot
2. Ginger
3. Potato
4. Radish

# HTML Table

HTML tables allow web developers to arrange data into rows and columns.

## HTML Table Tags

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<table>](https://www.w3schools.com/tags/tag_table.asp) | Defines a table |
| [<th>](https://www.w3schools.com/tags/tag_th.asp) | Defines a header cell in a table |
| [<tr>](https://www.w3schools.com/tags/tag_tr.asp) | Defines a row in a table |
| [<td>](https://www.w3schools.com/tags/tag_td.asp) | Defines a cell in a table |
| [<caption>](https://www.w3schools.com/tags/tag_caption.asp) | Defines a table caption |
| [<colgroup>](https://www.w3schools.com/tags/tag_colgroup.asp) | Specifies a group of one or more columns in a table for formatting |
| [<col>](https://www.w3schools.com/tags/tag_col.asp) | Specifies column properties for each column within a <colgroup> element |
| [<thead>](https://www.w3schools.com/tags/tag_thead.asp) | Groups the header content in a table |
| [<tbody>](https://www.w3schools.com/tags/tag_tbody.asp) | Groups the body content in a table |
| [<tfoot>](https://www.w3schools.com/tags/tag_tfoot.asp) | Groups the footer content in a table |

The HTML tables are created using the **<table>** tag in which the **<tr>** tag is used to create table rows and **<td>** tag is used to create data cells. The elements under <td> are regular and left aligned by default

## Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Tables</title>

</head>

<body>

<table border = "1">

<tr>

<td>Row 1, Column 1</td>

<td>Row 1, Column 2</td>

</tr>

<tr>

<td>Row 2, Column 1</td>

<td>Row 2, Column 2</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |
| --- | --- |
| Row 1, Column 1 | Row 1, Column 2 |
| Row 2, Column 1 | Row 2, Column 2 |

Here, the **border** is an attribute of <table> tag and it is used to put a border across all the cells. If you do not need a border, then you can use border = "0".

## Table Heading

Table heading can be defined using **<th>** tag. This tag will be put to replace <td> tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use <th> element in any row. Headings, which are defined in <th> tag are centered and bold by default.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Header</title>

</head>

<body>

<table border = "1">

<tr>

<th>Name</th>

<th>Salary</th>

</tr>

<tr>

<td>Ramesh Raman</td>

<td>5000</td>

</tr>

<tr>

<td>Shabbir Hussein</td>

<td>7000</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |
| --- | --- |
| **Name** | **Salary** |
| Ramesh Raman | 5000 |
| Shabbir Hussein | 7000 |

## Cellpadding and Cellspacing Attributes

There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The cellspacing attribute defines space between table cells, while cellpadding represents the distance between cell borders and the content within a cell.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Cellpadding</title>

</head>

<body>

<table border = "1" cellpadding = "5" cellspacing = "5">

<tr>

<th>Name</th>

<th>Salary</th>

</tr>

<tr>

<td>Ramesh Raman</td>

<td>5000</td>

</tr>

<tr>

<td>Shabbir Hussein</td>

<td>7000</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |
| --- | --- |
| **Name** | **Salary** |
| Ramesh Raman | 5000 |
| Shabbir Hussein | 7000 |

## Colspan and Rowspan Attributes

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Colspan/Rowspan</title>

</head>

<body>

<table border = "1">

<tr>

<th>Column 1</th>

<th>Column 2</th>

<th>Column 3</th>

</tr>

<tr>

<td rowspan = "2">Row 1 Cell 1</td>

<td>Row 1 Cell 2</td>

<td>Row 1 Cell 3</td>

</tr>

<tr>

<td>Row 2 Cell 2</td>

<td>Row 2 Cell 3</td>

</tr>

<tr>

<td colspan = "3">Row 3 Cell 1</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |  |
| --- | --- | --- |
| **Column 1** | **Column 2** | **Column 3** |
| Row 1 Cell 1 | Row 1 Cell 2 | Row 1 Cell 3 |
| Row 2 Cell 2 | Row 2 Cell 3 |
| Row 3 Cell 1 | | |

## Tables Backgrounds

You can set table background using one of the following two ways −

* **bgcolor** attribute − You can set background color for whole table or just for one cell.
* **background** attribute − You can set background image for whole table or just for one cell.

You can also set border color also using **bordercolor** attribute.

