Introduction to HTML

What is an HTML File?

- HTML stands for Hyper Text Markup Language
- An HTML file is a text file containing small markup tags
- The markup tags tell the Web browser how to display the page
- An HTML file must have an htm or html file extension
- An HTML file can be created using a simple text editor

Do You Want to Try It?

If you are running Windows, start Notepad.
If you are on a Mac, start SimpleText.
In OSX start Text Edit and change the following preferences: Open the "Format" menu and select "Plain text" instead of "Rich text". Then open the "Preferences" window under the "Text Edit" menu and select "Ignore rich text commands in HTML files". Your HTML code will probably not work if you do not change the preferences above!
Type in the following text:

```
<html>
<head>
<title>Title of page</title>
</head>
<body>
This is my first homepage. <b>This text is bold</b>
</body>
</html>
```

Save the file as "mypage.htm".
Start your Internet browser. Select "Open" (or "Open Page") in the File menu of your browser. A dialog box will appear. Select "Browse" (or "Choose File") and locate the HTML file you just created - "mypage.htm" - select it and click "Open". Now you should see an address in the dialog box, for example "C:\MyDocuments\mypage.htm". Click OK, and the browser will display the page.

Example Explained

The first tag in your HTML document is <html>. This tag tells your browser that this is the start of an HTML document. The last tag in your document is </html>. This tag tells your browser that this is the end of the HTML document.
The text between the <head> tag and the </head> tag is header information. Header information is not displayed in the browser window.
The text between the <title> tags is the title of your document. The title is displayed in your browser's caption.
The text between the <body> tags is the text that will be displayed in your browser.
The text between the and tags will be displayed in a bold font.

HTM or HTML Extension?

When you save an HTML file, you can use either the .htm or the .html extension. We have used .htm in our examples. It might be a bad habit inherited from the past when some of the commonly used software only allowed three letter extensions.
With newer software we think it will be perfectly safe to use .html.

Note on HTML Editors:

You can easily edit HTML files using a WYSIWYG (what you see is what you get) editor like FrontPage or Dream weaver, instead of writing your markup tags in a plain text file.
However, if you want to be a skillful Web developer, we strongly recommend that you use a plain text editor to learn your primer HTML.

Frequently Asked Questions

Q: After I have edited an HTML file, I cannot view the result in my browser. Why?
A: Make sure that you have saved the file with a proper name and extension like "c:\mypage.htm". Also make sure that you use the same name when you open the file in your browser.
Q: I have edited an HTML file, but the changes don't show in the browser. Why?
A: A browser caches pages so it doesn't have to read the same page twice. When you have modified a page, the browser doesn't know that. Use the browser's refresh/reload button to force the browser to reload the page.
Q: What browser should I use?
A: You can do all the training with all of the well-known browsers, like Internet Explorer, Firefox, Netscape, or Opera. However, some of the examples in our advanced classes require the latest versions of the browsers.
Q: Does my computer have to run Windows? What about a Mac?
A: You can do all your training on a non-Windows computer like a Mac.

HTML Elements

HTML Tags

- HTML tags are used to mark-up HTML elements
- HTML tags are surrounded by the two characters < and >
- The surrounding characters are called angle brackets
- HTML tags normally come in pairs like and
- The first tag in a pair is the start tag, the second tag is the end tag
- The text between the start and end tags is the element content
- HTML tags are not case sensitive, means the same as <B>

HTML Elements

Remember the HTML example from the previous page:

```
<html>
<head>
<title>Title of page</title>
</head>
<body>
This is my first homepage. <b>This text is bold</b>
</body>
</html>
```

This is an HTML element:

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

The HTML element starts with a start tag:
The content of the HTML element is: This text is bold
The HTML element ends with an end tag:
The purpose of the tag is to define an HTML element that should be displayed as bold.
This is also an HTML element:

```
<body>
This is my first homepage. <b>This text is bold</b>
</body>
```

This HTML element starts with the start tag <body>, and ends with the end tag </body>.
The purpose of the <body> tag is to define the HTML element that contains the body of the HTML document.

Why do We Use Lowercase Tags?

We have just said that HTML tags are not case sensitive: <B> means the same as . If you surf the Web, you will notice that plenty of web sites use uppercase HTML tags in their source code. We always use lowercase tags. Why?

If you want to follow the latest web standards, you should always use lowercase tags. The World Wide Web Consortium (W3C) recommends lowercase tags in their HTML 4 recommendation, and XHTML (the next generation HTML) demands lowercase tags.

Tag Attributes

Tags can have attributes. Attributes provide additional information to an HTML element.
The following tag defines an HTML table: <table>. With an added border attribute, you can tell the browser that the table should have no borders: <table border="0">
Attributes always come in name/value pairs like this: name="value".
Attributes are always specified in the start tag of an HTML element.
Attributes and attribute values are also case-insensitive. However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation, and XHTML demands lowercase attributes/attribute values.

Always Quote Attribute Values

Attribute values should always be enclosed in quotes. Double style quotes are the most common, but single style quotes are also allowed.
In some rare situations, like when the attribute value itself contains quotes, it is necessary to use single quotes: name='John "Shotgun" Nelson'

Basic HTML Tags

The most important tags in HTML are tags that define headings, paragraphs and line breaks.

The best way to learn HTML is to work with examples. We have created a very nice HTML editor for you. With this editor, you can edit the HTML source code if you like, and click on a test button to view the result.

Try it Yourself – Examples

A very simple HTML document

```
<html>
<body>
The content of the body element is displayed in your
browser.
</body>
</html>
```

The content of the body element is displayed in your browser.

This example is a very simple HTML document, with only a minimum of HTML tags. It demonstrates how the text inside a body element is displayed in the browser.

Simple paragraphs

```
<html>
<body>

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

<p>Paragraph elements are defined by the p tag.</p>

</body>
</html>
```

This is a paragraph.

This is a paragraph.

This is a paragraph.

Paragraph elements are defined by the p tag.

This example demonstrates how the text inside paragraph elements is displayed in the browser.
(You can find more examples at the bottom of this page)

Headings

Headings are defined with the <h1> to <h6> tags. <h1> defines the largest heading. <h6> defines the smallest heading.

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
<h4>This is a heading</h4>
<h5>This is a heading</h5>
<h6>This is a heading</h6>
```

HTML automatically adds an extra blank line before and after a heading.

Paragraphs

Paragraphs are defined with the tag.

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

HTML automatically adds an extra blank line before and after a paragraph.

Line Breaks

The <br> tag is used when you want to end a line, but don't want to start a new paragraph. The <br> tag forces a line break wherever you place it.

```
<p>This <br> is a para<br>graph with line breaks</p>
```

The <br> tag is an empty tag. It has no closing tag.

Comments in HTML

The comment tag is used to insert a comment in the HTML source code. A comment will be ignored by the browser. You can use comments to explain your code, which can help you when you edit the source code at a later date.

```
<!-- This is a comment -->
```

Note that you need an exclamation point after the opening bracket, but not before the closing bracket.

Basic Notes - Useful Tips

When you write HTML text, you can never be sure how the text is displayed in another browser. Some people have large computer displays, some have small. The text will be reformatted every time the user resizes his window. Never try to format the text in your editor by adding empty lines and spaces to the text.
HTML will truncate the spaces in your text. Any number of spaces count as one. Some extra information: In HTML a new line counts as one space.
Using empty paragraphs to insert blank lines is a bad habit. Use the <br> tag instead. (But don't use the <br> tag to create lists. Wait until you have learned about HTML lists.)
You might have noticed that paragraphs can be written without the closing tag . Don't rely on it. The next version of HTML will not allow you to skip ANY closing tags.
HTML automatically adds an extra blank line before and after some elements, like before and after a paragraph, and before and after a heading.
We use a horizontal rule (the <hr> tag), to separate the sections in our tutorials.

More paragraphs

```
<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>

<p>
The number of lines in a paragraph depends on the size of
your browser window. If you resize the browser window, the
number of lines in this paragraph will change.
</p>
</body></html>
```

This paragraph contains a lot of spaces in the source code, but the browser ignores it.

The number of lines in a paragraph depends on the size of your browser window. If you resize the browser window, the number of lines in this paragraph will change.

This example demonstrates some of the default behaviors of paragraph elements.

Line breaks

```
<html>
<body>

<p>
To break<br>lines<br>in a<br>paragraph,<br>use the br tag.
</p>

</body>
</html>
```

To break
lines
in a
paragraph,
use the br tag.

This example demonstrates the use of line breaks in an HTML document.

Poem problems

```
<html>
<body>

<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>

<p>Note that your browser simply ignores your formatting!</p>

</body>
</html>
```

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.

Note that your browser simply ignores your formatting!

This example demonstrates some problems with HTML formatting.

Headings

```
<html>
<body>

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

<p>Use heading tags only for headings. Don't use them just to
make something bold. Use other tags for that.</p>

</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

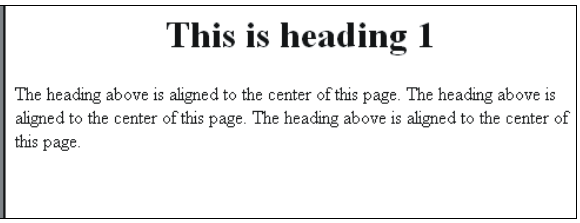
This is heading 6

Use heading tags only for headings. Don't use them just to make something bold. Use other tags for that.

This example demonstrates the tags that display headings in an HTML document.

Center aligned heading

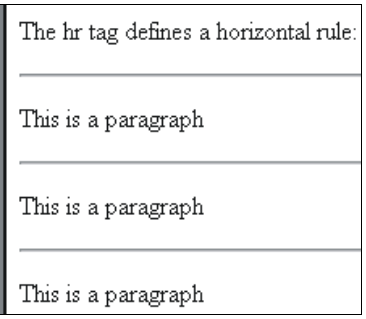
```
<html>
<body>

<h1 align="center">This is heading 1</h1>

<p>The heading above is aligned to the center of this page.
The heading above is aligned to the center of this page. The
heading above is aligned to the center of this page.</p>

</body>
</html>
```



This example demonstrates a center aligned heading.

Horizontal rule

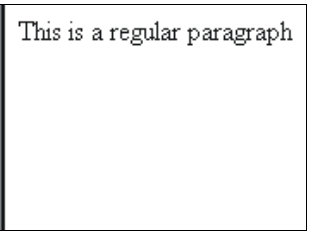
```
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
</body>
</html>
```



This example demonstrates how to insert a horizontal rule.

Hidden comments

```
<html>
<body>

<!--This comment will not be displayed-->
<p>This is a regular paragraph</p>

</body>
</html>
```



This example demonstrates how to insert a hidden comment in the HTML source code.

Background color

```
<html>
<body bgcolor="yellow">
<h2>Look: Colored Background!</h2>
</body>
</html>
```

This example demonstrates adding a background-color to an HTML page.

Basic HTML Tags

Description

<html> Defines an HTML document

This element tells a browser that this is an HTML document.

Differences Between HTML and XHTML

The xmlns attribute is required in XHTML but not in HTML. However, the validator on w3.org does not complain when this attribute is missing from the <html> tag in an XHTML document. This is because

"xmlns=http://www.w3.org/1999/xhtml" is a fixed value and will be added to the <html> tag even if you do not include it.

Example

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
</head>
<body>
...
...
...
</body>
</html>
```

<body> Defines the document's body

Example

```
<html>
<head>
</head>
<body>
The content of the document.....
</body>
</html>
```

<h1> to <h6> Defines header 1 to header 6

Source	Output
<h1>This is header 1</h1> <h2>This is header 2</h2> <h3>This is header 3</h3> <h4>This is header 4</h4> <h5>This is header 5</h5> <h6>This is header 6</h6>	**This is header 1** This is header 2 **This is header 3** This is header 4 *This is header 5* This is header 6

 Defines a paragraph

Source	Output
This is some text in a very short paragraph	This is some text in a very short paragraph

 Inserts a single line break

Differences Between HTML and XHTML

In HTML the <br> tag has no end tag.
In XHTML the <br> tag must be properly closed, like this: <br />.

Source	Output
This text contains a line break	This text contains a line break

<hr> Defines a horizontal rule

Differences Between HTML and XHTML

In HTML the <hr> tag has no end tag.
In XHTML the <hr> tag must be properly closed.

Source	Output
This is some text <hr /> This is some text	This is some text --- This is some text

<!--> Defines a comment

Definition and Usage

The comment tag is used to insert a comment in the source code. A comment will be ignored by the browser. You can use comments to explain your code, which can help you when you edit the source code at a later date.

You can also store program-specific information inside comments. In this case they will not be visible for the user, but they are still available to the program. A good practice is to comment the text inside the script and style elements to prevent older browsers, that do not support scripting or styles, from showing it as plain text.

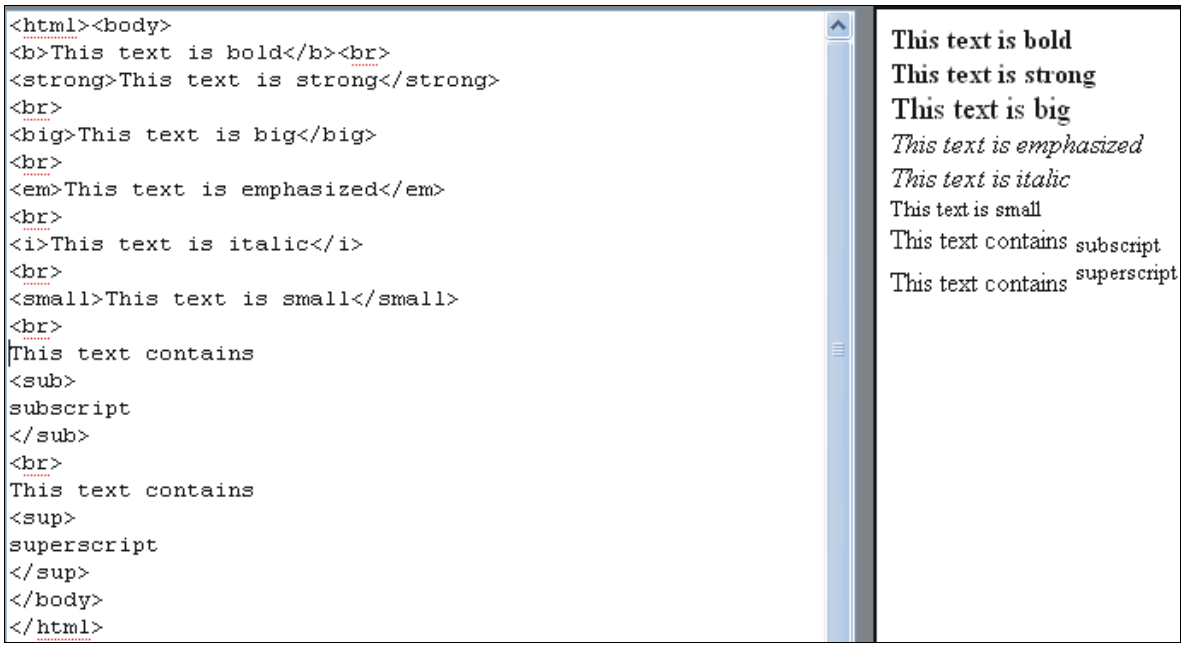
Source	Output
<!--This text is a comment--> This is a regular paragraph	This is a regular paragraph

HTML Text Formatting

HTML defines a lot of elements for formatting output, like bold or italic text.
Below are a lot of examples that you can try out yourself

Examples

Text formatting



This example demonstrates how you can format text in an HTML document.

Preformatted text

```
<html>
<body>

<pre>
This is
preformatted text.
It preserves      both spaces
and line breaks.
</pre>

<p>The pre tag is good for displaying computer code:</p>

<pre>
for i = 1 to 10
     print i
next i
</pre>

</body>
</html>
```

```
This is
preformatted text.
It preserves      both spaces
and line breaks.

