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="https://www.w3schools.com">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="w3schools.jpg" alt="W3Schools.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 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 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>

## 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 W3C **recommends** lowercase in HTML, and **demands** lowercase for stricter document types like XHTML.

At W3Schools we always use lowercase tag names.

HTML Tag Reference

W3Schools' 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 |

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

# **HTML Attributes**

HTML attributes provide additional information about HTML elements.

## HTML Attributes

* 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.w3schools.com">Visit W3Schools</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">

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.w3schools.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 specifies the width and height of the image (in pixels):

### **Example**

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

## 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 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">

### **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">

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>

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>

## 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, W3C **recommends** lowercase attributes in HTML, and **demands** lowercase attributes for stricter document types like XHTML.

At W3Schools we always use lowercase attribute names.

## We Suggest: Always Quote Attribute Values

The HTML standard does not require quotes around attribute values.

However, W3C **recommends** quotes in HTML, and **demands** quotes for stricter document types like XHTML.

### **Good:**

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

### **Bad:**

<a href=https://www.w3schools.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 W3Schools>

 At W3Schools 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
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# **HTML Attributes**

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

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### **Bad:**

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* 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 webpage.

### **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>

**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 Exercises

Formun Üstü

Use the correct HTML tag to add a heading with the text "London".

<p>London is the capital city of England. It is the most populous city in the United Kingdom, with a metropolitan area of over 13 million inhabitants.</p>

# **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>

## 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>

## 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>

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>

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>

## 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>

# **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

## 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>

### **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>

## 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>

## 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>

## 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>

## 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>

## 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

<body style="background-color:powderblue;">

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

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

<h1 style="color:blue;">This is a heading</h1>

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

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

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

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

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

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

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

# **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>

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

### **Example**

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

## 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>

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>

## HTML <small> Element

The HTML <small> element defines smaller text:

### **Example**

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

## 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>

## 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>

## 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>

## 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>

## 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>

<p><b>This text is bold</b></p>

<p><i>This text is italic</i></p>

<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

<p><b>This text is bold.</b></p>

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

<p><i>This text is italic.</i></p>

<p><em>This text is emphasized.</em></p>

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

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

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

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

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

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

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

## 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 Quotation and Citation Elements**

In this chapter we will go through the <blockquote>,<q>, <abbr>, <address>, <cite>, and <bdo> HTML elements.

### **Example**

Here is a quote from WWF's website:

For nearly 60 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by more than one million members in the United States and close to five million globally.

## HTML <blockquote> for Quotations

The HTML <blockquote> element defines a section that is quoted from another source.

Browsers usually indent <blockquote> elements.

### **Example**

<p>Here is a quote from WWF's website:</p>  
<blockquote cite="http://www.worldwildlife.org/who/index.html">  
For 50 years, WWF has been protecting the future of nature.  
The world's leading conservation organization,  
WWF works in 100 countries and is supported by  
1.2 million members in the United States and  
close to 5 million globally.  
</blockquote>

## HTML <q> for Short Quotations

The HTML <q> tag defines a short quotation.

Browsers normally insert quotation marks around the quotation.

### **Example**

<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>

## HTML <abbr> for Abbreviations

The HTML <abbr> tag defines an abbreviation or an acronym, like "HTML", "CSS", "Mr.", "Dr.", "ASAP", "ATM".

Marking abbreviations can give useful information to browsers, translation systems and search-engines.

**Tip:** Use the global title attribute to show the description for the abbreviation/acronym when you mouse over the element.

### **Example**

<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>

## HTML <address> for Contact Information

The HTML <address> tag defines the contact information for the author/owner of a document or an article.

The contact information can be an email address, URL, physical address, phone number, social media handle, etc.

The text in the <address> element usually renders in *italic,* and browsers will always add a line break before and after the <address> element.

### **Example**

<address>  
Written by John Doe.<br>  
Visit us at:<br>  
Example.com<br>  
Box 564, Disneyland<br>  
USA  
</address>

## HTML <cite> for Work Title

The HTML <cite> tag defines the title of a creative work (e.g. a book, a poem, a song, a movie, a painting, a sculpture, etc.).