**Note** − The *bgcolor*, *background*, and *bordercolor* attributes deprecated in HTML5. Do not use these attributes.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Background</title>

</head>

<body>

<table border = "1" bordercolor = "green" bgcolor = "yellow">

<tr>

<th>Column 1</th>

<th>Column 2</th>

<th>Column 3</th>

</tr>

<tr>

<td rowspan = "2">Row 1 Cell 1</td>

<td>Row 1 Cell 2</td>

<td>Row 1 Cell 3</td>

</tr>

<tr>

<td>Row 2 Cell 2</td>

<td>Row 2 Cell 3</td>

</tr>

<tr>

<td colspan = "3">Row 3 Cell 1</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |  |
| --- | --- | --- |
| **Column 1** | **Column 2** | **Column 3** |
| Row 1 Cell 1 | Row 1 Cell 2 | Row 1 Cell 3 |
| Row 2 Cell 2 | Row 2 Cell 3 |
| Row 3 Cell 1 | | |

Here is an example of using **background** attribute. Here we will use an image available in /images directory.

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Background</title>

</head>

<body>

<table border = "1" bordercolor = "green" background = "/images/test.png">

<tr>

<th>Column 1</th>

<th>Column 2</th>

<th>Column 3</th>

</tr>

<tr>

<td rowspan = "2">Row 1 Cell 1</td>

<td>Row 1 Cell 2</td><td>Row 1 Cell 3</td>

</tr>

<tr>

<td>Row 2 Cell 2</td>

<td>Row 2 Cell 3</td>

</tr>

<tr>

<td colspan = "3">Row 3 Cell 1</td>

</tr>

</table>

</body>

</html>

This will produce the following result. Here background image did not apply to table's header.

|  |  |  |
| --- | --- | --- |
| **Column 1** | **Column 2** | **Column 3** |
| Row 1 Cell 1 | Row 1 Cell 2 | Row 1 Cell 3 |
| Row 2 Cell 2 | Row 2 Cell 3 |
| Row 3 Cell 1 | | |

## Table Height and Width

You can set a table width and height using **width** and **height** attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Width/Height</title>

</head>

<body>

<table border = "1" width = "400" height = "150">

<tr>

<td>Row 1, Column 1</td>

<td>Row 1, Column 2</td>

</tr>

<tr>

<td>Row 2, Column 1</td>

<td>Row 2, Column 2</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |
| --- | --- |
| Row 1, Column 1 | Row 1, Column 2 |
| Row 2, Column 1 | Row 2, Column 2 |

## Table Caption

The **caption** tag will serve as a title or explanation for the table and it shows up at the top of the table. This tag is deprecated in newer version of HTML/XHTML.

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table Caption</title>

</head>

<body>

<table border = "1" width = "100%">

<caption>This is the caption</caption>

<tr>

<td>row 1, column 1</td><td>row 1, columnn 2</td>

</tr>

<tr>

<td>row 2, column 1</td><td>row 2, columnn 2</td>

</tr>

</table>

</body>

</html>

This will produce the following result –

|  |  |
| --- | --- |
| This is the caption | |
| row 1, column 1 | row 1, column 2 |
| row 2, column 1 | row 2, column 2 |

## Table Header, Body, and Footer

Tables can be divided into three portions − a header, a body, and a foot. The head and foot are rather similar to headers and footers in a word-processed document that remain the same for every page, while the body is the main content holder of the table.

The three elements for separating the head, body, and foot of a table are −

* **<thead>** − to create a separate table header.
* **<tbody>** − to indicate the main body of the table.
* **<tfoot>** − to create a separate table footer.

A table may contain several <tbody> elements to indicate *different pages* or groups of data. But it is notable that <thead> and <tfoot> tags should appear before <tbody>

### Example

<!DOCTYPE html>

<html>

<head>

<title>HTML Table</title>

</head>

<body>

<table border = "1" width = "100%">

<thead>

<tr>

<td colspan = "4">This is the head of the table</td>

</tr>

</thead>

<tfoot>

<tr>

<td colspan = "4">This is the foot of the table</td>

</tr>

</tfoot>

<tbody>

<tr>

<td>Cell 1</td>

<td>Cell 2</td>

<td>Cell 3</td>

<td>Cell 4</td>

</tr>

</tbody>

</table>

</body>

</html>

This will produce the following result –

## Nested Tables

You can use one table inside another table. Not only tables you can use almost all the tags inside table data tag <td>.

### Example

Following is the example of using another table and other tags inside a table cell.