The pre tag is good for displaying computer code:

for i = 1 to 10
     print i
next i
```

This example demonstrates how you can control the line breaks and spaces with the pre tag.

"Computer output" tags

```
<html>
<body>

<code>Computer code</code>
<br>
<kbd>Keyboard input</kbd>
<br>
<tt>Teletype text</tt>
<br>
<samp>Sample text</samp>
<br>
<var>Computer variable</var>
<br>

<p>
<b>Note:</b> These tags are often used to display
computer/programming code.
</p>

</body>
</html>
```

Computer code
Keyboard input
Teletype text
Sample text
Computer variable

Note: These tags are often used to display computer/programming code.

This example demonstrates how different "computer output" tags will be displayed.

Address

```
<address>
Donald Duck<br>
BOX 555<br>
Disneyland<br>
USA
</address>

</body>
</html>
```

BOX 555
Disneyland
USA

This example demonstrates how to write an address in an HTML document.

Abbreviations and acronyms

```
<html>
<body>

<abbr title="United Nations">UN</abbr>
<br>
<acronym title="World Wide Web">WWW</acronym>

<p>The title attribute is used to show the spelled-out
version when holding the mouse pointer over the acronym or
abbreviation.</p>

<p>This only works for the acronym element in IE 5.</p>

<p>This works for both the abbr and acronym element in
Netscape 6.2.</p>

</body>
</html>
```

UN
WWW

The title attribute is used to show the spelled-out version when holding the mouse pointer over the acronym or abbreviation.

This only works for the acronym element in IE 5.

This works for both the abbr and acronym element in Netscape 6.2.

This example demonstrates how to handle an abbreviation or an acronym.

Text direction

```
<html>
<body>

<p>
If your browser supports bi-directional override (bdo), the
next line will be written from the right to the left (rtl):
</p>

<bdo dir="rtl">
Here is some Hebrew text
</bdo>

</body>
</html>
```

If your browser supports bi-directional override (bdo), the next line will be written from the right to the left (rtl):

txet werbeH emos si ereH

This example demonstrates how to change the text direction.

Quotations

```
<html>
<body>

Here comes a long quotation:
<blockquote>
This is a long quotation. This is a long quotation. This is
a long quotation. This is a long quotation. This is a long
quotation.
</blockquote>

Here comes a short quotation:
<q>
This is a short quotation
</q>

<p>
With the block quote element, the browser inserts line
breaks and margins, but the q element does not render as
anything special.
</p>

</body>
</html>
```

Here comes a long quotation:

> This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation.

Here comes a short quotation: " This is a short quotation "

With the block quote element, the browser inserts line breaks and margins, but the q element does not render as anything special.

This example demonstrates how to handle long and short quotations.

Deleted and inserted text

```
<html>
<body>

<p>
a dozen is
<del>twenty</del>
<ins>twelve</ins>
pieces
</p>

<p>
Most browsers will overstrike deleted text and underline
inserted text.
</p>

<p>
Some older browsers will display deleted or inserted text as
plain text.
</p>

</body>
</html>
```

a dozen is ~~twenty~~ twelve pieces

Most browsers will overstrike deleted text and underline inserted text.

Some older browsers will display deleted or inserted text as plain text.

This example demonstrates how to mark a text that is deleted or inserted to a document.

How to View HTML Source

Have you ever seen a Web page and wondered "Hey! How did they do that?"
To find out, click the VIEW option in your browser's toolbar and select SOURCE or PAGE SOURCE. This will open a window that shows you the HTML code of the page.

Text Formatting Tags

Description

<b> Defines bold text

HTML <tt> <i> <b> <big> <small> tags

Definition and Usage

The following elements are all font style elements. They are not deprecated, but it is possible to achieve richer effects using style sheets.

<tt>	Renders as teletype or mono spaced text
<i>	Renders as italic text
<b>	Renders as bold text
<big>	Renders as bigger text
<small>	Renders as smaller text

Differences Between HTML and XHTML

Example

Source	Output
<tt>Teletype text</tt> Italic text Bold text <big>Big text</big> <small>Small text</small> 	Teletype text *Italic text* **Bold text** Big text Small text

<big> Defines big text

HTML <tt>   <big> <small> tags

<tt>	Renders as teletype or mono spaced text
	Renders as italic text
	Renders as bold text
<big>	Renders as bigger text
<small>	Renders as smaller text

Example

Source	Output
<tt>Teletype text</tt> Italic text Bold text <big>Big text</big> <small>Small text</small> 	Teletype text *Italic text* **Bold text** Big text Small text

 Defines emphasized text

HTML   <dfn> <code> <samp> <kbd> <var> <cite> tags

	Renders as emphasized text
	Renders as strong emphasized text
<dfn>	Defines a definition term
<code>	Defines computer code text
<samp>	Defines sample computer code
<kbd>	Defines keyboard text
<var>	Defines a variable
<cite>	Defines a citation

Example

Source	Output
Emphasized text Strong text <dfn>Definition term</dfn> <code>Computer code text</code> <samp>Sample computer code text</samp> <kbd>Keyboard text</kbd> <var>Variable</var> <cite>Citation</cite>	*Emphasized text* Strong text *Definition term* Computer code text Sample computer code text Keyboard text *Variable* *Citation*

 Defines italic text

HTML <tt>   <big> <small> tags

<tt>	Renders as teletype or mono spaced text

	Renders as italic text
	Renders as bold text
<big>	Renders as bigger text
<small>	Renders as smaller text

Example

Source	Output
<tt>Teletype text</tt> Italic text Bold text Big text</big> Small text</small> 	Teletype text *Italic text* Bold text Big text Small text

<small> Defines small text

HTML <tt>   <big> <small> tags

<tt>	Renders as teletype or mono spaced text
	Renders as italic text
	Renders as bold text
<big>	Renders as bigger text
<small>	Renders as smaller text

Example

Source	Output
<tt>Teletype text</tt> Italic text Bold text Big text</big> Small text</small> 	Teletype text *Italic text* Bold text Big text Small text

 Defines strong text

HTML   <dfn> <code> <samp> <kbd> <var> <cite> tags

em>	Renders as emphasized text
	Renders as strong emphasized text
<dfn>	Defines a definition term
<code>	Defines computer code text
<samp>	Defines sample computer code
<kbd>	Defines keyboard text
<var>	Defines a variable
<cite>	Defines a citation

Example

Source	Output
Emphasized text Strong text Definition term</dfn> Computer code text</code> Sample computer code text</samp> Keyboard text</kbd> Variable</var> Citation</cite>	*Emphasized text* Strong text *Definition term* Computer code text Sample computer code text Keyboard text *Variable* *Citation*

<sub> Defines subscripted text

HTML <sub> and <sup> tags

Definition and Usage

The <sub> tag defines subscript text. The <sup> tag defines superscript text.

Source	Output
This text contains _{subscript} This text contains ^{superscript}	This text contains $_{\text{subscript}}$ This text contains $^{\text{superscript}}$

<sup> Defines superscripted text

HTML <sub> and <sup> tags
Definition and Usage

The <sub> tag defines subscript text. The <sup> tag defines superscript text.

Source	Output
This text contains _{subscript} This text contains ^{superscript}	This text contains $_{\text{subscript}}$ This text contains $^{\text{superscript}}$

<ins> Defines inserted text

HTML <ins> tag

Definition and Usage Defines inserted text.

Differences Between HTML and XHTML

Tips and Notes

Tip: Use it together with the <del> tag to describe updates and modifications to a document.

Example

Source	Output
a dozen is <del>20</del> <ins>12</ins> pieces!	a dozen is 12 pieces!

<del> Defines deleted text

HTML <del> tag

Definition and Usage

Defines text that has been deleted in a document.

Tips and Notes

Tip: Use it together with the <ins> tag to describe updates and modifications in a document.

Example

Source	Output
a dozen is <del>20</del> 12 pieces	a dozen is 12 pieces

<s> Deprecated. Use <del> instead

HTML <s> and <strike> tags

Definition and Usage
The <s> and <strike> tags defines strikethrough text.

Differences Between HTML and XHTML

The <s> and <strike> elements were deprecated in HTML 4.01.
The <s> and <strike> elements are not supported in XHTML 1.0 Strict DTD.

Tips and Notes :

Tip: Use <del> instead!

Source	Output
A new version is <s>not yet available.</s> now available! A new version is <strike>not yet available.</strike> now available!	A new version is ~~not yet available.~~ now available! A new version is ~~not yet available.~~ now available!

<strike> Deprecated. Use <del> instead

HTML <s> and <strike> tags

Definition and Usage
The <s> and <strike> tags defines strikethrough text.

Differences Between HTML and XHTML
The <s> and <strike> elements were deprecated in HTML 4.01.
The <s> and <strike> elements are not supported in XHTML 1.0 Strict DTD.

Tips and Notes

Tip: Use <del> instead!

Example

Source	Output
A new version is <s>not yet available.</s> now available! A new version is <strike>not yet available.</strike> now available!	A new version is ~~not yet available.~~ now available! A new version is ~~not yet available.~~ now available!

<u> Deprecated. Use styles instead

HTML <u> tag

Definition and Usage
The <u> tag defines underlined text.
Tip: Do not underline text - a user confuses it with a hyperlink!!

Example

Source	Output
A new version is <u>now available!</u>	A new version is now available!

"Computer Output" Tags
Tag Description
<code> Defines computer code text

HTML   <dfn> <code> <samp> <kbd> <var> <cite> tags

Definition and Usage
The following elements are all phrase elements. They are not deprecated, but it is possible to achieve a much richer effect using style sheets.

	Renders as emphasized text
	Renders as strong emphasized text
<dfn>	Defines a definition term
<code>	Defines computer code text
<samp>	Defines sample computer code
<kbd>	Defines keyboard text
<var>	Defines a variable
<cite>	Defines a citation

Example

Source	Output
Emphasized text <br /

Source	Output
<acronym title="World Wide Web">WWW</acronym>	WWW

<address> Defines an address element

HTML <address> tag

Definition and Usage
The <address> tag defines the start of an address. You should use it to define addresses, signatures, or authorships of documents.

Tips and Notes
Note: The address usually renders in *italic*. Most browsers will add a line break before and after the address element, but line breaks inside the text you have to insert yourself.
Example

Source	Output
<address> Donald Duck Box 555 Disneyland </address>	*Donald Duck* *Box 555* *Disneyland*

<bdo> Defines the text direction

HTML <bdo> tag

Definition and Usage
The bdo element overrides the default text direction.
Example

Source	Output
<bdo dir="rtl">Here is some Hebrew text</bdo>	Here is some Hebrew text

<blockquote> Defines a long quotation

HTML <blockquote> tag

Definition and Usage
The <blockquote> tag defines the start of a long quotation.
Differences Between HTML and XHTML
The <blockquote> tag is supposed to contain only block-level elements within it, and not just plain text.
To validate the page as strict XHTML, you must add a block-level element around the text within the <blockquote> tag, like this:

```
<blockquote>
<p>here is a long quotation here is a long quotation</p>
</blockquote>
```

Tips and Notes
Note: The blockquote element creates white space on both sides of the text.
Example

Source	Output
Here comes a long quotation: <blockquote> here is a long quotation here is a long quotation here is a long quotation

HTML <q> tag

Definition and Usage

The <q> tag defines the start of a short quotation.

Tips and Notes

Note: According to the HTML 4.01 spec, the q element should render with delimiting quotation marks. This works in Mozilla browsers (Firefox) and Opera. Internet Explorer ignores this entirely.

Example

Source	Output
Here comes a short quotation: <q>here is a short quotation here is a short quotation</q>	Here comes a short quotation: here is a short quotation here is a short quotation

<cite> Defines a citation

HTML   <dfn> <code> <samp> <kbd> <var> <cite> tags

Definition and Usage

The following elements are all phrase elements. They are not deprecated, but it is possible to achieve a much richer effect using style sheets.

<cite>	Defines a citation

Example

Source	Output
<cite>Citation</cite>	*Citation*

<dfn> Defines a definition term

HTML   <dfn> <code> <samp> <kbd> <var> <cite> tags

Definition and Usage

The following elements are all phrase elements. They are not deprecated, but it is possible to achieve a much richer effect using style sheets.

	Renders as emphasized text
	Renders as strong emphasized text
<dfn>	Defines a definition term
<code>	Defines computer code text
<samp>	Defines sample computer code
<kbd>	Defines keyboard text
<var>	Defines a variable
<cite>	Defines a citation

Example

Source	Output
<dfn>Definition term</dfn> 	*Definition term*

HTML Character Entities

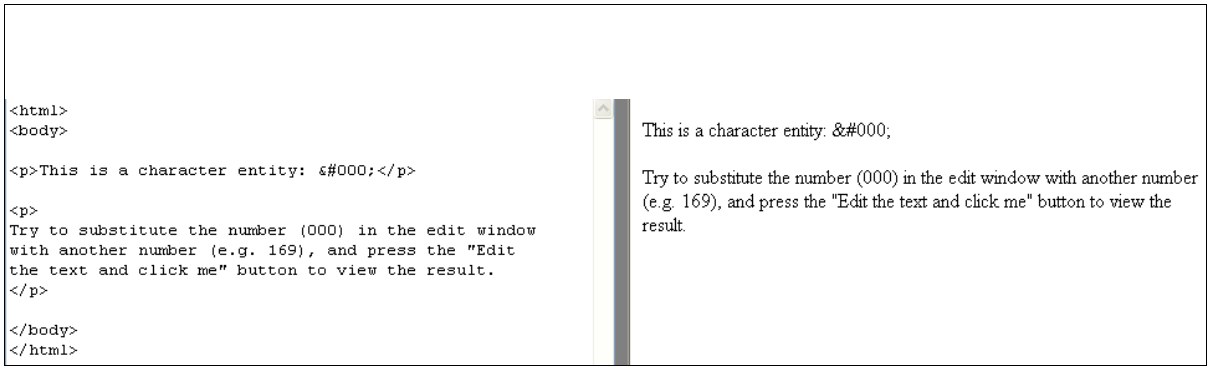
Some characters like the < character, have a special meaning in HTML, and therefore cannot be used in the text.

To display a less than sign (<) in HTML, we have to use a character entity.

Character Entities

Some characters have a special meaning in HTML, like the less than sign (<) that defines the start of an HTML tag. If we want the browser to actually display these characters we must insert character entities in the HTML source.
A character entity has three parts: an ampersand (&), an entity name or a # and an entity number, and finally a semicolon (;).
To display a less than sign in an HTML document we must write: < or <

The advantage of using a name instead of a number is that a name is easier to remember. The disadvantage is that not all browsers support the newest entity names, while the support for entity numbers is very good in almost all browsers.
Note that the entities are case sensitive.
This example lets you experiment with character entities: Character Entities IE only



Non-breaking Space

The most common character entity in HTML is the non-breaking space.
Normally HTML will truncate spaces in your text. If you write 10 spaces in your text HTML will remove 9 of them. To add spaces to your text, use the   character entity.

The Most Common Character Entities:

Result	Description	Entity Name	Entity Number
	non-breaking space		
<	less than	<	<
>	greater than	>	>
&	ampersand	&	&
"	quotation mark	"	"
'	apostrophe	' (does not work in IE)	'

Some Other Commonly Used Character Entities:

Result	Description	Entity Name	Entity Number
¢	cent	¢	¢
£	pound	£	£
¥	yen	¥	¥
§	section	§	§
©	copyright	©	©
®	registered trademark	®	®
×	multiplication	×	×
÷	division	÷	÷

To see a full list of HTML character entities go to our HTML Entities Reference.

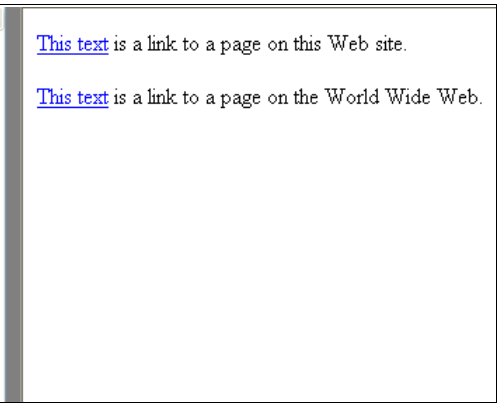
HTML Links

HTML uses a hyperlink to link to another document on the Web.

Examples

Create hyperlinks

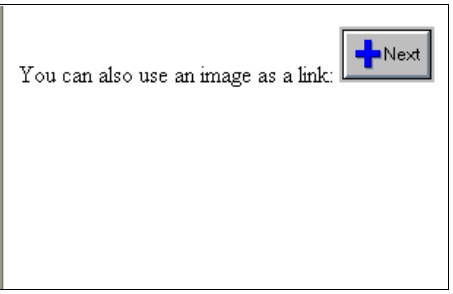
```
<html>
<body>

<p>
<a href="lastpage.htm">
This text</a> is a link to a page on
this Web site.
</p>

<p>
<a href="http://www.microsoft.com/">
This text</a> is a link to a page on
the World Wide Web.
</p>

</body>
</html>
```



This example demonstrates how to create links in an HTML document.

An image as a link

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65"
height="38">
</a>
</p>

</body>
</html>
```



This example demonstrates how to use an image as a link.
(You can find more examples at the bottom of this page)

The Anchor Tag and the Href Attribute

HTML uses the <a> (anchor) tag to create a link to another document.
An anchor can point to any resource on the Web: an HTML page, an image, a sound file, a movie, etc.
The syntax of creating an anchor:

```
<a href="url">Text to be displayed</a>
```

The <a> tag is used to create an anchor to link from, the href attribute is used to address the document to link to, and the words between the open and close of the anchor tag will be displayed as a hyperlink.
This anchor defines a link to W3Schools:

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

The line above will look like this in a browser:

The Target Attribute

With the target attribute, you can define where the linked document will be opened.
The line below will open the document in a new browser window:

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

The Anchor Tag and the Name Attribute

The name attribute is used to create a named anchor. When using named anchors we can create links that can jump directly into a specific section on a page, instead of letting the user scroll around to find what he/she is looking for.
Below is the syntax of a named anchor:

```
<a name="label">Text to be displayed</a>
```

The name attribute is used to create a named anchor. The name of the anchor can be any text you care to use.

The line below defines a named anchor:

```
<a name="tips">Useful Tips Section</a>
```

You should notice that a named anchor is not displayed in a special way.
To link directly to the "tips" section, add a # sign and the name of the anchor to the end of a URL, like this:

```
<a href="http://www.w3schools.com/html_links.asp#tips">
Jump to the Useful Tips Section</a>
```

A hyperlink to the Useful Tips Section from WITHIN the file "html_links.asp" will look like this:

```
<a href="#tips">Jump to the Useful Tips Section</a>
```

Basic Notes - Useful Tips

Always add a trailing slash to subfolder references. If you link like this: href="http://www.w3schools.com/html", you will generate two HTTP requests to the server, because the server will add a slash to the address and create a new request like this: href="http://www.w3schools.com/html/"
Named anchors are often used to create "table of contents" at the beginning of a large document. Each chapter within the document is given a named anchor, and links to each of these anchors are put at the top of the document.
If a browser cannot find a named anchor that has been specified, it goes to the top of the document. No error occurs.

Open a link in a new browser window

```
<html>
<body>

<a href="lastpage.htm" target="_blank">Last Page</a>

<p>
If you set the target attribute of a link to "_blank",
the link will open in a new window.
</p>

</body>
</html>
```

Last Page

If you set the target attribute of a link to "_blank", the link will open in a new window.

This example demonstrates how to link to another page by opening a new window, so that the visitor does not have to leave your Web site.

Link to a location on the same page

```
html>
<body>

<p>
<a href="#C4">See also Chapter 4.</a>
</p>

<h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 3</h2>
<p>This chapter explains ba bla bla</p>

<h2><a name="C4">Chapter 4</a></h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 5</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 6</h2>
```

See also Chapter 4.

Chapter 1
This chapter explains ba bla bla
Chapter 2
This chapter explains ba bla bla
Chapter 3
This chapter explains ba bla bla
Chapter 4
This chapter explains ba bla bla
Chapter 5
This chapter explains ba bla bla
Chapter 6
This chapter explains ba bla bla
Chapter 7

```
<p>This chapter explains ba bla bla</p>

<h2>Chapter 7</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 8</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 9</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 10</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 11</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 12</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 13</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 14</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 15</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 16</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 17</h2>
<p>This chapter explains ba bla bla</p>

</body></html>
```

This chapter explains ba bla bla

Chapter 8

This chapter explains ba bla bla

Chapter 9

This chapter explains ba bla bla

Chapter 10

This chapter explains ba bla bla

Chapter 11

This chapter explains ba bla bla

Chapter 12

This chapter explains ba bla bla

Chapter 13

This chapter explains ba bla bla

Chapter 14

This chapter explains ba bla bla

Chapter 15

This chapter explains ba bla bla

Chapter 16

This chapter explains ba bla bla

Chapter 17

This chapter explains ba bla bla

This example demonstrates how to use a link to jump to another part of a document.

Break out of a frame

```
<html>
<body>

<p>Locked in a frame?</p>

<a href="http://www.w3schools.com/"
target="_top">Click here!</a>

</body>
</html>
```

Locked in a frame?

Click here!

This example demonstrates how to break out of a frame, if your site is locked in a frame.

Create a mailto link

```
<html>
<body>

<p>
This is a mail link:
<a href="mailto:someone@microsoft.com?
subject=Hello%20again">
Send Mail</a>
```

This is a mail link: Send Mail

Note: Spaces between words should be replaced by %20 to ensure that the browser will display your text properly

```
</p>

<p>
<b>Note:</b> Spaces between words
should be replaced by %20 to
<b>ensure</b> that
 the browser will display your text properly.
</p>

</body>
</html>
```

This example demonstrates how to link to a mail message (will only work if you have mail installed).

Create a mailto link 2

```
<html>

<body>

<p>
This is another mailto link:
<a href="mailto:someone@microsoft.com?
cc=someoneelse@microsoft.com&bcc=andsomeoneelse2@microsoft.com&subject=Summer%
20Party&body=You%20are%20invited%20to%20a%20big%20summer%20party!">Send mail!
</a>
</p>

<p>
<b>Note:</b> Spaces between words should be replaced by %20 to <b>ensure</b>
that the browser will display your text properly.
</p>

</body>
</html>
```

This is another mailto link: Send mail!

Note: Spaces between words should be replaced by %20 to **ensure** that the browser will display your text properly.

This example demonstrates a more complicated mailto link.

Link Tags

Tag	Description
<a>	Defines an anchor

HTML <a> tag

Definition and Usage

The <a> tag defines an anchor. An anchor can be used in two ways:
1. To create a link to another document by using the href attribute
2. To create a bookmark inside a document, by using the name or id attribute

Tips and Notes

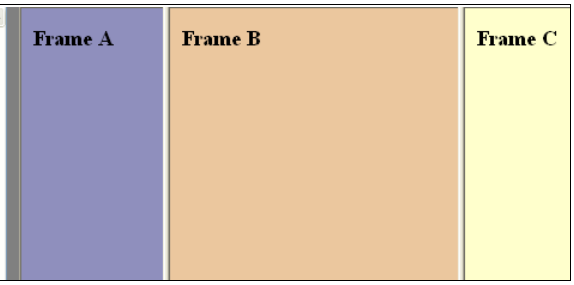
Note: A linked page is normally displayed in the current browser window, unless you specify another target.

Source	Output
Linking to W3Schools: <a href="http://www.w3schools.com"> W3Schools</a> Opening W3Schools a new browser window: <a href="http://www.w3schools.com" target="_blank">W3Schools</a> 	Linking to W3Schools: W3Schools Opening W3Schools a new browser window: W3Schools

HTML Frames With frames, you can display more than one Web page in the same browser window.

Vertical frameset

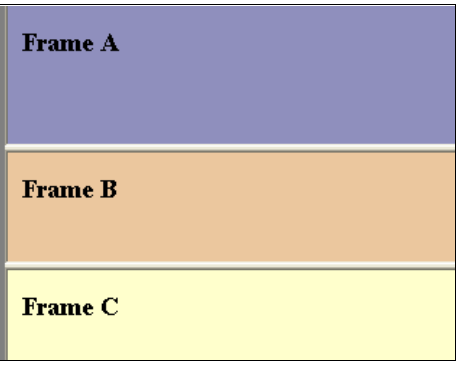
```
<html>

<frameset cols="25%,50%,25%">
  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

<noframes>
<body>Your browser does not handle frames!</body>
</noframes>

</frameset>

</html>
```



This example demonstrates how to make a vertical frameset with three different documents.

Horizontal frameset

```
<html>

<frameset rows="25%,50%,25%">

  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

</frameset>

</html>
```



This example demonstrates how to make a horizontal frameset with three different documents.
(You can find more examples at the bottom of this page)

Frames

With frames, you can display more than one HTML document in the same browser window. Each HTML document is called a frame, and each frame is independent of the others.
The disadvantages of using frames are:

- The web developer must keep track of more HTML documents
- It is difficult to print the entire page

The Frameset Tag

- The <frameset> tag defines how to divide the window into frames
- Each frameset defines a set of rows or columns
- The values of the rows/columns indicate the amount of screen area each row/column will occupy

The Frame Tag

- The <frame> tag defines what HTML document to put into each frame

In the example below we have a frameset with two columns. The first column is set to 25% of the width of the browser window. The second column is set to 75% of the width of the browser window. The HTML document "frame_a.htm" is put into the first column, and the HTML document "frame_b.htm" is put into the second column:

```
<frameset cols="25%,75%">
   <frame src="frame_a.htm">
   <frame src="frame_b.htm">
</frameset>
```

Basic Notes - Useful Tips

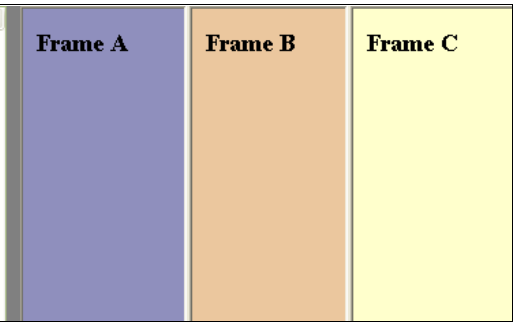
If a frame has visible borders, the user can resize it by dragging the border. To prevent a user from doing this, you can add noresize="noresize" to the <frame> tag.
Add the <noframes> tag for browsers that do not support frames.

Important: You cannot use the <body></body> tags together with the <frameset></frameset> tags! However, if you add a <noframes> tag containing some text for browsers that do not support frames, you will have to enclose the text in <body></body> tags! See how it is done in the first example below.

More Examples

How to use the <noframes> tag

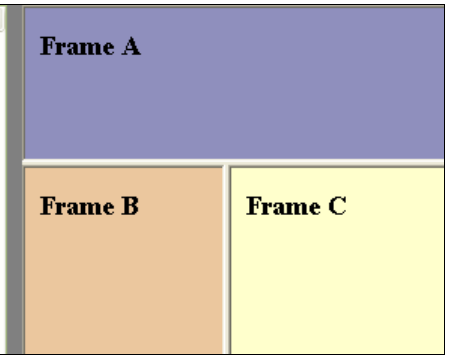
```
<html>

<frameset cols="25%,50%,25%">
  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

<noframes>
<body>Your browser does not handle frames!</body>
</noframes>

</frameset>

</html>
```



This example demonstrates how to use the <noframes> tag.