**Note:** A person's name is not the title of a work.

The text in the <cite> element usually renders in *italic*.

### **Example**

<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>

## HTML <bdo> for Bi-Directional Override

BDO stands for Bi-Directional Override.

The HTML <bdo> tag is used to override the current text direction:

### **Example**

<bdo dir="rtl">This text will be written from right to left</bdo>

## HTML Quotation and Citation Elements

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<abbr>](https://www.w3schools.com/tags/tag_abbr.asp) | Defines an abbreviation or acronym |
| [<address>](https://www.w3schools.com/tags/tag_address.asp) | Defines contact information for the author/owner of a document |
| [<bdo>](https://www.w3schools.com/tags/tag_bdo.asp) | Defines the text direction |
| [<blockquote>](https://www.w3schools.com/tags/tag_blockquote.asp) | Defines a section that is quoted from another source |
| [<cite>](https://www.w3schools.com/tags/tag_cite.asp) | Defines the title of a work |
| [<q>](https://www.w3schools.com/tags/tag_q.asp) | Defines a short inline quotation |

<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>

<blockquote cite="http://www.worldwildlife.org/who/index.html">

For 50 years, WWF has been protecting the future of nature.

The world's leading conservation organization,

WWF works in 100 countries and is supported by

1.2 million members in the United States and

close to 5 million globally.

</blockquote>

<address>

Written by John Doe.<br>

Visit us at:<br>

Example.com<br>

Box 564, Disneyland<br>

USA

</address>

<img src="img\_the\_scream.jpg" width="220" height="277" alt="The Scream">

<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>

<bdo dir="rtl">This line will be written from right to left</bdo>

# **HTML Comments**

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

## HTML Comment Tags

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.

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 -->

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

### **Example**

<!-- Do not display this image at the moment  
<img border="0" src="pic\_trulli.jpg" alt="Trulli">  
-->

# **HTML Colors**

HTML colors are specified with predefined color names, or with RGB, HEX, HSL, RGBA, or HSLA values.

## Color Names

In HTML, a color can be specified by using a color name:

Tomato

Orange

DodgerBlue

MediumSeaGreen

Gray

SlateBlue

Violet

LightGray

HTML supports [140 standard color names](https://www.w3schools.com/colors/colors_names.asp).

## Background Color

You can set the background color for HTML elements:

Hello World

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

### **Example**

<h1 style="background-color:DodgerBlue;">Hello World</h1>  
<p style="background-color:Tomato;">Lorem ipsum...</p>

## Text Color

You can set the color of text:

### **Hello World**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

### **Example**

<h1 style="color:Tomato;">Hello World</h1>  
<p style="color:DodgerBlue;">Lorem ipsum...</p>  
<p style="color:MediumSeaGreen;">Ut wisi enim...</p>

## Border Color

You can set the color of borders:

## Hello World

## Hello World

## Hello World

### **Example**

<h1 style="border:2px solid Tomato;">Hello World</h1>  
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>  
<h1 style="border:2px solid Violet;">Hello World</h1>

## Color Values

In HTML, colors can also be specified using RGB values, HEX values, HSL values, RGBA values, and HSLA values.

The following three <div> elements have their background color set with RGB, HEX, and HSL values:

**rgb(255, 99, 71)**

**#ff6347**

**hsl(9, 100%, 64%)**

The following two <div> elements have their background color set with RGBA and HSLA values, which adds an Alpha channel to the color (here we have 50% transparency):

**Example**

<h1 style="background-color:rgb(255, 99, 71);">...</h1>  
<h1 style="background-color:#ff6347;">...</h1>  
<h1 style="background-color:hsl(9, 100%, 64%);">...</h1>  
  
<h1 style="background-color:rgba(255, 99, 71, 0.5);">...</h1>  
<h1 style="background-color:hsla(9, 100%, 64%, 0.5);">...</h1>

### **Learn more about Color Values**

You will learn more about [RGB](https://www.w3schools.com/html/html_colors_rgb.asp), [HEX](https://www.w3schools.com/html/html_colors_hex.asp) and [HSL](https://www.w3schools.com/html/html_colors_hsl.asp) in the next chapters.