<!DOCTYPE html>

<html>

<head>

<title>HTML Table</title>

</head>

<body>

<table border = "1" width = "100%">

<tr>

<td>

<table border = "1" width = "100%">

<tr>

<th>Name</th>

<th>Salary</th>

</tr>

<tr>

<td>Ramesh Raman</td>

<td>5000</td>

</tr>

<tr>

<td>Shabbir Hussein</td>

<td>7000</td>

</tr>

</table>

</td>

</tr>

</table>

</body>

</html>

This will produce the following result −

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Name** | **Salary** | | Ramesh Raman | 5000 | | Shabbir Hussein | 7000 | |

# HTML Images

Images can improve the design and the appearance of a web page.

### Example

<img src="img\_girl.jpg" alt="Girl in a jacket">

[Try it Yourself »Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_girl)

## HTML Images Syntax

The HTML <img> tag is used to embed an image in a web page.

Images are not technically inserted into a web page; images are linked to web pages. The <img> tag creates a holding space for the referenced image.

The <img> tag is empty, it contains attributes only, and does not have a closing tag.

The <img> tag has two required attributes:

* src - Specifies the path to the image
* alt - Specifies an alternate text for the image

### Syntax

<img src="*url*" alt="alternatetext">

## The src Attribute

The required src attribute specifies the path (URL) to the image.

**Note:** When a web page loads, it is the browser, at that moment, that gets the image from a web server and inserts it into the page. Therefore, make sure that the image actually stays in the same spot in relation to the web page, otherwise your visitors will get a broken link icon. The broken link icon and the alt text are shown if the browser cannot find the image.

### Example

<img src="img\_chania.jpg" alt="Flowers in Chania">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_alt_chania)

## The alt Attribute

The required alt attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the src attribute, or if the user uses a screen reader).

The value of the alt attribute should describe the image:

### Example

<img src="img\_chania.jpg" alt="Flowers in Chania">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_alt_chania)

If a browser cannot find an image, it will display the value of the alt attribute:

### Example

<img src="wrongname.gif" alt="Flowers in Chania">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_wrongname)

**Tip:** A screen reader is a software program that reads the HTML code, and allows the user to "listen" to the content. Screen readers are useful for people who are visually impaired or learning disabled.

## Image Size - Width and Height

You can use the style attribute to specify the width and height of an image.

### Example

<img src="img\_girl.jpg" alt="Girl in a jacket" style="width:500px;height:600px;">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_size)

Alternatively, you can use the width and height attributes:

### Example

<img src="img\_girl.jpg" alt="Girl in a jacket" width="500" height="600">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_attributes)

The width and height attributes always define the width and height of the image in pixels.

**Note:** Always specify the width and height of an image. If width and height are not specified, the web page might flicker while the image loads.

## Width and Height, or Style?

The width, height, and style attributes are all valid in HTML.

However, we suggest using the style attribute. It prevents styles sheets from changing the size of images:

### Example

<!DOCTYPE html>  
<html>  
<head>  
<style>  
img {  
  width: 100%;  
}  
</style>  
</head>  
<body>  
  
<img src="html5.gif" alt="HTML5 Icon" width="128" height="128">  
  
<img src="html5.gif" alt="HTML5 Icon" style="width:128px;height:128px;">  
  
</body>  
</html>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_style)

## Images in Another Folder

If you have your images in a sub-folder, you must include the folder name in the src attribute:

### Example

<img src="/images/html5.gif" alt="HTML5 Icon" style="width:128px;height:128px;">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_folder)

## Images on Another Server/Website

Some web sites point to an image on another server.

To point to an image on another server, you must specify an absolute (full) URL in the src attribute:

### Example

<img src="https://www.w3schools.com/images/w3schools\_green.jpg" alt="W3Schools.com">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_w3schools)

**Notes on external images:** External images might be under copyright. If you do not get permission to use it, you may be in violation of copyright laws. In addition, you cannot control external images; they can suddenly be removed or changed.

## Animated Images

HTML allows animated GIFs:

### Example

<img src="programming.gif" alt="Computer Man" style="width:48px;height:48px;">

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_hackman)

## Image as a Link

To use an image as a link, put the <img> tag inside the <a> tag:

### Example

<a href="default.asp">  
  <img src="smiley.gif" alt="HTML tutorial" style="width:42px;height:42px;">  
</a>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_link)

## Image Floating

Use the CSS float property to let the image float to the right or to the left of a text:

### Example

<p><img src="smiley.gif" alt="Smiley face" style="float:right;width:42px;height:42px;">  
The image will float to the right of the text.</p>  
  
<p><img src="smiley.gif" alt="Smiley face" style="float:left;width:42px;height:42px;">  
The image will float to the left of the text.</p>