Mixed frameset

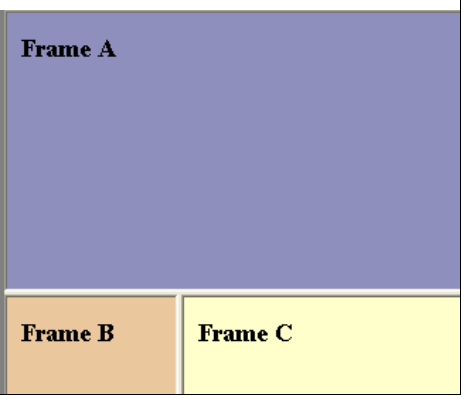
```
<html>

<frameset rows="50%,50%">

<frame src="frame_a.htm">

<frameset cols="25%,75%">
<frame src="frame_b.htm">
<frame src="frame_c.htm">
</frameset>

</frameset>

</html>
```



This example demonstrates how to make a frameset with three documents, and how to mix them in rows and columns.

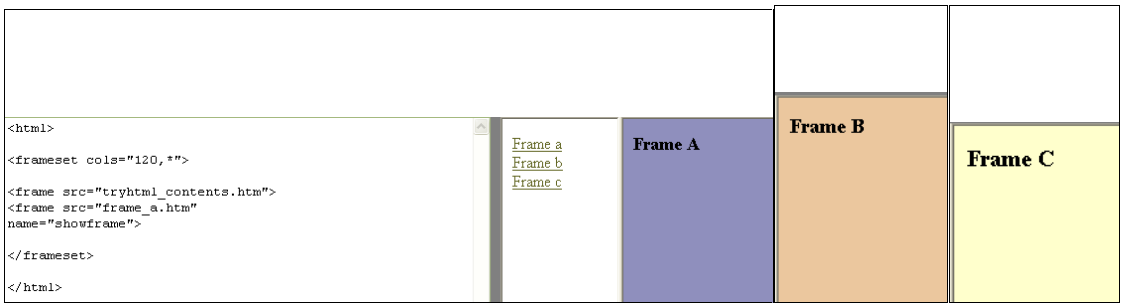
Frameset with noresize="noresize"

```
<html>

<frameset rows="50%,50%">

<frame noresize="noresize" src="frame_a.htm">

<frameset cols="25%,75%">
<frame noresize="noresize" src="frame_b.htm">
<frame noresize="noresize" src="frame_c.htm">
</frameset>

</frameset>

</html>
```



This example demonstrates the noresize attribute. The frames are not resizable. Move the mouse over the borders between the frames and notice that you can not move the borders.

Navigation frame

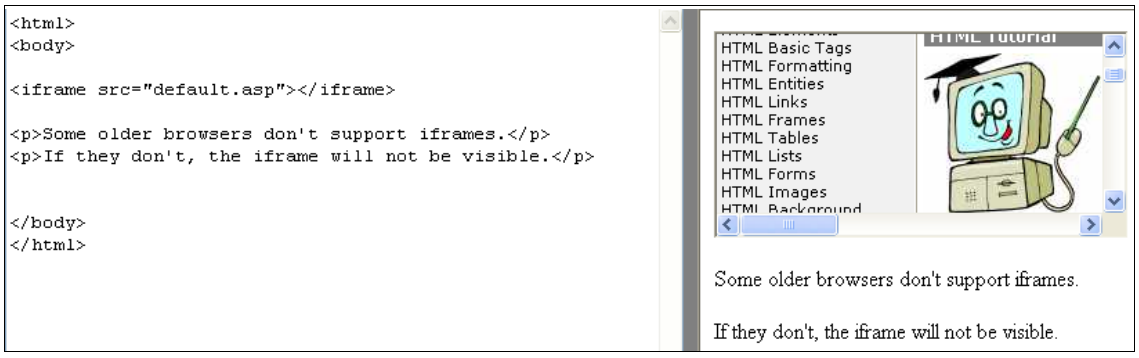


This example demonstrates how to make a navigation frame. The navigation frame contains a list of links with the second frame as the target. The file called "tryhtml_contents.htm" contains three links. The source code of the links:

```
<a href ="frame_a.htm" target ="showframe">Frame a</a><br>
<a href ="frame_b.htm" target ="showframe">Frame b</a><br>
<a href ="frame_c.htm" target ="showframe">Frame c</a>
```

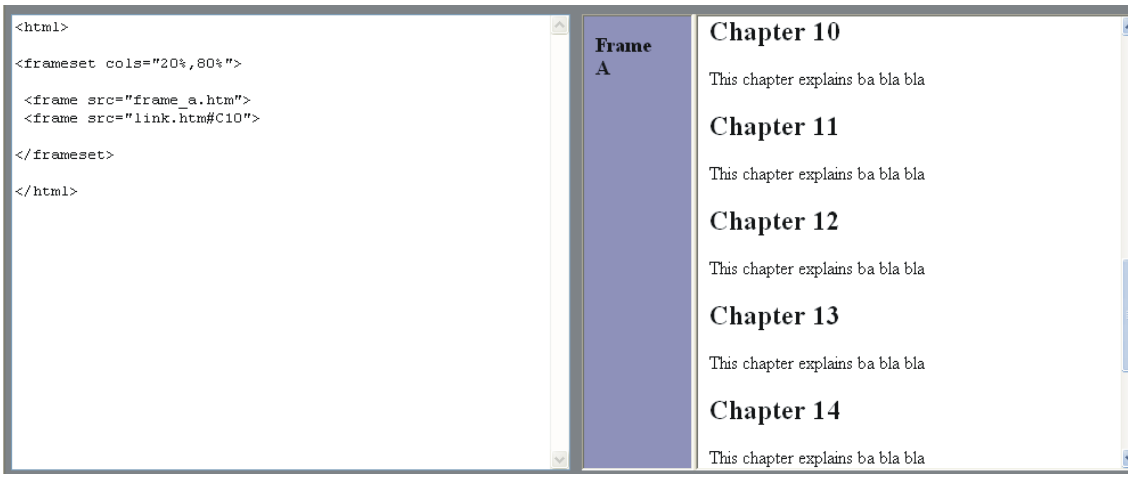
The second frame will show the linked document.

Inline frame



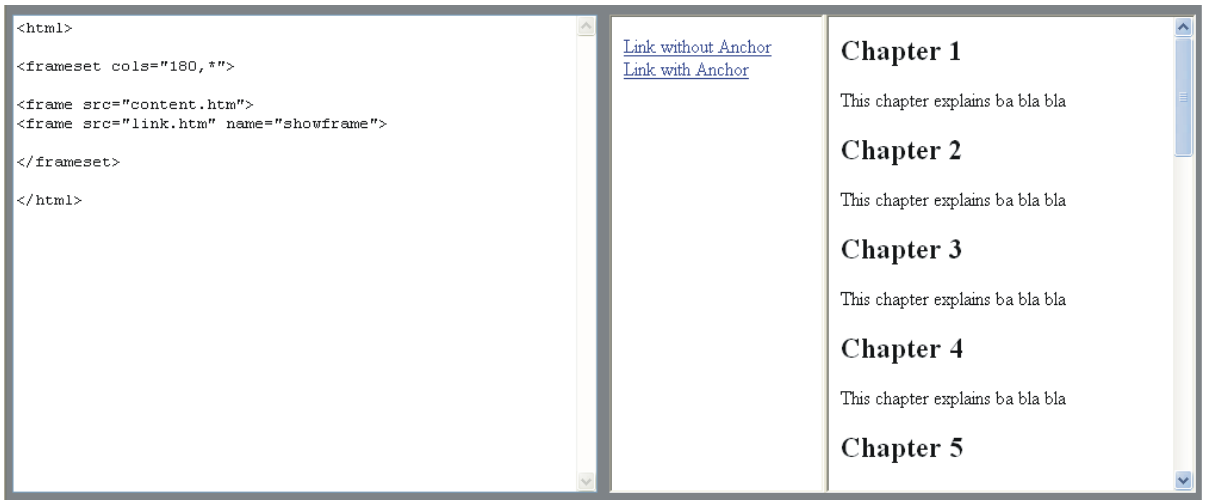
This example demonstrates how to create an inline frame (a frame inside an HTML page)

Jump to a specified section within a frame



This example demonstrates two frames. One of the frames has a source to a specified section in a file. The specified section is made with <a name="C10"> in the "link.htm" file.

Jump to a specified section with frame navigation



This example demonstrates two frames. The navigation frame (content.htm) to the left contains a list of links with the second frame (link.htm) as a target. The second frame shows the linked document. One of the links in the navigation frame is linked to a specified section in the target file. The HTML code in the file "content.htm" looks like this: <a href ="link.htm" target ="showframe">Link without Anchor</a>
<a href ="link.htm#C10" target ="showframe">Link with Anchor</a>.

Frame Tags

Tag	Description
<frameset>	Defines a set of frames
<frame>	Defines a sub window (a frame)
<noframes>	Defines a noframe section for browsers that do not handle frames
<iframe>	Defines an inline sub window (frame)

HTML <frameset> tag

Definition and Usage

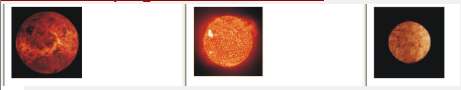
The frameset element defines a frameset. It is used to organize multiple windows (frames). Each frame holds a separate document. In its simplest use, the frameset element states only how many columns or rows there will be in the frameset. You must use the cols or the rows attribute.

Tips and Notes

Note: If you want to validate a page containing frames, be sure the DTD is set to "Frameset DTD". Read more about XHTML Validation.

Important: You cannot use the <body></body> tags together with the <frameset></frameset> tags! However, if you add a <noframes> tag containing some text for browsers that do not support frames, you will have to enclose the text in <body></body> tags!

Example

Source	Output
<a href="planets.htm" target="_blank">View this page for the result</a> The source code in "planets.htm": <html> <frameset cols = "25%, 25%,*"> <frame src ="venus.htm" /> <frame src ="sun.htm" /> <frame src ="mercur.htm" /> </frameset> </html>	View this page for the result 

HTML <frame> tag

Definition and Usage

Defines a sub window (a frame).

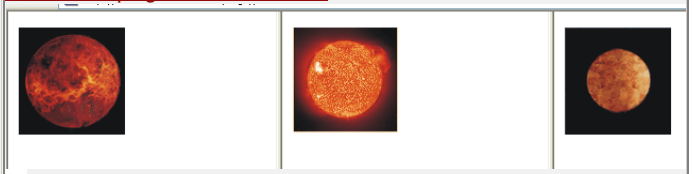
Differences Between HTML and XHTML

In HTML the <frame> tag has no end tag.

In XHTML the <frame> tag must be properly closed.

Important: You cannot use the <body></body> tags together with the <frameset></frameset> tags! However, if you add a <noframes> tag containing some text for browsers that do not support frames, you will have to enclose the text in <body></body> tags!

Example

Source	Output
<a href="planets.htm" target="_blank">View this page for the result</a> The source code in "planets.htm": <html> <frameset cols = "25%, 25%,*"> <frame src ="venus.htm" /> <frame src ="sun.htm" /> <frame src ="mercur.htm" /> </frameset> </html>	View this page for the result 

HTML <noframes> tag

Definition and Usage

The noframes element displays text for browsers that do not handle frames. The noframes element goes inside the frameset element.

Example

```
<frameset cols = "25%, 25%,*">
  <noframes>
    <body>Your browser does not handle frames!</body>
  </noframes>
  <frame src ="venus.htm" />
  <frame src ="sun.htm" />
  <frame src ="mercur.htm" />
</frameset>
```

HTML <iframe> tag

Definition and Usage

The iframe element creates an inline frame that contains another document.

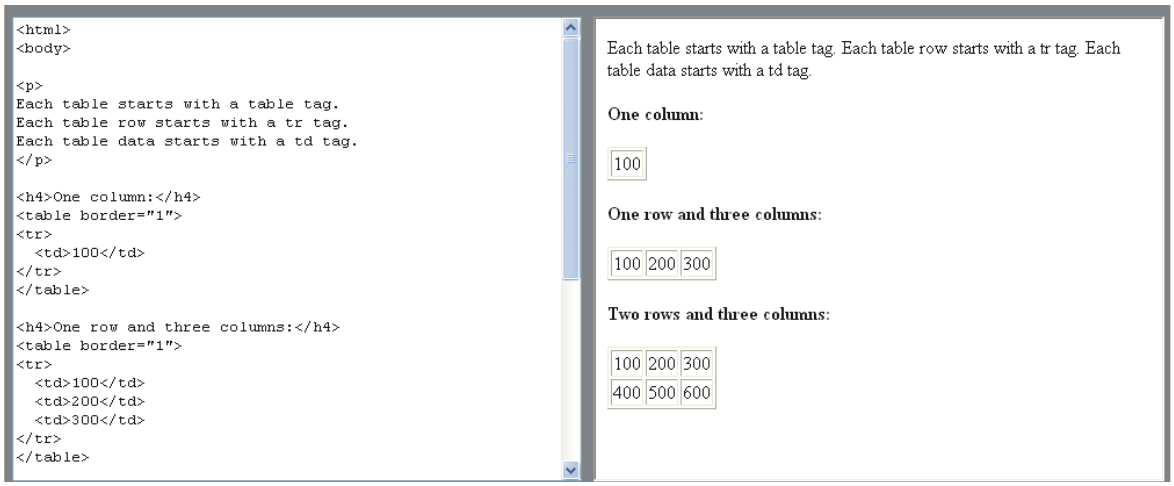
Example

Source	Output
<iframe src ="/default.asp" width="100%"> </iframe>	

HTML Tables

With HTML you can create tables.

Tables



```
<html>
<body>

<p>
Each table starts with a table tag.
Each table row starts with a tr tag.
Each table data starts with a td tag.
</p>

<h4>One column:</h4>
<table border="1">
<tr>
  <td>100</td>
</tr>
</table>

<h4>One row and three columns:</h4>
<table border="1">
<tr>
  <td>100</td>
  <td>200</td>
  <td>300</td>
</tr>
</table>
```

Each table starts with a table tag. Each table row starts with a tr tag. Each table data starts with a td tag.