# **HTML Styles - CSS**

CSS stands for Cascading Style Sheets.

CSS saves a lot of work. It can control the layout of multiple web pages all at once.

# **CSS = Styles and Colors**

Manipulate Text

Colors,  Boxes

## What is CSS?

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

**Tip:** The word **cascading** means that a style applied to a parent element will also apply to all children elements within the parent. So, if you set the color of the body text to "blue", all headings, paragraphs, and other text elements within the body will also get the same color (unless you specify something else)!

## Using CSS

CSS can be added to HTML documents in 3 ways:

* **Inline** - by using the style attribute inside HTML elements
* **Internal** - by using a <style> element in the <head> section
* **External** - by using a <link> element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files. However, in this tutorial we will use inline and internal styles, because this is easier to demonstrate, and easier for you to try it yourself.

## Inline CSS

An inline CSS is used to apply a unique style to a single HTML element.

An inline CSS uses the style attribute of an HTML element.

The following example sets the text color of the <h1> element to blue, and the text color of the <p> element to red:

### **Example**

<h1 style="color:blue;">A Blue Heading</h1>  
  
<p style="color:red;">A red paragraph.</p>

## Internal CSS

An internal CSS is used to define a style for a single HTML page.

An internal CSS is defined in the <head> section of an HTML page, within a <style> element.

The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page will be displayed with a "powderblue" background color:

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
<style>  
body {background-color: powderblue;}  
h1   {color: blue;}  
p    {color: red;}  
</style>  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

## External CSS

An external style sheet is used to define the style for many HTML pages.

To use an external style sheet, add a link to it in the <head> section of each HTML page:

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
  <link rel="stylesheet" href="styles.css">  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

The external style sheet can be written in any text editor. The file must not contain any HTML code, and must be saved with a .css extension.

Here is what the "styles.css" file looks like:

### **"styles.css":**

body {  
  background-color: powderblue;  
}  
h1 {  
  color: blue;  
}  
p {  
  color: red;  
}

**Tip:** With an external style sheet, you can change the look of an entire web site, by changing one file!

## CSS Colors, Fonts and Sizes

Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.

The CSS color property defines the text color to be used.

The CSS font-family property defines the font to be used.

The CSS font-size property defines the text size to be used.

### **Example**

Use of CSS color, font-family and font-size properties:

<!DOCTYPE html>  
<html>  
<head>  
<style>  
h1 {  
  color: blue;  
  font-family: verdana;  
  font-size: 300%;  
}  
p {  
  color: red;  
  font-family: courier;  
  font-size: 160%;  
}  
</style>  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

## CSS Border

The CSS border property defines a border around an HTML element.

**Tip:** You can define a border for nearly all HTML elements.

### **Example**

Use of CSS border property:

p {  
  border: 2px solid powderblue;  
}

<!DOCTYPE html>

<html>

<head>

<style>

p {

border: 2px solid powderblue;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

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

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

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

</body>

</html>

<head>

<style>

p {

border: 2px solid powderblue;

padding: 30px;

}

</style>

</head>

<head>

<style>

p {

border: 2px solid powderblue;

margin: 50px;

}

</style>

</head>

<head>

<link rel="stylesheet" href="https://www.w3schools.com/html/styles.css">

</head>

<head>

<link rel="stylesheet" href="/html/styles.css">

</head>

<head>

<link rel="stylesheet" href="styles.css">

</head>

**CSS Padding**

The CSS padding property defines a padding (space) between the text and the border.

### **Example**

Use of CSS border and padding properties:

p {  
  border: 2px solid powderblue;  
  padding: 30px;  
}

## CSS Margin

The CSS margin property defines a margin (space) outside the border.

### **Example**

Use of CSS border and margin properties:

p {  
  border: 2px solid powderblue;  
  margin: 50px;  
}

## Link to External CSS

External style sheets can be referenced with a full URL or with a path relative to the current web page.