[Try it Yourself »](https://www.w3schools.com/htmL/tryit.asp?filename=tryhtml_images_float)

**Tip:** To learn more about CSS Float, read our [CSS Float Tutorial](https://www.w3schools.com/css/css_float.asp).

## Common Image Formats

Here are the most common image file types, which are supported in all browsers (Chrome, Edge, Firefox, Safari, Opera):

|  |  |  |
| --- | --- | --- |
| **Abbreviation** | **File Format** | **File Extension** |
| APNG | Animated Portable Network Graphics | .apng |
| GIF | Graphics Interchange Format | .gif |
| ICO | Microsoft Icon | .ico, .cur |
| JPEG | Joint Photographic Expert Group image | .jpg, .jpeg, .jfif, .pjpeg, .pjp |
| PNG | Portable Network Graphics | .png |
| SVG | Scalable Vector Graphics | .svg |

## Chapter Summary

* Use the HTML <img> element to define an image
* Use the HTML src attribute to define the URL of the image
* Use the HTML alt attribute to define an alternate text for an image, if it cannot be displayed
* Use the HTML width and height attributes or the CSS width and height properties to define the size of the image
* Use the CSS float property to let the image float to the left or to the right

**Note:** Loading large images takes time, and can slow down your web page. Use images carefully.

# HTML Links

A webpage can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as hyperlinks.

Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

## HTML Links - Hyperlinks

HTML links are hyperlinks.

You can click on a link and jump to another document.

When you move the mouse over a link, the mouse arrow will turn into a little hand.

**Note:** A link does not have to be text. A link can be an image or any other HTML element!

## HTML Links - Syntax

The HTML <a> tag defines a hyperlink. It has the following syntax:

<a href="*url*">*link text*</a>

The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

The link text is the part that will be visible to the reader.

Clicking on the link text, will send the reader to the specified URL address.

### Example

This example shows how to create a link to W3Schools.com:

<a href="https://www.w3schools.com/">Visit W3Schools.com!</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_w3schools)

By default, links will appear as follows in all browsers:

* An unvisited link is underlined and blue
* A visited link is underlined and purple
* An active link is underlined and red

**Tip:** Links can of course be styled with CSS, to get another look!

## HTML Links - The target Attribute

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

The target attribute specifies where to open the linked document.

The target attribute can have one of the following values:

* \_self - Default. Opens the document in the same window/tab as it was clicked
* \_blank - Opens the document in a new window or tab
* \_parent - Opens the document in the parent frame
* \_top - Opens the document in the full body of the window

### Example

Use target="\_blank" to open the linked document in a new browser window or tab:

<a href="https://www.w3schools.com/" target="\_blank">Visit W3Schools!</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_target)

## Absolute URLs vs. Relative URLs

Both examples above are using an **absolute URL** (a full web address) in the href attribute.

A local link (a link to a page within the same website) is specified with a **relative URL** (without the "https://www" part):

### Example

<h2>Absolute URLs</h2>  
<p><a href="https://www.w3.org/">W3C</a></p>  
<p><a href="https://www.google.com/">Google</a></p>  
  
<h2>Relative URLs</h2>  
<p><a href="html\_images.asp">HTML Images</a></p>  
<p><a href="/css/default.asp">CSS Tutorial</a></p>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links)

ADVERTISEMENT

## HTML Links - Use an Image as a Link

To use an image as a link, just put the <img> tag inside the <a> tag:

### Example

<a href="default.asp">  
<img src="smiley.gif" alt="HTML tutorial" style="width:42px;height:42px;">  
</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_image)

## Link to an Email Address

Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):

### Example

<a href="mailto:someone@example.com">Send email</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_email)

## Button as a Link

To use an HTML button as a link, you have to add some JavaScript code.

JavaScript allows you to specify what happens at certain events, such as a click of a button:

### Example

<button onclick="document.location='default.asp'">HTML Tutorial</button>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_button_element)

**Tip:** Learn more about JavaScript in our [JavaScript Tutorial](https://www.w3schools.com/js/default.asp).

## Link Titles

The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.

### Example

<a href="https://www.w3schools.com/html/" title="Go to W3Schools HTML section">Visit our HTML Tutorial</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_title)

## More on Absolute URLs and Relative URLs

### Example

Use a full URL to link to a web page:

<a href="https://www.w3schools.com/html/default.asp">HTML tutorial</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_external_url)

### Example

Link to a page located in the html folder on the current web site:

<a href="/html/default.asp">HTML tutorial</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_external_relative)

### Example

Link to a page located in the same folder as the current page:

<a href="default.asp">HTML tutorial</a>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_links_external)

You can read more about file paths in the chapter [HTML File Paths](https://www.w3schools.com/html/html_filepaths.asp).