One column:

100

One row and three columns:

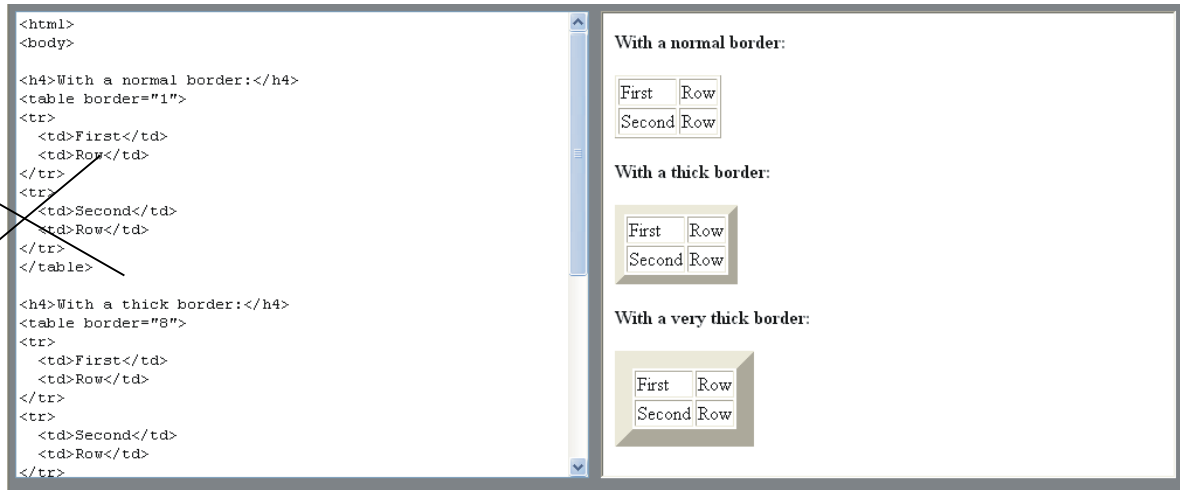
100	200	300

Two rows and three columns:

100	200	300
400	500	600

This example demonstrates how to create tables in an HTML document.

Table borders



```
<html>
<body>

<h4>With a normal border:</h4>
<table border="1">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With a thick border:</h4>
<table border="8">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
```

With a normal border:

First	Row
Second	Row

With a thick border:

First	Row
Second	Row

With a very thick border:

First	Row
Second	Row

This example demonstrates different table borders.
(You can find more examples at the bottom of this page)

Tables

Tables are defined with the <table> tag. A table is divided into rows (with the <tr> tag), and each row is divided into data cells (with the <td> tag). The letters td stands for "table data," which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, etc.

```
<table border="1">
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

How it looks in a browser:

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Tables

Tables are defined with the <table> tag. A table is divided into rows (with the <tr> tag), and each row is divided into data cells (with the <td> tag). The letters td stands for "table data," which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, etc.

```
<table border="1">
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

How it looks in a browser:

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Tables and the Border Attribute

If you do not specify a border attribute the table will be displayed without any borders. Sometimes this can be useful, but most of the time, you want the borders to show.
To display a table with borders, you will have to use the border attribute:

```
<table border="1">
<tr>
<td>Row 1, cell 1</td>
<td>Row 1, cell 2</td>
</tr>
</table>
```

Headings in a Table

Headings in a table are defined with the <th> tag.

```
<table border="1">
<tr>
<th>Heading</th>
<th>Another Heading</th>
</tr>
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

How it looks in a browser:

Heading	Another Heading
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Empty Cells in a Table

Table cells with no content are not displayed very well in most browsers.

```
<table border="1">
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td></td>
</tr>
</table>
```

How it looks in a browser:

row 1, cell 1	row 1, cell 2
row 2, cell 1	

Note that the borders around the empty table cell are missing (NB! Mozilla Firefox displays the border).

To avoid this, add a non-breaking space ( ) to empty data cells, to make the borders visible:

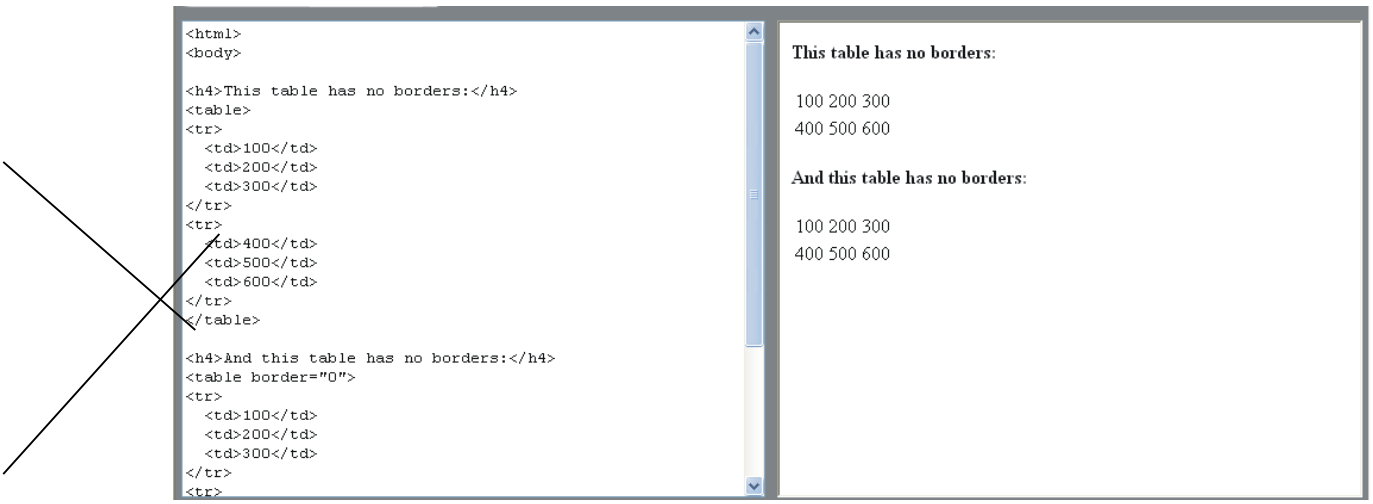
```
<table border="1">
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td> </td>
</tr>
</table>
```

How it looks in a browser:

row 1, cell 1	row 1, cell 2
row 2, cell 1	

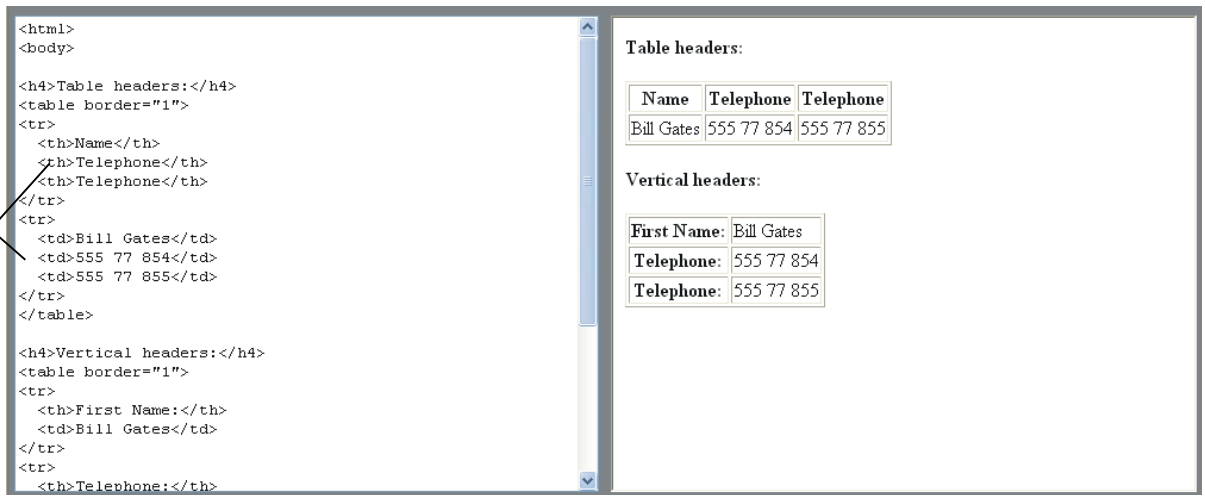
More Examples

Table with no border



This example demonstrates a table with no borders.

Headings in a table



```
<html>
<body>

<h4>Table headers:</h4>
<table border="1">
<tr>
  <th>Name</th>
  <th>Telephone</th>
  <th>Telephone</th>
</tr>
<tr>
  <td>Bill Gates</td>
  <td>555 77 854</td>
  <td>555 77 855</td>
</tr>
</table>

<h4>Vertical headers:</h4>
<table border="1">
<tr>
  <th>First Name:</th>
  <td>Bill Gates</td>
</tr>
<tr>
  <th>Telephone:</th>
```

Table headers:

Name	Telephone	Telephone
Bill Gates	555 77 854	555 77 855

Vertical headers:

First Name:	Bill Gates
Telephone:	555 77 854
Telephone:	555 77 855

This example demonstrates how to display table headers.

Empty cells

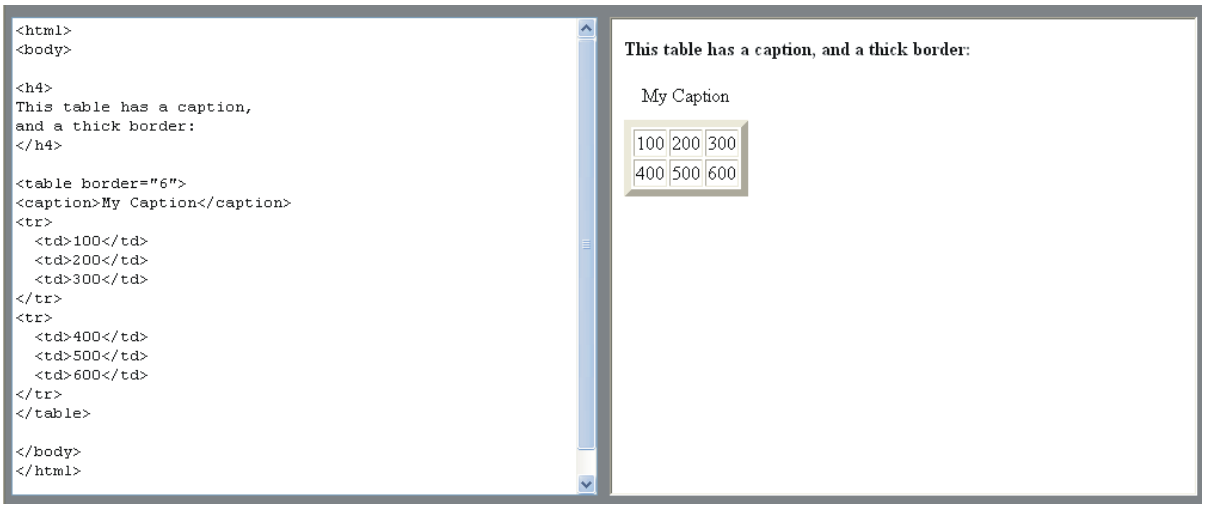
```
<html>
<body>
<table border="1">
<tr>
  <td>Some text</td>
  <td>Some text</td>
</tr>
<tr>
  <td></td>
  <td>Some text</td>
</tr>
</table>
<p>
As you can see, one of the cells has no border. That is because it is empty. Try to insert a space in the cell. Still it has no border.
</p>
<p>
The trick is to insert a no-breaking space in the cell.
</p>
<p>No-breaking space is a character entity. If you don't know what a character entity is, read the chapter about it.
</p>
<p>The no-breaking space entity starts with an ampersand ("&"),
then the letters "nbsp", and ends with a semicolon (";")
</p>
<p>
</p>
</body>
</html>
```

Some text	Some text
	Some text

As you can see, one of the cells has no border. That is because it is empty. Try to insert a space in the cell. Still it has no border.
The trick is to insert a no-breaking space in the cell.
No-breaking space is a character entity. If you don't know what a character entity is, read the chapter about it.
The no-breaking space entity starts with an ampersand ("&"), then the letters "nbsp", and ends with a semicolon (";")

This example demonstrates how to use " " to handle cells that have no content.

Table with a caption



```
<html>
<body>

<h4>
This table has a caption,
and a thick border:
</h4>

<table border="6">
<caption>My Caption</caption>
<tr>
  <td>100</td>
  <td>200</td>
  <td>300</td>
</tr>
<tr>
  <td>400</td>
  <td>500</td>
  <td>600</td>
</tr>
</table>

</body>
</html>
```

This table has a caption, and a thick border:

My Caption

100	200	300
400	500	600

This example demonstrates a table with a caption.

Table cells that span more than one row/column

```
<html>
<body>

<h4>Cell that spans two columns:</h4>
<table border="1">
<tr>
  <th>Name</th>
  <th colspan="2">Telephone</th>
</tr>
<tr>
  <td>Bill Gates</td>
  <td>555 77 854</td>
  <td>555 77 855</td>
</tr>
</table>

<h4>Cell that spans two rows:</h4>
<table border="1">
<tr>
  <th>First Name:</th>
  <td>Bill Gates</td>
</tr>
<tr>
  <th rowspan="2">Telephone:</th>
  <td>555 77 854</td>
</tr>
<tr>
  <td>555 77 855</td>
</tr>
</table>

</body>
</html>
```

Cell that spans two columns:

Name	Telephone	
Bill Gates	555 77 854	555 77 855

Cell that spans two rows:

First Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

This example demonstrates how to define table cells that span more than one row or one column.

Tags inside a table

```
<html>
<body>

<table border="1">
<tr>
 <td>
  <p>This is a paragraph</p>
  <p>This is another paragraph</p>
 </td>
 <td>This cell contains a table:
  <table border="1">
  <tr>
    <td>A</td>
    <td>B</td>
  </tr>
  <tr>
    <td>C</td>
    <td>D</td>
  </tr>
  </table>
 </td>
</tr>
<tr>
 <td>This cell contains a list
  <ul>
   <li>apples</li>
   <li>bananas</li>
   <li>pineapples</li>
  </ul>
 </td>
 <td>HELLO</td>
</tr>
</table>

</body>
</html>
```

<table>
<tr>
<td>This is a paragraph
This is another paragraph</td>
<td>This cell contains a table:<table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table></td>
</tr>
<tr>
<td>This cell contains a list<ul><li>apples</li><li>bananas</li><li>pineapples</li></ul></td>
<td>HELLO</td>
</tr>
</table>

This example demonstrates how to display elements inside other elements.

Cell padding

```
<html>
<body>

<h4>Without cellpadding:</h4>
<table border="1">
<tr>
 <td>First</td>
 <td>Row</td>
</tr>
<tr>
 <td>Second</td>
 <td>Row</td>
</tr>
</table>

<h4>With cellpadding:</h4>
<table border="1"
```

Without cell padding:

<table>
<tr><td>First</td><td>Row</td></tr>
<tr><td>Second</td><td>Row</td></tr>
</table>

With cell padding:

<table>
<tr><td>First</td><td>Row</td></tr>
<tr><td>Second</td><td>Row</td></tr>
</table>

```
cellpadding="10">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

This example demonstrates how to use cellpadding to create more white space between the cell content and its borders.