### **Example**

This example uses a full URL to link to a style sheet:

<link rel="stylesheet" href="https://www.w3schools.com/html/styles.css">

### **Example**

This example links to a style sheet located in the html folder on the current web site:

<link rel="stylesheet" href="/html/styles.css">

### **Example**

This example links to a style sheet located in the same folder as the current page:

<link rel="stylesheet" href="styles.css">

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 HTML style attribute for inline styling
* Use the HTML <style> element to define internal CSS
* Use the HTML <link> element to refer to an external CSS file
* Use the HTML <head> element to store <style> and <link> elements
* Use the CSS color property for text colors
* Use the CSS font-family property for text fonts
* Use the CSS font-size property for text sizes
* Use the CSS border property for borders
* Use the CSS padding property for space inside the border
* Use the CSS margin property for space outside the border

**Tip:** You can learn much more about CSS in our [CSS Tutorial](https://www.w3schools.com/css/default.asp).

Formun Altı

## HTML Style Tags

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<style>](https://www.w3schools.com/tags/tag_style.asp) | Defines style information for an HTML document |
| [<link>](https://www.w3schools.com/tags/tag_link.asp) | Defines a link between a document and an external resource |

<h1 style="color:blue;">A Blue Heading</h1>

<p style="color:red;">A red paragraph.</p>

<head>

<style>

body {background-color: powderblue;}

h1 {color: blue;}

p {color: red;}

</style>

</head>

<head>

<link rel="stylesheet" href="styles.css">

</head>

# **HTML Links**

Links are found in nearly all web pages. Links allow users to click their way from page to page.

## 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>

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>

## 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>

## 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>

## 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>

## 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>

**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>

## 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>

### **Example**

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

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

### **Example**

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

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

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 |

<p><a href="https://www.w3schools.com/">Visit3Schools.com!</a></p>

<a href="https://www.w3schools.com/" target="\_blank">VisitW3Schools!</a>

<p>If target="\_blank", the link will open in a new browser window or tab.</p>

<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>

<p>The image below is a link. Try to click on it.</p>

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

<p>Click the button to go to the HTML tutorial.</p>

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

<p>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.</p>

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

<p>This example uses a full URL to link to a web page:</p>

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

<p>This example links to a page located in the html folder on the current web site:</p>

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

<p>This example links to a page located in the same folder as the current page:</p>

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

# **HTML Links - Different Colors**

An HTML link is displayed in a different color depending on whether it has been visited, is unvisited, or is active.

## HTML Link Colors

By default, a link will appear like this (in all browsers):

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

You can change the link state colors, by using CSS:

### **Example**

Here, an unvisited link will be green with no underline. A visited link will be pink with no underline. An active link will be yellow and underlined. In addition, when mousing over a link (a:hover) it will become red and underlined:

<style>  
a:link {  
  color: green;  
  background-color: transparent;  
  text-decoration: none;  
}  
  
a:visited {  
  color: pink;  
  background-color: transparent;  
  text-decoration: none;  
}  
  
a:hover {  
  color: red;  
  background-color: transparent;  
  text-decoration: underline;  
}  
  
a:active {  
  color: yellow;  
  background-color: transparent;  
  text-decoration: underline;  
}  
</style>

## Link Buttons

A link can also be styled as a button, by using CSS:

### **Example**

<style>  
a:link, a:visited {  
  background-color: #f44336;  
  color: white;  
  padding: 15px 25px;  
  text-align: center;  
  text-decoration: none;  
  display: inline-block;  
}  
  
a:hover, a:active {  
  background-color: red;  
}  
</style>

# **HTML Links - Create Bookmarks**

HTML links can be used to create bookmarks, so that readers can jump to specific parts of a web page.

## Create a Bookmark in HTML

Bookmarks can be useful if a web page is very long.

To create a bookmark - first create the bookmark, then add a link to it.

When the link is clicked, the page will scroll down or up to the location with the bookmark.