## Chapter Summary

* Use the <a> element to define a link
* Use the href attribute to define the link address
* Use the target attribute to define where to open the linked document
* Use the <img> element (inside <a>) to use an image as a link
* Use the mailto: scheme inside the href attribute to create a link that opens the user's email program

## HTML Link Tags

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<a>](https://www.w3schools.com/tags/tag_a.asp) | Defines a hyperlink |

For a complete list of all available HTML tags, visit our [HTML Tag Reference](https://www.w3schools.com/tags/default.asp).

# HTML Entities

Some characters are reserved in HTML.

If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.

Character entities are used to display reserved characters in HTML.

A character entity looks like this:

&*entity\_name*;

OR

&#*entity\_number*;

To display a less than sign (<) we must write: **&lt;** or **&#60;**

**Advantage of using an entity name:** An entity name is easy to remember.  
**Disadvantage of using an entity name:** Browsers may not support all entity names, but the support for entity numbers is good.

## Non-breaking Space

A commonly used entity in HTML is the non-breaking space: **&nbsp;**

A non-breaking space is a space that will not break into a new line.

Two words separated by a non-breaking space will stick together (not break into a new line). This is handy when breaking the words might be disruptive.

Examples:

* § 10
* 10 km/h
* 10 PM

Another common use of the non-breaking space is to prevent browsers from truncating spaces in HTML pages.

If you write 10 spaces in your text, the browser will remove 9 of them. To add real spaces to your text, you can use the **&nbsp;** character entity.

**Tip:** The non-breaking hyphen ([&#8209;](https://www.w3schools.com/charsets/ref_utf_punctuation.asp)) is used to define a hyphen character (‑) that does not break into a new line.

## Some Useful HTML Character Entities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Result** | **Description** | **Entity Name** | **Entity Number** | **Try it** |
|  | non-breaking space | &nbsp; | &#160; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_nbsp) |
| < | less than | &lt; | &#60; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_lt) |
| > | greater than | &gt; | &#62; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_gt) |
| & | ampersand | &amp; | &#38; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_amp) |
| " | double quotation mark | &quot; | &#34; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_quot) |
| ' | single quotation mark (apostrophe) | &apos; | &#39; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_apos) |
| ¢ | cent | &cent; | &#162; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_cent) |
| £ | pound | &pound; | &#163; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_pound) |
| ¥ | yen | &yen; | &#165; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_yen) |
| € | euro | &euro; | &#8364; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_euro) |
| © | copyright | &copy; | &#169; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_copy) |
| ® | registered trademark | &reg; | &#174; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_ent_reg) |

**Note:** Entity names are case sensitive.

# HTML Symbol Entities

HTML entities were described in the previous chapter.

Many mathematical, technical, and currency symbols, are not present on a normal keyboard.

To add such symbols to an HTML page, you can use the entity name or the entity number (a decimal or a hexadecimal reference) for the symbol.

### Example

Display the euro sign, €, with an entity name, a decimal, and a hexadecimal value:

<p>I will display &euro;</p>  
<p>I will display &#8364;</p>  
<p>I will display &#x20AC;</p>

### Will display as:

I will display €  
I will display €  
I will display €

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_utf_euro)

## Some Mathematical Symbols Supported by HTML

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Char** | **Number** | **Entity** | **Description** | **Try it** |
| ∀ | &#8704; | &forall; | FOR ALL | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_forall) |
| ∂ | &#8706; | &part; | PARTIAL DIFFERENTIAL | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_part) |
| ∃ | &#8707; | &exist; | THERE EXISTS | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_exist) |
| ∅ | &#8709; | &empty; | EMPTY SETS | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_empty) |
| ∇ | &#8711; | &nabla; | NABLA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_nabla) |
| ∈ | &#8712; | &isin; | ELEMENT OF | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_isin) |
| ∉ | &#8713; | &notin; | NOT AN ELEMENT OF | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_notin) |
| ∋ | &#8715; | &ni; | CONTAINS AS MEMBER | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_ni) |
| ∏ | &#8719; | &prod; | N-ARY PRODUCT | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_prod) |
| ∑ | &#8721; | &sum; | N-ARY SUMMATION | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_sum) |

[Full Math Reference](https://www.w3schools.com/charsets/ref_utf_math.asp)