Cell spacing

```
<html>
<body>

<h4>Without cellspacing:</h4>
<table border="1">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With cellspacing:</h4>
<table border="1"
cellspacing="10">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

Without cellspacing:

First	Row
Second	Row

With cellspacing:

First	Row
Second	Row

This example demonstrates how to use cellspacing to increase the distance between the cells.

Add a background color or a background image to a table

```
<html>
<body>

<h4>A background color:</h4>
<table border="1"
bgcolor="red">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
```

A background color:

First	Row
Second	Row

A background image:

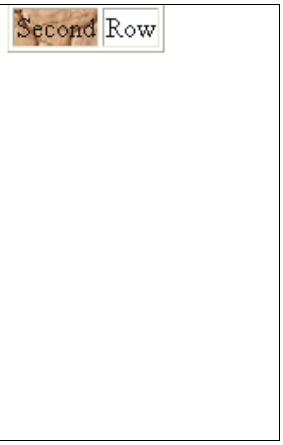
First	Row
Second	Row

```
  <td>Row</td>
</tr>
</table>

<h4>A background image:</h4>
<table border="1"
background="bgdesert.jpg">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

This example demonstrates how to add a background to a table.

Add a background color or a background image to a table cell

```
<tr>
  <td bgcolor="red">First</td>
  <td>Row</td>
</tr>
<tr>
  <td
  background="bgdesert.jpg">
  Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```



This example demonstrates how to add a background to one or more table cells.

Align the content in a table cell

```
<html>
<body>

<table width="400" border="1">
 <tr>
  <th align="left">Money spent on....</th>
  <th align="right">January</th>
  <th align="right">February</th>
 </tr>
 <tr>
  <td align="left">Clothes</td>
  <td align="right">$241.10</td>
  <td align="right">$50.20</td>
 </tr>
 <tr>
  <td align="left">Make-Up</td>
  <td align="right">$30.00</td>
  <td align="right">$44.45</td>
 </tr>
 <tr>
  <td align="left">Food</td>
  <td align="right">$730.40</td>
```

Money spent on....	January	February
Clothes	$241.10	$50.20
Make-Up	$30.00	$44.45
Food	$730.40	$650.00
Sum	**$1001.50**	**$744.65**

```
  <td align="right">$650.00</td>
 </tr>
 <tr>
  <th align="left">Sum</th>
  <th align="right">$1001.50</th>
  <th align="right">$744.65</th>
 </tr>
</table>

</body>
</html>
```

This example demonstrates how to use the "align" attribute to align the content of cells, to create a "nice-looking" table.

The frame attribute

```
<html>
<body>

<p>
If you see no frames around the tables in these examples, your browser is too old, or does not support it.
</p>

<h4>With frame="border":</h4>
<table frame="border">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="box":</h4>
<table frame="box">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="void":</h4>
<table frame="void">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="above":</h4>
<table frame="above">
<tr>
  <td>First</td>
```

If you see no frames around the tables in these examples, your browser is too old, or does not support it.

With frame="border":

First Row

Second Row

With frame="box":

First Row

Second Row

With frame="void":

First Row

Second Row

With frame="above":

First Row

Second Row

With frame="below":

First Row

Second Row

With frame="hsides":

First Row

Second Row

With frame="vsides":

First Row

Second Row

With frame="lhs":

First Row

Second Row

With frame="rhs":

```
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="below":</h4>
<table frame="below">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="hsides":</h4>
<table frame="hsides">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="vsides":</h4>
<table frame="vsides">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="lhs":</h4>
<table frame="lhs">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With frame="rhs":</h4>
<table frame="rhs">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
```

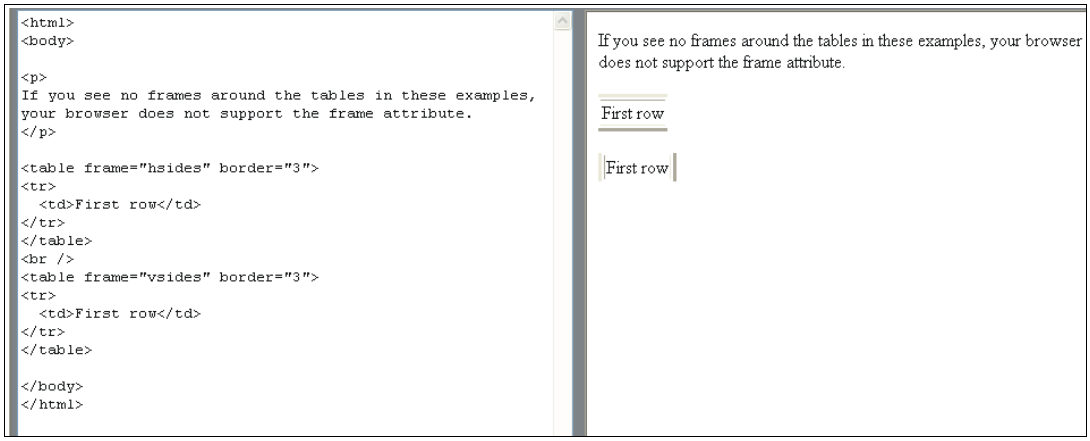
First Row

Second Row

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

This example demonstrates how to use the "frame" attribute to control the borders around the table.

The frame and border attributes



How to use the "frame" and "border" attributes to control the borders around the table.

Table Tags

Tag	Description
<table>	Defines a table
<th>	Defines a table header
<tr>	Defines a table row
<td>	Defines a table cell
<caption>	Defines a table caption
<colgroup>	Defines groups of table columns
<col>	Defines the attribute values for one or more columns in a table
<thead>	Defines a table head
<tbody>	Defines a table body
<tfoot>	Defines a table footer

HTML <table> tag

Definition and Usage

The <table> tag defines a table. Inside a <table> tag you can put table headers, table rows, table cells, and other tables.

Example

Source	Output
<table border = "1"> <tr> <td>Cell A</td> <td>Cell B</td> </tr> </table>	Cell A Cell B

HTML <th> tag

Definition and Usage

Defines a table header cell in a table. The text within the th element usually renders in bold.

Example

Source	Output
<table border = "1"> <tr> <th>Header 1</th> <th>Header 2</th>	Header 1 Header 2 Cell A Cell B

</tr> <tr> <td>Cell A</td> <td>Cell B</td> </tr> </table>	

HTML <tr> tag

Definition and Usage

Defines a row in a table.

Example

Source	Output
<table border = "1"> <tr> <td>Cell A</td> <td>Cell B</td> </tr> </table>	Cell A Cell B

HTML <td> tag

Source	Output
<table border = "1"> <tr> <td>Cell A</td> <td>Cell B</td> </tr> </table>	Cell A Cell B

HTML <caption> tag

Definition and Usage

This element defines a table caption. The <caption> tag must be inserted immediately after the <table> tag. You can specify only one caption per table. Usually the caption will be centered above the table.

Source	Output
<table border="1"> <caption>This is a caption</caption> <tr> <td>Cell 1</td> <td>Cell 2</td> </tr> </table>	This is a caption Cell 1 Cell 2

HTML <colgroup> tag

Definition and Usage

Defines groups of table columns. With this element, you can group columns for formatting. This element is only valid inside the <table> tag.

Tips and Notes

Note: The colgroup element is an empty element that contains attributes only. To create columns, you must specify td elements within a tr element.

Example

This example creates a table with four columns, with the first three columns in one colgroup, and the last column in the second colgroup:

Source	Output
<table border="1"> <colgroup span="3"	1 2 3 4

```
style="color:#FF0000;">
</colgroup>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</table>
```

HTML <col> tag

Definition and Usage

Defines the attribute values for one or more columns in a table. You can only use this element inside a table or a colgroup.

Differences Between HTML and XHTML

In HTML the <col> tag has no end tag.
In XHTML the <col> tag must be properly closed.

Tips and Notes

Note: The col element is an empty element that contains attributes only. To create columns, you must specify td elements within a tr element.
Tip: Use this element when you want to specify different attribute values to a column inside a colgroup. Without a col element a column will inherit all its attribute values from the colgroup.

```
This example shows a colgroup that has
three columns of different widths:
<table border="1">
<colgroup span="3">
<col width="20"></col>
<col width="50"></col>
<col width="80"></col>
</colgroup>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</table>
```

This example shows a colgroup that has three columns of different widths:

1	2	3	4

HTML <thead> tag

Tips and Notes

Note: The <thead> must have a <tr> tag inside!
Note: If you use the thead, tfoot and tbody elements, you must use every element. They should appear in this order: <thead>, <tfoot> and <tbody>, so that browsers can render the foot before receiving all the data. You must use these tags within the table element.
Note: The <thead>,<tbody> and <tfoot> elements are seldom used, because of bad browser support. Expect this to change in future versions of XHTML. If you have Internet Explorer 5.0 or newer, you can view an example in our XML tutorial.

Example

Source

```
<table border = "1">
<thead>
<tr>
<td>This text is in the THEAD</td>
</tr>
</thead>
<tfoot>
```

Output

This text is in the THEAD
This text is in the TFOOT
This text is in the TBODY

```
<tr>
<td>This text is in the TFOOT</td>
</tr>
</tfoot>
<tbody>
<tr>
<td>This text is in the TBODY</td>
</tr>
</tbody>
</table>
```

HTML <tbody> tag

Tips and Notes

Note: The <tbody> must have a <tr> tag inside!
Note: If you use the thead, tfoot and tbody elements, you must use every element. They should appear in this order: <thead>, <tfoot> and <tbody>, so that browsers can render the foot before receiving all the data. You must use these tags within the table element.
Note: The <thead>,<tbody> and <tfoot> elements are seldom used, because of bad browser support. Expect this to change in future versions of XHTML. If you have Internet Explorer 5.0 or newer, you can view an example in our XML tutorial.

Source

```
<table border = "1">
<thead>
<tr>
<td>This text is in the THEAD</td>
</tr>
</thead>
<tfoot>
<tr>
<td>This text is in the TFOOT</td>
</tr>
</tfoot>
<tbody>
<tr>
<td> This text is in the TBODY</td>
</tr>
</tbody>
</table>
```

Output

This text is in the THEAD
This text is in the TFOOT
This text is in the TBODY

HTML <tfoot> tag

Tips and Notes

Note: The <tfoot> must have a <tr> tag inside!
Note: If you use the thead, tfoot and tbody elements, you must use every element. They should appear in this order: <thead>, <tfoot> and <tbody>, so that browsers can render the foot before receiving all the data. You must use these tags within the table element.
Note: The <thead>,<tbody> and <tfoot> elements are seldom used, because of bad browser support. Expect this to change in future versions of XHTML. If you have Internet Explorer 5.0 or newer, you can view an example in our XML tutorial.

Source

```
<table border = "1">
<thead>
<tr>
<td>This text is in the THEAD</td>
</tr>
</thead>
<tfoot>
<tr>
<td>This text is in the TFOOT</td>
</tr>
```

Output

This text is in the THEAD
This text is in the TFOOT
This text is in the TBODY

```
</tfoot>
<tbody>
<tr>
<td>This text is in the TBODY</td>
</tr>
</tbody>
</table>
```

HTML Lists

An unordered list

This example demonstrates an unordered list.

```
<html>
<body>

<h4>An Unordered List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

An Unordered List:

- Coffee
- Tea
- Milk

An ordered list

This example demonstrates an ordered list.

```
<html>
<body>

<h4>An Ordered List:</h4>
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

An Ordered List:

1. Coffee
2. Tea
3. Milk

(You can find more examples at the bottom of this page)

Unordered Lists

An unordered list is a list of items. The list items are marked with bullets (typically small black circles).
An unordered list starts with the <ul> tag. Each list item starts with the <li> tag.

```
<ul>
<li>Coffee</li>
<li>Milk</li>
</ul>
```

Here is how it looks in a browser:

- Coffee
- Milk

Inside a list item you can put paragraphs, line breaks, images, links, other lists, etc.

Ordered Lists

An ordered list is also a list of items. The list items are marked with numbers.
An ordered list starts with the <ol> tag. Each list item starts with the <li> tag.

```
<ol>
<li>Coffee</li>
<li>Milk</li>
</ol>
```

Here is how it looks in a browser:
1. Coffee
2. Milk

Inside a list item you can put paragraphs, line breaks, images, links, other lists, etc.

Definition Lists

A definition list is not a list of items. This is a list of terms and explanation of the terms.
A definition list starts with the <dl> tag. Each definition-list term starts with the <dt> tag. Each definition-list definition starts with the <dd> tag.