## Example

First, use the id attribute to create a bookmark:

<h2 id="C4">Chapter 4</h2>

Then, add a link to the bookmark ("Jump to Chapter 4"), from within the same page:

### **Example**

<a href="#C4">Jump to Chapter 4</a>

You can also add a link to a bookmark on another page:

<a href="html\_demo.html#C4">Jump to Chapter 4</a>

## Chapter Summary

* Use the id attribute (id="value") to define bookmarks in a page
* Use the href attribute (href="#value") to link to the bookmark

<p><a href="#C4">Jump to Chapter 4</a></p>

<p><a href="#C10">Jump to Chapter 10</a></p>

# **HTML Image Maps**

With HTML image maps, you can create clickable areas on an image.

## Image Maps

The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.

Try to click on the computer, phone, or the cup of coffee in the image below:



### **Example**

Here is the HTML source code for the image map above:

<img src="workplace.jpg" alt="Workplace" usemap="#workmap">  
<map name="workmap">  
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">  
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">  
  <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm">  
</map>

## How Does it Work?

The idea behind an image map is that you should be able to perform different actions depending on where in the image you click.

To create an image map you need an image, and some HTML code that describes the clickable areas.

## The Image

The image is inserted using the <img> tag. The only difference from other images is that you must add a usemap attribute:

<img src="workplace.jpg" alt="Workplace" usemap="#workmap">

The usemap value starts with a hash tag # followed by the name of the image map, and is used to create a relationship between the image and the image map.

**Tip:** You can use any image as an image map!

## Create Image Map

Then, add a <map> element.

The <map> element is used to create an image map, and is linked to the image by using the required name attribute:

<map name="workmap">

The name attribute must have the same value as the <img>'s usemap attribute .

## The Areas

Then, add the clickable areas.

A clickable area is defined using an <area> element.

### **Shape**

You must define the shape of the clickable area, and you can choose one of these values:

* rect - defines a rectangular region
* circle - defines a circular region
* poly - defines a polygonal region
* default - defines the entire region

You must also define some coordinates to be able to place the clickable area onto the image.

### **Shape="rect"**

The coordinates for shape="rect" come in pairs, one for the x-axis and one for the y-axis.

So, the coordinates 34,44 is located 34 pixels from the left margin and 44 pixels from the top:



The coordinates 270,350 is located 270 pixels from the left margin and 350 pixels from the top:



Now we have enough data to create a clickable rectangular area:

### **Example**

<area shape="rect" coords="34, 44, 270, 350" href="computer.htm">

This is the area that becomes clickable and will send the user to the page "computer.htm":



### **Shape="circle"**

To add a circle area, first locate the coordinates of the center of the circle:

337,300



Then specify the radius of the circle:

44 pixels



Now you have enough data to create a clickable circular area:

### **Example**

<area shape="circle" coords="337, 300, 44" href="coffee.htm">

This is the area that becomes clickable and will send the user to the page "coffee.htm":



### **Shape="poly"**

The shape="poly" contains several coordinate points, which creates a shape formed with straight lines (a polygon).

This can be used to create any shape.

Like maybe a croissant shape!

How can we make the croissant in the image below become a clickable link?



We have to find the x and y coordinates for all edges of the croissant:



The coordinates come in pairs, one for the x-axis and one for the y-axis:

### **Example**

<area shape="poly" coords="140,121,181,116,204,160,204,222,191,270,140,329,85,355,58,352,37,322,40,259,103,161,128,147" href="croissant.htm">

This is the area that becomes clickable and will send the user to the page "croissant.htm":



## Image Map and JavaScript

A clickable area can also trigger a JavaScript function.