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## Some Greek Letters Supported by HTML

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Char** | **Number** | **Entity** | **Description** | **Try it** |
| Α | &#913; | &Alpha; | GREEK CAPITAL LETTER ALPHA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_alpha) |
| Β | &#914; | &Beta; | GREEK CAPITAL LETTER BETA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_beta) |
| Γ | &#915; | &Gamma; | GREEK CAPITAL LETTER GAMMA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_gamma) |
| Δ | &#916; | &Delta; | GREEK CAPITAL LETTER DELTA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_delta) |
| Ε | &#917; | &Epsilon; | GREEK CAPITAL LETTER EPSILON | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_epsilon) |
| Ζ | &#918; | &Zeta; | GREEK CAPITAL LETTER ZETA | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_zeta) |

[Full Greek Reference](https://www.w3schools.com/charsets/ref_utf_greek.asp)

## Some Other Entities Supported by HTML

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Char** | **Number** | **Entity** | **Description** | **Try it** |
| © | &#169; | &copy; | COPYRIGHT SIGN | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_copy) |
| ® | &#174; | &reg; | REGISTERED SIGN | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_reg) |
| € | &#8364; | &euro; | EURO SIGN | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_euro) |
| ™ | &#8482; | &trade; | TRADEMARK | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_trade) |
| ← | &#8592; | &larr; | LEFTWARDS ARROW | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_larr) |
| ↑ | &#8593; | &uarr; | UPWARDS ARROW | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_uarr) |
| → | &#8594; | &rarr; | RIGHTWARDS ARROW | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_rarr) |
| ↓ | &#8595; | &darr; | DOWNWARDS ARROW | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_darr) |
| ♠ | &#9824; | &spades; | BLACK SPADE SUIT | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_spades) |
| ♣ | &#9827; | &clubs; | BLACK CLUB SUIT | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_clubs) |
| ♥ | &#9829; | &hearts; | BLACK HEART SUIT | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_hearts) |
| ♦ | &#9830; | &diams; | BLACK DIAMOND SUIT | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_symbol_diams) |

[Full Currency Reference](https://www.w3schools.com/charsets/ref_utf_currency.asp)

[Full Arrows Reference](https://www.w3schools.com/charsets/ref_utf_arrows.asp)

[Full Symbols Reference](https://www.w3schools.com/charsets/ref_utf_symbols.asp)

# Emojis in HTML

Note :- Emojis symbols are not supporting in ms-word . use the [HTML Emojis (w3schools.com)](https://www.w3schools.com/html/html_emojis.asp) for more details.

Emojis are characters from the UTF-8 character set: 😄 😍 💗

## What are Emojis?

Emojis look like images, or icons, but they are not.

They are letters (characters) from the UTF-8 (Unicode) character set.

UTF-8 covers almost all of the characters and symbols in the world.

## The HTML charset Attribute

To display an HTML page correctly, a web browser must know the character set used in the page.

This is specified in the <meta> tag:

<meta charset="UTF-8">

If not specified, UTF-8 is the default character set in HTML.

## UTF-8 Characters

Many UTF-8 characters cannot be typed on a keyboard, but they can always be displayed using numbers (called entity numbers):

* A is 65
* B is 66
* C is 67

### Example

<!DOCTYPE html>  
<html>  
<head>  
<meta charset="UTF-8">  
</head>  
<body>  
  
<p>I will display A B C</p>  
<p>I will display &#65; &#66; &#67;</p>  
  
</body>  
</html>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emojis_utf8)

### Example Explained

The <meta charset="UTF-8"> element defines the character set.

The characters A, B, and C, are displayed by the numbers 65, 66, and 67.

To let the browser understand that you are displaying a character, you must start the entity number with &# and end it with ; (semicolon).

## Emoji Characters

Emojis are also characters from the UTF-8 alphabet:

* 😄 is 128516
* 😍 is 128525
* 💗 is 128151

### Example

<!DOCTYPE html>  
<html>  
<head>  
<meta charset="UTF-8">  
</head>  
<body>  
  
<h1>My First Emoji</h1>  
  
<p>&#128512;</p>  
  
</body>  
</html>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emojis)

Since Emojis are characters, they can be copied, displayed, and sized just like any other character in HTML.