```
<dl>
<dt>Coffee</dt>
<dd>Black hot drink</dd>
<dt>Milk</dt>
<dd>White cold drink</dd>
</dl>
```

Here is how it looks in a browser:
Coffee
Black hot drink

Milk
White cold drink

Inside a definition-list definition (the <dd> tag) you can put paragraphs, line breaks, images, links, other lists, etc.

More Examples

Different types of ordered lists

```
<html>
<body>

<h4>Numbered list:</h4>
<ol>
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

<h4>Letters list:</h4>
<ol type="A">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

<h4>Lowercase letters list:</h4>
<ol type="a">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
```

Numbered list:
1. Apples
2. Bananas
3. Lemons
4. Oranges

Letters list:
A. Apples
B. Bananas
C. Lemons
D. Oranges

Lowercase letters list:
a. Apples
b. Bananas
c. Lemons
d. Oranges

Roman numbers list:
I. Apples
II. Bananas

```
 <li>Oranges</li>
</ol>

<h4>Roman numbers list:</h4>
<ol type="I">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

<h4>Lowercase Roman numbers list:</h4>
<ol type="i">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

</body>
</html>
```

Lemons
Oranges

Lowercase Roman numbers list:

Apples
Bananas
Lemons
Oranges

This example demonstrates different types of ordered lists.

Different types of unordered Lists

```
<html>
<body>

<h4>Disc bullets list:</h4>
<ul type="disc">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>

<h4>Circle bullets list:</h4>
<ul type="circle">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>

<h4>Square bullets list:</h4>
<ul type="square">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>

</body>
</html>
```

Disc bullets list:

Apples
Bananas
Lemons
Oranges

Circle bullets list:

Apples
Bananas
Lemons
Oranges

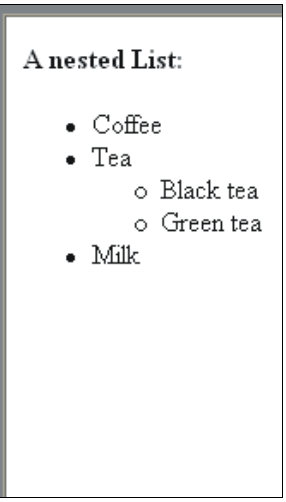
Square bullets list:

Apples
Bananas
Lemons
Oranges

This example demonstrates different types of unordered lists.

Nested list

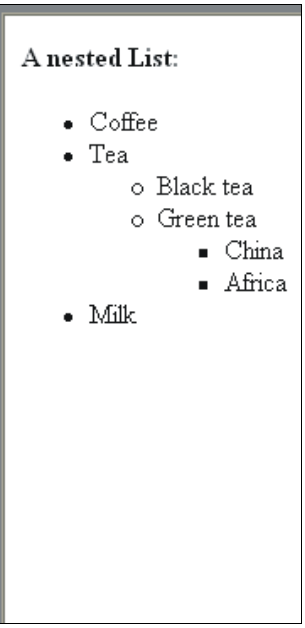
```
<html>
<body>

<h4>A nested List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
    <li>Black tea</li>
    <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```



This example demonstrates how you can nest lists.

Nested list 2

```
<html>
<body>

<h4>A nested List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
    <li>Black tea</li>
    <li>Green tea
      <ul>
      <li>China</li>
      <li>Africa</li>
      </ul>
    </li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```



This example demonstrates a more complicated nested list.

Definition list

```
<html>
<body>

<h4>A Definition List:</h4>
<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl>

</body>
</html>
```

A Definition List:

Coffee
Black hot drink
Milk
White cold drink

This example demonstrates a definition list.

List Tags

Tag	Description
<ol>	Defines an ordered list
<ul>	Defines an unordered list
<li>	Defines a list item
<dl>	Defines a definition list
<dt>	Defines a definition term
<dd>	Defines a definition description
<dir>	Deprecated. Use <ul> instead
<menu>	Deprecated. Use <ul> instead

HTML <ol> tag

Definition and Usage

The <ol> tag defines the start of an ordered list.
Tip: Use styles to define the type of list.

Example

Source	Output
<ol> <li>Coffee</li> <li>Tea</li> </ol>	1. Coffee 2. Tea

HTML <ul> tag

Definition and Usage

The <ul> tag defines an unordered list.
Tip: Use styles to define the type of list.

Source	Output
<ul> <li>Coffee</li> <li>Tea</li> </ul>	• Coffee • Tea

HTML <li> tag

Definition and Usage

The <li> tag defines the start of a list item. The <li> tag is used in both ordered (<ol>) and unordered lists (<ul>).
Tip: Use styles to define the type of list.

Examples

Source	Output
<ol> <li>Coffee</li> <li>Tea</li> </ol> <ul> <li>Coffee</li> <li>Tea</li> </ul>	1. Coffee 2. Tea • Coffee • Tea

HTML <dl> tag

Definition and Usage

The <dl> tag defines a definition list.

HTML <dt> tag

Definition and Usage

The <dt> tag defines the start of a term in a definition list.

HTML <dd> tag

Definition and Usage

The <dd> tag defines the description of a term in a definition list.

Source	Output
<dl> <dt>Coffee</dt> <dd>Black hot drink</dd> <dt>Milk</dt> <dd>White cold drink</dd> </dl>	Coffee Black hot drink Milk White cold drink

HTML <dir> tag

Definition and Usage

The <dir> tag defines a directory list.

Tip: Use CSS styles to define the type of list!

Source	Output
<dir> <li>html</li> <li>xhtml</li> </dir>	• html • xhtml

HTML <menu> tag

Definition and Usage

The <menu> tag defines a menu list.

Tip: Use CSS styles to define the type of list!

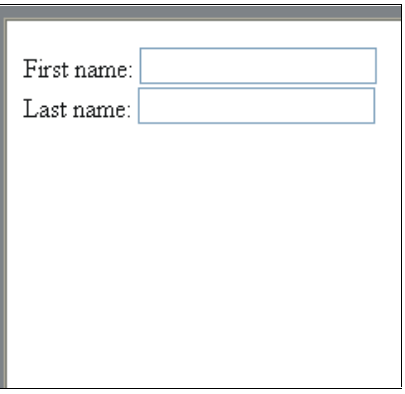
Source	Output
<menu> <li>html</li> <li>xhtml</li> </menu>	• html • xhtml

HTML Forms and Input

HTML Forms are used to select different kinds of user input.

Text fields

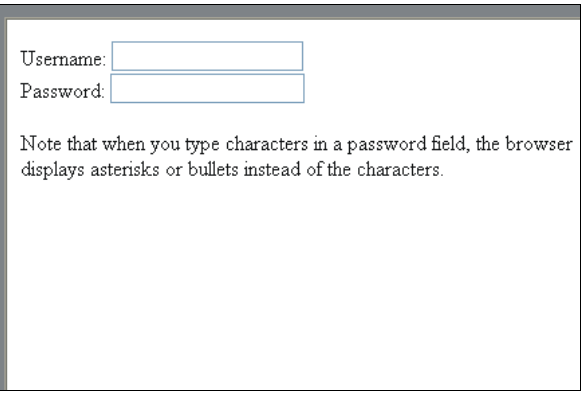
```
<html>
<body>

<form action="">
First name:
<input type="text" name="firstname">
<br>
Last name:
<input type="text" name="lastname">
</form>

</body>
</html>
```



This example demonstrates how to create text fields on an HTML page. A user can write text in a text field.

Password fields

```
<html>
<body>

<form action="">
Username:
<input type="text" name="user">
<br>
Password:
<input type="password" name="password">
</form>
<p>
Note that when you type characters in a password field,
the browser displays asterisks or bullets instead of the
characters.
</p>
</body>
</html>
```



This example demonstrates how to create a password field on an HTML page.
(You can find more examples at the bottom of this page)

Forms

A form is an area that can contain form elements.
Form elements are elements that allow the user to enter information (like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.) in a form.
A form is defined with the <form> tag.

```
<form>
  <input>
  <input>
</form>
```

Input

The most used form tag is the <input> tag. The type of input is specified with the type attribute. The most commonly used input types are explained below.

Text Fields

Text fields are used when you want the user to type letters, numbers, etc. in a form.

```
<form>
First name:
<input type="text" name="firstname">
<br>
Last name:
<input type="text" name="lastname">
</form>
```

How it looks in a browser:

First name:

Last name:

Note that the form itself is not visible. Also note that in most browsers, the width of the text field is 20 characters by default.

Radio Buttons

Radio Buttons are used when you want the user to select one of a limited number of choices.

```
<form>
<input type="radio" name="sex" value="male"> Male
<br>
<input type="radio" name="sex" value="female"> Female
</form>
```

How it looks in a browser:

Male

Female

Note that only one option can be chosen.

Checkboxes

Checkboxes are used when you want the user to select one or more options of a limited number of choices.

```
<form>
I have a bike:
<input type="checkbox" name="vehicle" value="Bike" />
<br />
I have a car:
<input type="checkbox" name="vehicle" value="Car" />
<br />
I have an airplane:
<input type="checkbox" name="vehicle" value="Airplane" />
</form>
```

How it looks in a browser:

I have a bike:

I have a car:

I have an airplane:

The Form's Action Attribute and the Submit Button

When the user clicks on the "Submit" button, the content of the form is sent to another file. The form's action attribute defines the name of the file to send the content to. The file defined in the action attribute usually does something with the received input.

```
<form name="input" action="html_form_action.asp"
method="get">
Username:
<input type="text" name="user">
<input type="submit" value="Submit">
</form>
```

How it looks in a browser:

Username: Submit

If you type some characters in the text field above, and click the "Submit" button, you will send your input to a page called "html_form_action.asp". That page will show you the received input.

More Examples

Checkboxes

```
<html>
<body>

<form action="">
I have a bike:
<input type="checkbox" name="vehicle" value="Bike" />
<br />
I have a car:
<input type="checkbox" name="vehicle" value="Car" />
<br />
I have an airplane:
<input type="checkbox" name="vehicle" value="Airplane" />
</form>

</body>
</html>
```

I have a bike: ☐
I have a car: ☐
I have an airplane: ☐

This example demonstrates how to create check-boxes on an HTML page. A user can select or unselect a checkbox.

Radio buttons

```
<html>
<body>

<form action="">
Male:
<input type="radio" checked="checked"
name="Sex" value="male">
<br>
Female:
<input type="radio"
name="Sex" value="female">
</form>

<p>
When a user clicks on a radio-button, the button becomes
checked, and all other buttons with the same name become
unchecked
</p>

</body>
</html>
```

Male: ◉
Female: ○

When a user clicks on a radio-button, the button becomes checked, and all other buttons with the same name become unchecked

This example demonstrates how to create radio-buttons on an HTML page.
Simple drop down box

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

Volvo
Volvo
Saab
Fiat
Audi

This example demonstrates how to create a simple drop-down box on an HTML page. A drop-down box is a selectable list.

Another drop down box

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat" selected="selected">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

This example demonstrates how to create a simple drop-down box with a pre-selected value.

Textarea

```
<html>
<body>

<p>
This example cannot be edited
because our editor uses a textarea
for input,
and your browser does not allow
a textarea inside a textarea.
</p>

<textarea rows="10" cols="30">
The cat was playing in the garden.
</textarea>

</body>
</html>
```

This example cannot be edited because our editor uses a textarea for input, and your browser does not allow a textarea inside a textarea.

The cat was playing in the garden.

This example demonstrates how to create a text-area (a multi-line text input control). A user can write text in the text-area. In a text-area you can write an unlimited number of characters.

Create a button

```
<html>
<body>

<form action="">
<input type="button" value="Hello world!">
</form>

</body>
</html>
```

This example demonstrates how to create a button. On the button you can define your own text.

Fieldset around data

```
<html>
<body>

<fieldset>
<legend>
Health information:
</legend>
<form action="">
Height <input type="text" size="3">
Weight <input type="text" size="3">
</form>
</fieldset>

<p>
If there is no border around the input form, your browser
is too old.
</p>

</body>
</html>
```

Health information:

Height 5"8' Weight 175

If there is no border around the input form, your browser is too old.

This example demonstrates how to draw a border with a caption around your data.

Form Examples

Form with input fields and a submit button

```
<html>
<body>

<form name="input" action="html_form_action.asp"
method="get">

Type your first name:
<input type="text" name="FirstName" value="Mickey"
size="20">
<br>Type your last name:
<input type="text" name="LastName" value="Mouse"
size="20">
<br>
<input type="submit" value="Submit">

</form>

<p>
If you click the "Submit" button, you will send your
input to a new page called html_form_action.asp.
</p>

</body>
</html>
```

Type your first name: Mickey

Type your last name: Mouse

Submit

If you click the "Submit" button, you will send your input to a new page called html_form_action.asp.

This example demonstrates how to add a form to a page. The form contains two input fields and a submit button.

Form with checkboxes

```
<body>

<form name="input" action="html_form_action.asp"
method="get">
I have a bike:
<input type="checkbox" name="vehicle" value="Bike"
checked="checked" />
<br />
I have a car:
<input type="checkbox" name="vehicle" value="Car" />
<br />
I have an airplane:
<input type="checkbox" name="vehicle" value="Airplane" />
<br /><br />
<input type="submit" value="Submit" />
</form>

<p>
If you click the "Submit" button, you send your input to
a new page called html_form_action.asp.
</p>

</body>
</html>
```

I have a bike:

I have a car:

I have an airplane:

Submit

If you click the "Submit" button, you send your input to a new page called html_form_action.asp.

This form contains two checkboxes, and a submit button.

Form with radio buttons

```
<html>
<body>

<form name="input" action="html_form_action.asp"
method="get">
Male:
<input type="radio" name="Sex" value="Male"
checked="checked">
<br>
Female:
<input type="radio" name="Sex" value="Female">
<br>
<input type ="submit" value ="Submit">
</form>

<p>
If you click the "Submit" button, you will send your
input to a new page called html_form_action.asp.
</p>

</body>
</html>
```

Male: ◉
Female: ○
Submit

If you click the "Submit" button, you will send your input to a new page called html_form_action.asp.

This form contains two radio buttons, and a submit button.

Send e-mail from a form

```
<html>
<body>
<form action="MAILTO:someone@w3schools.com" method="post"
enctype="text/plain">

<h3>This form sends an e-mail to W3Schools.</h3>
Name:<br>
<input type="text" name="name"
value="yourname" size="20">
<br>
Mail:<br>
<input type="text" name="mail"
value="yourmail" size="20">
<br>
Comment:<br>
<input type="text" name="comment"
value="yourcomment" size="40">
<br><br>
<input type="submit" value="Send">
<input type="reset" value="Reset">

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

This form sends an e-mail to W3Schools.

Name:
yourname
Mail:
yourmail
Comment:
yourcomment

Send Reset

This example demonstrates how to send e-mail from a form.

Form Tags

Tag	Description
<form>	Defines a form for user input
<input>	Defines an input field
<textarea>	Defines a text-area (a multi-line text input control)
<label>	Defines a label to a control
<fieldset>	Defines a fieldset
<legend>	Defines a caption for a fieldset
<select>	Defines a selectable list (a drop-down box)
<optgroup>	Defines an option group
<option>	Defines an option in the drop-down box
<button>	Defines a push button
<isindex>	Deprecated. Use <input> instead

HTML <form> tag

Definition and Usage

The form element creates a form for user input. A form can contain textfields, checkboxes, radio-buttons and more. Forms are used to pass user-data to a specified URL.

Source	Output
<form action="form_action.asp" method="get"> First name: <input type="text" name="fname" value="Mickey" /> Last name: <input type="text" name="lname" value="Mouse" /> <input type="submit" value="Submit" /> </form> If you click the "Submit" button, you will send your input to a new page called form_action.asp. 	First name: Mickey Last name: Mouse Submit If you click the "Submit" button, you will send your input to a new page called form_action.asp.

HTML <input> tag

Definition and Usage

The <input> tag defines the start of an input field where the user can enter data.