Add a click event to the <area> element to execute a JavaScript function:

### **Example**

Here, we use the onclick attribute to execute a JavaScript function when the area is clicked:

<map name="workmap">  
  <area shape="circle" coords="337,300,44" href="coffee.htm" onclick="myFunction()">  
</map>  
  
<script>  
function myFunction() {  
  alert("You clicked the coffee cup!");  
}  
</script>

## Chapter Summary

* Use the HTML <map> element to define an image map
* Use the HTML <area> element to define the clickable areas in the image map
* Use the HTML usemap attribute of the <img> element to point to an image map

## HTML Image Tags

|  |  |
| --- | --- |
| **Tag** | **Description** |
| [<img>](https://www.w3schools.com/tags/tag_img.asp) | Defines an image |
| [<map>](https://www.w3schools.com/tags/tag_map.asp) | Defines an image map |
| [<area>](https://www.w3schools.com/tags/tag_area.asp) | Defines a clickable area inside an image map |
| [<picture>](https://www.w3schools.com/tags/tag_picture.asp) | Defines a container for multiple image resources |

<!DOCTYPE html>

<html>

<body>

<h2>Image Maps</h2>

<p>Click on the computer, the phone, or the cup of coffee to go to a new page and read more about the topic:</p>

<img src="workplace.jpg" alt="Workplace" usemap="#workmap" width="400" height="379">

<map name="workmap">

<area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">

<area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">

<area shape="circle" coords="337,300,44" alt="Cup of coffee" href="coffee.htm">

</map>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Image Maps</h2>

<p>Click on the computer to go to a new page and read more about the topic:</p>

<img src="workplace.jpg" alt="Workplace" usemap="#workmap" width="400" height="379">

<map name="workmap">

<area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">

</map>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Image Maps</h2>

<p>Click on the cup of coffee to go to a new page and read more about the topic:</p>

<img src="workplace.jpg" alt="Workplace" usemap="#workmap" width="400" height="379">

<map name="workmap">

<area shape="circle" coords="337,300,44" alt="Cup of coffee" href="coffee.htm">

</map>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Image Maps</h2>

<p>Click on the croissant to go to a new page and read more about the topic:</p>

<img src="frenchfood.jpg" alt="French Food" usemap="#foodmap" width="450" height="675">

<map name="foodmap">

<area shape="poly" coords="140,121,181,116,204,160,204,222,191,270,140,329,85,355,58,352,37,322,40,259,103,161,128,147" alt="Croissant" href="croissant.htm">

</map>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Image Maps</h2>

<p>Click on the cup of coffee to execute a JavaScript function:</p>

<img src="workplace.jpg" alt="Workplace" usemap="#workmap" width="400" height="379">

<map name="workmap">

<area shape="circle" coords="337,300,44" href="coffee.htm" onclick="myFunction()">

</map>

<script>

function myFunction() {

alert("You clicked the coffee cup!");

}

</script>

</body>

</html>

# **HTML Background Images**

A background image can be specified for almost any HTML element.

## Background Image on a HTML element

To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property:

### **Example**

Add a background image on a HTML element:

<div style="background-image: url('img\_girl.jpg');">

You can also specify the background image in the <style> element, in the <head> section:

### **Example**

Specify the background image in the <style> element:

<style>  
div {  
  background-image: url('img\_girl.jpg');  
}  
</style>

## Background Image on a Page

If you want the entire page to have a background image, you must specify the background image on the <body> element:

### **Example**

Add a background image for the entire page:

<style>  
body {  
  background-image: url('img\_girl.jpg');  
}  
</style>

## Background Repeat

If the background image is smaller than the element, the image will repeat itself, horizontally and vertically, until it reaches the end of the element:

### **Example**

<style>  
body {  
  background-image: url('example\_img\_girl.jpg');  
}  
</style>

To avoid the background image from repeating itself, set the background-repeat property to no-repeat.

### **Example**

<style>  
body {  
  background-image: url('example\_img\_girl.jpg');  
  background-repeat: no-repeat;  
}  
</style>

## Background Cover

If you want the background image to cover the entire element, you can set the background-size property to cover.

Also, to make sure the entire element is always covered, set the background-attachment property to fixed:

This way, the background image will cover the entire element, with no stretching (the image will keep its original proportions):

### **Example**

<style>  
body {  
  background-image: url('img\_girl.jpg');  
  background-repeat: no-repeat;  
  background-attachment: fixed;  
  background-size: cover;  
}  
</style>

## Background Stretch

If you want the background image to stretch to fit the entire element, you can set the background-size property to 100% 100%:

Try resizing the browser window, and you will see that the image will stretch, but always cover the entire element.