### Example

<!DOCTYPE html>  
<html>  
<head>  
<meta charset="UTF-8">  
</head>  
<body>  
  
<h1>Sized Emojis</h1>  
  
<p style="font-size:48px">  
&#128512; &#128516; &#128525; &#128151;  
</p>  
  
</body>  
</html>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emojis_size)

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## Some Emoji Symbols in UTF-8

|  |  |  |
| --- | --- | --- |
| **Emoji** | **Value** | **Try it** |
| 🗻 | &#128507; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128507) |
| 🗼 | &#128508; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128508) |
| 🗽 | &#128509; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128509) |
| 🗾 | &#128510; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128510) |
| 🗿 | &#128511; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128511) |
| 😀 | &#128512; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128512) |
| 😁 | &#128513; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128513) |
| 😂 | &#128514; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128514) |
| 😃 | &#128515; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128515) |
| 😄 | &#128516; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128516) |
| 😅 | &#128517; | [Try it »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_emoji_128517) |

For a full list, please go to our [HTML Emoji Reference](https://www.w3schools.com/charsets/ref_emoji.asp).

# HTML Forms

Ok

An HTML form is used to collect user input.

<form> is a HTML element to collect input data with containing interactive controls. It provides facilities to input text, number, values, email, password, and control fields such as checkboxes, radio buttons, submit buttons, etc., or in other words, form is a container that contains input elements like text, email, number, radio buttons, checkboxes, submit buttons, etc. Forms are generally used when you want to collect data from the user. For example, a user wants to buy a bag online, so he/she has to first enter their shipping address in the address form and then add their payment details in the payment form to place an order.

Forms are created by placing input fields within paragraphs, preformatted text, lists and tables. This gives considerable flexibility in designing the layout of forms.

**Syntax:**

<form>

<!--form elements-->

</form>

### Example

Top of Form

First name:  
  
Last name:  
  
  


Bottom of Form

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_submit)

## The <form> Element

The HTML <form> element is used to create an HTML form for user input:

<form>  
.  
*form elements*  
.  
</form>

The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

All the different form elements are covered in this chapter: [HTML Form Elements](https://www.w3schools.com/html/html_form_elements.asp).

## The <input> Element

The HTML <input> element is the most used form element.

An <input> element can be displayed in many ways, depending on the type attribute.

Here are some examples:

|  |  |
| --- | --- |
| **Type** | **Description** |
| <input type="text"> | Displays a single-line text input field |
| <input type="radio"> | Displays a radio button (for selecting one of many choices) |
| <input type="checkbox"> | Displays a checkbox (for selecting zero or more of many choices) |
| <input type="submit"> | Displays a submit button (for submitting the form) |
| <input type="button"> | Displays a clickable button |

All the different input types are covered in this chapter: [HTML Input Types](https://www.w3schools.com/html/html_form_input_types.asp).

HTML Popular Input Types

Here are the different input types you can use in HTML:

* <input type="button">
* <input type="checkbox">
* <input type="color">
* <input type="date">
* <input type="datetime-local">
* <input type="email">
* <input type="file">
* <input type="hidden">
* <input type="image">
* <input type="month">
* <input type="number">
* <input type="password">
* <input type="radio">
* <input type="range">
* <input type="reset">
* <input type="search">
* <input type="submit">
* <input type="tel">
* <input type="text">
* <input type="time">
* <input type="url">
* <input type="week">

**Tip:** The default value of the type attribute is "text".

## Text Fields

The <input type="text"> defines a single-line input field for text input.

### Example

A form with input fields for text:

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

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_text)

This is how the HTML code above will be displayed in a browser:

Top of Form

First name:  
  
Last name:  


Bottom of Form

**Note:** The form itself is not visible. Also note that the default width of an input field is 20 characters.

## The <label> Element

Notice the use of the <label> element in the example above.

The <label> tag defines a label for many form elements.

The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focuses on the input element.

The <label> element also helps users who have difficulty clicking on very small regions (such as radio buttons or checkboxes) - because when the user clicks the text within the <label> element, it toggles the radio button/checkbox.

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

## Radio Buttons

The <input type="radio"> defines a radio button.

Radio buttons let a user select ONE of a limited number of choices.

### Example

A form with radio buttons:

<p>Choose your favorite Web language:</p>  
  
<form>  
  <input type="radio" id="html" name="fav\_language" value="HTML">  
  <label for="html">HTML</label><br>  
  <input type="radio" id="css" name="fav\_language" value="CSS">  
  <label for="css">CSS</label><br>  
  <input type="radio" id="javascript" name="fav\_language" value="JavaScript">  
  <label for="javascript">JavaScript</label>  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_radio)

This is how the HTML code above will be displayed in a browser:

Choose your favorite Web language:

 HTML  
 CSS  
 JavaScript

## Checkboxes

The <input type="checkbox"> defines a **checkbox**.

Checkboxes let a user select ZERO or MORE options of a limited number of choices.

### Example

A form with checkboxes:

<form>  
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">  
  <label for="vehicle1"> I have a bike</label><br>  
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">  
  <label for="vehicle2"> I have a car</label><br>  
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">  
  <label for="vehicle3"> I have a boat</label>  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_input_checkbox)

This is how the HTML code above will be displayed in a browser:

 I have a bike  
 I have a car  
 I have a boat

## Input Type Password

<input type="password"> defines a **password field**:

### Example

<form>  
  <label for="username">Username:</label><br>  
  <input type="text" id="username" name="username"><br>  
  <label for="pwd">Password:</label><br>  
  <input type="password" id="pwd" name="pwd">  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_input_password)

This is how the HTML code above will be displayed in a browser:

Username:  
  
Password:  


The characters in a password field are masked (shown as asterisks or circles).

## The Submit Button

The <input type="submit"> defines a button for submitting the form data to a form-handler.

The form-handler is typically a file on the server with a script for processing input data.

The form-handler is specified in the form's action attribute.

### Example

A form with a submit button:

<form action="/action\_page.php">  
  <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"><br><br>  
  <input type="submit" value="Submit">  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_submit)

This is how the HTML code above will be displayed in a browser:

Top of Form

First name:  
  
Last name:  
  
  


Bottom of Form

## The Name Attribute for <input>

Notice that each input field must have a name attribute to be submitted.

If the name attribute is omitted, the value of the input field will not be sent at all.

### Example

This example will not submit the value of the "First name" input field:

<form action="/action\_page.php">  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" value="John"><br><br>  
  <input type="submit" value="Submit">  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_submit_id)

# HTML Form Attributes

## The Action Attribute

The action attribute defines the action to be performed when the form is submitted.

Usually, the form data is sent to a file on the server when the user clicks on the submit button.

In the example below, the form data is sent to a file called "action\_page.php". This file contains a server-side script that handles the form data:

### Example

On submit, send form data to "action\_page.php":

<form action="/action\_page.php">  
  <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"><br><br>  
  <input type="submit" value="Submit">  
</form>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_attributes_submit)

**Tip:** If the action attribute is omitted, the action is set to the current page.

## The Target Attribute

The target attribute specifies where to display the response that is received after submitting the form.

The target attribute can have one of the following values:

|  |  |
| --- | --- |
| **Value** | **Description** |
| \_blank | The response is displayed in a new window or tab |
| \_self | The response is displayed in the current window |
| \_parent | The response is displayed in the parent frame |
| \_top | The response is displayed in the full body of the window |
| *framename* | The response is displayed in a named iframe |

The default value is \_self which means that the response will open in the current window.

### Example

Here, the submitted result will open in a new browser tab:

<form action="/action\_page.php" target="\_blank">

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_form_target)

### Create an HTML form to input the basic details of a student

In this example, we will take input such as Salutation, First Name, Last Name, Email, Phone, Gender, Date of Birth, and Address.

To create this form, we need to use the <legend> tag to defined caption, <select> tag for Salutation, <option> tag to define elements of Salutation, <input> tag for First Name, Last Name, Email, Phone, Date of Birth by changing <input> tag type attribute, <textarea> to input address, radio button for gender. After defining all these stuffs, we will use a <button> to submit this form data.

Program:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>GfG</title>

</head>

<body>

<form>

<fieldset>

<legend>Personal Details</legend>

<p>

<label>

Salutation

<br />

<select name="salutation">

<option>--None--</option>

<option>Mr.</option>

<option>Ms.</option>

<option>Mrs.</option>

<option>Dr.</option>

<option>Prof.</option>

</select>

</label>

</p>

<p>

<label>First name: <input name="firstName" /></label>

</p>

<p>

<label>Last name: <input name="lastName" /></label>

</p>

<p>

Gender :

<label><input type="radio" name="gender" value="male" /> Male</label>

<label><input type="radio" name="gender" value="female" /> Female</label>

</p>

<p>

<label>Email:<input type="email" name="email" /></label>

</p>

<p>

<label>Date of Birth:<input type="date" name="birthDate"></label>

</p>

<p>

<label>

Address :

<br />

<textarea name="address" cols="30" rows="3"></textarea>

</label>

</p>

<p>

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

</p>

</fieldset>

</form>

</body>

</html>

**Output:**



# HTML Skills 9 Projects

# HTML Assignment Projects