### **Example**

<style>  
body {  
  background-image: url('img\_girl.jpg');  
  background-repeat: no-repeat;  
  background-attachment: fixed;  
  background-size: 100% 100%;  
}  
</style>

<!DOCTYPE html>

<html>

<body>

<h2>Background Image</h2>

<p>A background image for a div element:</p>

<div style="background-image: url('img\_girl.jpg');">

You can specify background images<br>

for any visible HTML element.<br>

In this example, the background image<br>

is specified for a div element.<br>

By default, the background-image<br>

will repeat itself in the direction(s)<br>

where it is smaller than the element<br>

where it is specified. (Try resizing the<br>

browser window to see how the<br>

background image behaves.

</div>

<p>A background image for a p element:</p>

<p style="background-image: url('img\_girl.jpg');">

You can specify background images<br>

for any visible HTML element.<br>

In this example, the background image<br>

is specified for a p element.<br>

By default, the background-image<br>

will repeat itself in the direction(s)<br>

where it is smaller than the element<br>

where it is specified. (Try resizing the<br>

browser window to see how the<br>

background image behaves.

</p>

</body>

</html>

# **HTML Tables**

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

### **Example**

|  |  |  |
| --- | --- | --- |
| **Company** | **Contact** | **Country** |
| Alfreds Futterkiste | Maria Anders | Germany |
| Centro comercial Moctezuma | Francisco Chang | Mexico |
| Ernst Handel | Roland Mendel | Austria |
| Island Trading | Helen Bennett | UK |
| Laughing Bacchus Winecellars | Yoshi Tannamuri | Canada |
| Magazzini Alimentari Riuniti | Giovanni Rovelli | Italy |

## Define an HTML Table

A table in HTML consists of table cells inside rows and columns

### **Example**

A simple HTML table:

<table>  
  <tr>  
    <th>Company</th>  
    <th>Contact</th>  
    <th>Country</th>  
  </tr>  
  <tr>  
    <td>Alfreds Futterkiste</td>  
    <td>Maria Anders</td>  
    <td>Germany</td>  
  </tr>  
  <tr>  
    <td>Centro comercial Moctezuma</td>  
    <td>Francisco Chang</td>  
    <td>Mexico</td>  
  </tr>  
</table>

## Table Cells

Each table cell is defined by a <td> and a </td> tag.

td stands for table data.

Everything between <td> and </td> are the content of the table cell.

### **Example**

<table>  
  <tr>  
    <td>Emil</td>  
    <td>Tobias</td>  
    <td>Linus</td>  
  </tr>  
</table>

**Note:** table data elements are the data containers of the table.  
They can contain all sorts of HTML elements; text, images, lists, other tables, etc.

## Table Rows

Each table row starts with a <tr> and end with a </tr> tag.

tr stands for table row.

### **Example**

<table>  
  <tr>  
    <td>Emil</td>  
    <td>Tobias</td>  
    <td>Linus</td>  
  </tr>  
  <tr>  
    <td>16</td>  
    <td>14</td>  
    <td>10</td>  
  </tr>  
</table>

You can have as many rows as you like in a table, just make sure that the number of cells are the same in each row.

**Note:** There are times where a row can have less or more cells than another. You will learn about that in a later chapter.

## Table Headers

Sometimes you want your cells to be headers, in those cases use the <th> tag instead of the <td> tag:

### **Example**

Let the first row be table headers:

<table>  
  <tr>  
    <th>Person 1</th>  
    <th>Person 2</th>  
    <th>Person 3</th>  
  </tr>  
  <tr>  
    <td>Emil</td>  
    <td>Tobias</td>  
    <td>Linus</td>  
  </tr>  
  <tr>  
    <td>16</td>  
    <td>14</td>  
    <td>10</td>  
  </tr>  
</table>

[Try it Yourself »](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_table6)

By default, the text in <th> elements are bold and centered, but you can change that with CSS.

Formun Üstü

Formun Altı

## 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 |