Note: The input element is empty, it contains attributes only.

Tip: Use the label element to define a label to a form control.

Source	Output
<form action="form_action.asp" method="get"> First name: <input type="text" name="fname" value="Mickey" /> Last name: <input type="text" name="lname" value="Mouse" /> <input type="submit" value="Submit" /> </form> If you click the "Submit" button, you will send your input to a new page called form_action.asp. 	First name: Mickey Last name: Mouse Submit If you click the "Submit" button, you will send your input to a new page called form_action.asp.

HTML <textarea> tag

Definition and Usage

Defines a text-area (a multi-line text input control). A user can write text in the text-area. In a text-area you can write an unlimited number of characters. The default font in the text-area is fixed pitch.

Source	Output
<textarea rows="2" cols="20"> The cat was playing in the garden. Suddenly a dog showed up..... </textarea>	The cat w as playing in the gard

HTML <label> tag

Definition and Usage

Defines a label to a control. If you click the text within the label element, it is supposed to toggle the control.

Note: The "for" attribute binds a label to another element. Set the value of the "for" attribute equal to the value of the "id" attribute of the related element.

Source	Output
Try clicking on the text labels: <form name="input" action=""> <input type="radio" name="sex" id="male" /> <label for="male">Male</label> <input type="radio" name="sex" id="female" /> <label for="female">Female</label> </form>	Try clicking on the text labels: Male Female

HTML <fieldset> tag

Definition and Usage

The fieldset element draws a box around its containing elements.

Source	Output
<fieldset> Height <input type="text" size="3" /> Weight <input type="text" size="3" /> </fieldset>	Height Weight

HTML <legend> tag

Definition and Usage

The legend element defines a caption for a fieldset.

Source	Output
<fieldset> <legend>Health information:</legend> Height <input type="text" size="3" /> Weight <input type="text" size="3" /> </fieldset>	Health information:Height Weight

HTML <select> tag

Definition and Usage

The select element creates a drop-down list.

Tip: Use this tag in the form element to accept user input.

Source	Output
<select> <option value ="volvo">Volvo</option> <option value ="saab">Saab</option> <option value ="opel">Opel</option> <option value ="audi">Audi</option> </select>	Volvo

HTML <optgroup> tag

Definition and Usage

Defines an option group. This element allows you to group choices. When you have a long list of options, groups of related choices are easier to handle.

Source	Output

```
<select>
<optgroup label="Swedish Cars">
<option value ="volvo">Volvo</option>
<option value ="saab">Saab</option>
</optgroup>
<optgroup label="German Cars">
<option value ="mercedes">Mercedes</option>
<option value ="audi">Audi</option>
</optgroup>
</select>
```

Volvo

HTML <option> tag

Note: The <option> tag can be used without any attributes, but you usually need the value attribute, which indicates what is sent to the server.
Note: Use this tag in conjunction with the select element, elsewhere it is meaningless.

Source	Output
<select> <option value ="volvo">Volvo</option> <option value ="saab">Saab</option> <option value ="opel" selected="selected">Opel</option> <option value ="audi">Audi</option> </select>	Opel

HTML <button> tag

Definition and Usage

Defines a push button. Inside a button element you can put content, like text or images. This is the difference between this element and buttons created with the input element.

Source	Output
<button>Click Me!</button>	Click Me! Click mi

HTML Images

With HTML you can display images in a document.

Insert images

```
<html>
<body>

<p>
An image:
<img src="constr4.gif"
width="144" height="50">
</p>

<p>
A moving image:
<img src="hackanm.gif"
width="48" height="48">
</p>

<p>
Note that the syntax of inserting a moving image is no
different from that of a non-moving image.
</p>

</body>
</html>
```

An image:

A moving image:

Note that the syntax of inserting a moving image is no different from that of a non-moving image.

This example demonstrates how to display images in your Web page.

Insert images from different locations

```
<html>
<body>

<p>
An image from another folder:
<img src="/images/netscape.gif"
width="33" height="32">
</p>

<p>
An image from W3Schools:
<img src="http://www.w3schools.com/images/ie.gif">
</p>

</body>
</html>
```

An image from another folder:

An image from W3Schools:

This example demonstrates how to display images from another folder or another server in your Web page.
(You can find more examples at the bottom of this page)

The Image Tag and the Src Attribute

In HTML, images are defined with the <img> tag.
The <img> tag is empty, which means that it contains attributes only and it has no closing tag.
To display an image on a page, you need to use the src attribute. Src stands for "source". The value of the src attribute is the URL of the image you want to display on your page.
The syntax of defining an image:

```
<img src="url">
```

The URL points to the location where the image is stored. An image named "boat.gif" located in the directory "images" on "www.w3schools.com" has the URL: http://www.w3schools.com/images/boat.gif.
The browser puts the image where the image tag occurs in the document. If you put an image tag between two paragraphs, the browser shows the first paragraph, then the image, and then the second paragraph.

The Alt Attribute

The alt attribute is used to define an "alternate text" for an image. The value of the alt attribute is an author-defined text:

```
<img src="boat.gif" alt="Big Boat">
```

The "alt" attribute tells the reader what he or she is missing on a page if the browser can't load images. The browser will then display the alternate text instead of the image. It is a good practice to include the "alt" attribute for each image on a page, to improve the display and usefulness of your document for people who have text-only browsers.

Basic Notes - Useful Tips

If an HTML file contains ten images - eleven files are required to display the page right. Loading images take time, so my best advice is: Use images carefully.

Background image

```
<html>
<body background="background.jpg">

<h3>Look: A background image!</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```

Look: A background image!

Both gif and jpg files can be used as HTML backgrounds.

If the image is smaller than the page, the image will repeat itself.

This example demonstrates how to add a background image to an HTML page.

Aligning images

```
<html>
<body>

<p>
An image
<img src="hackanm.gif"
align="bottom" width="48" height="48">
in the text
</p>

<p>
An image
<img src ="hackanm.gif"
align="middle" width="48" height="48">
in the text
</p>

<p>
An image
<img src ="hackanm.gif"
align="top" width="48" height="48">
in the text
</p>

<p>Note that bottom alignment is the default
alignment</p>

<p>
An image
<img src ="hackanm.gif"
width="48" height="48">
in the text
</p>

<p>
<img src ="hackanm.gif"
width="48" height="48">
An image before the text
</p>

<p>
An image after the text
<img src ="hackanm.gif"
```

An image in the text

An image in the text

An image in the text

Note that bottom alignment is the default alignment

An image in the text

An image before the text

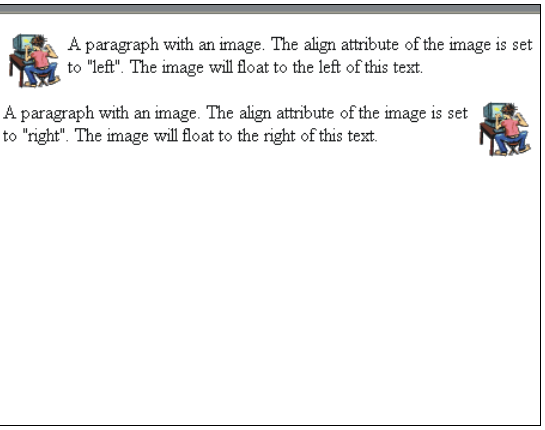
An image after the text

```
width="48" height="48">
</p>

</body>
</html>
```

This example demonstrates how to align an image within the text.

Let the image float

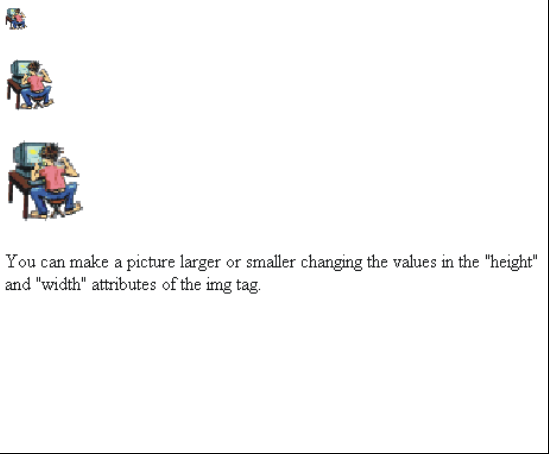
```
<html>
<body>

<p>
<img src ="hackanm.gif"
align ="left" width="48" height="48">
A paragraph with an image. The align attribute of the
image is set to "left". The image will float to the left
of this text.
</p>

<p>
<img src ="hackanm.gif"
align ="right" width="48" height="48">
A paragraph with an image. The align attribute of the
image is set to "right". The image will float to the
right of this text.
</p>

</body>
</html>
```



This example demonstrates how to let an image float to the left or right of a paragraph.

Adjust images to different sizes

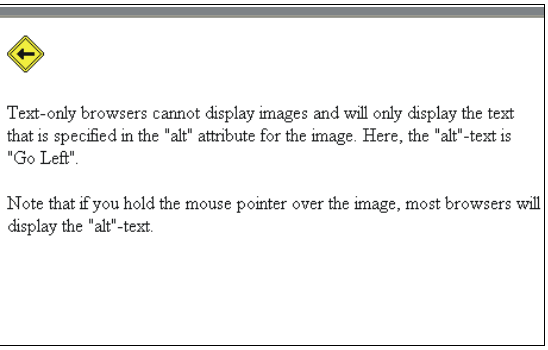
```
<body>

<p>
<img src="hackanm.gif"
width="20" height="20">
</p>

<p>
<img src="hackanm.gif"
width="45" height="45">
</p>

<p>
<img src="hackanm.gif"
width="70" height="70">
</p>

<p>
You can make a picture larger or smaller changing the
values in the "height" and "width" attributes of the
img tag.
</p>

</body> </html>
```



This example demonstrates how to adjust images to different sizes.

Display an alternate text for an image

```
<html>
<body>

<img src="goleft.gif" alt="Go Left" width="32"
height="32">

<p>
Text-only browsers cannot display images and will only
display the text that is specified in the "alt" attribute
for the image. Here, the "alt"-text is "Go Left".</p>
<p>
Note that if you hold the mouse pointer over the image,
most browsers will display the "alt"-text.
</p>

</body>
</html>
```



This example demonstrates how to display an alternate text for an image. The "alt" attribute tells the reader what he or she is missing on a page if the browser can't load images. It is a good practice to include the "alt" attribute for each image on a page.

Make a hyperlink of an image

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65"
height="38">
</a>
</p>

</body>
</html>
```

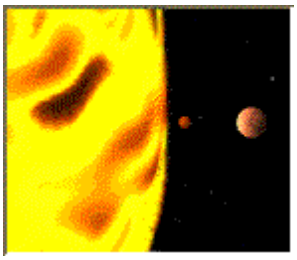
You can also use an image as a link: Next

This example demonstrates how to use an image as a link.

Create an image map

```
<html>
<body>

<p>
Click on one of the planets to watch it
closer:
</p>

<img src="planets.gif"
width="145" height="126"
usemap="#planetmap">

<map id="planetmap" name="planetmap">

<area shape="rect"
coords="0,0,82,126"
alt="Sun"
href="sun.htm">

<area shape="circle"
coords="90,58,3"
alt="Mercury"
href="mercur.htm">

<area shape="circle"
coords="124,58,8"
alt="Venus"
href="venus.htm">

</map>

<p><b>Note:</b> The "usemap" attribute
in the img element refers to the "id" or
"name" (browser dependant) attribute in
the map element, therefore we have added
both the "id" and "name" attributes to the
map element.</p>

</body>
</html>
```

Click on one of the planets to watch it closer:



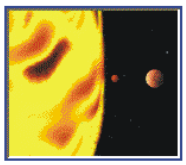
Note: The "usemap" attribute in the img element refers to the "id" or "name" (browser dependant) attribute in the map element, therefore we have added both the "id" and "name" attributes to the map element.

This example demonstrates how to create an image map, with clickable regions. Each of the regions is a hyperlink.

Turn an image into an image map

```
<html>
<body>

<p>
Move the mouse over the image, and look at the status bar
to see how the
coordinates change.
</p>

<p>
<a href="tryhtml_ismap.htm">
<img src="planets.gif"
ismap width="146" height="126">
</a>
</p>

</body>
</html>
```

Move the mouse over the image, and look at the status bar to see how the coordinates change.



This example demonstrates how to turn an image into an image map. You will see that if you move the mouse over the image, the coordinates will be displayed on the status bar.

Image Tags

Tag	Description
<img>	Defines an image
<map>	Defines an image map
<area>	Defines a clickable area inside an image map

HTML <img> tag

Definition and Usage

The img element defines an image.

Differences Between HTML and XHTML

In HTML the <img> tag has no end tag.
In XHTML the <img> tag must be properly closed.
The "align", "border", "hspace", and "vspace" attributes of the image element were deprecated in HTML 4.01.
The "align", "border", "hspace", and "vspace" attributes of the image element are not supported in XHTML 1.0 Strict DTD.

Mozilla Firefox and the alt Attribute

If you use the alt attribute in Firefox on images and image maps the text will not show on mouse-over as in other browsers.
Firefox uses the alt attribute the way it's meant to be used, like an alternative text if the image won't load, not as a mouse-over text.
Firefox does support mouse-over comments on images or image maps if you use a title attribute in the <img> tag.
E.g. <img src="image.gif" alt="bla" title="bla bla bla"

Source	Output
<img src="angry.gif" alt="Angry" />	

HTML <map> tag

Definition and Usage

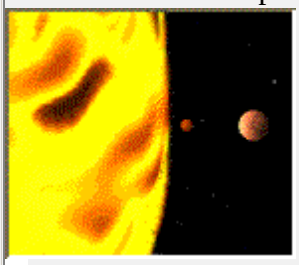
Defines a client-side image-map. An image-map is an image with clickable regions.

Differences Between HTML and XHTML
NONE

Tips and Notes
Note: The area element is always nested inside the map element. The area element defines the regions in the image map.
Note: The **usemap** attribute in <img> refers to the **id** or **name** (browser dependant) attribute in <map>, therefore we have added both the id and name attributes to <map>.

HTML <area> tag
Definition and Usage
Defines a region in an image map.
Differences Between HTML and XHTML
In HTML the <area> tag has no end tag.
In XHTML the <area> tag must be properly closed.
Tips and Notes
This element is always nested inside a <map> tag.
Note: The **usemap** attribute in <image> refers to the **id** or **name** (browser dependant) attribute in <map>, therefore we have added both the id and name attributes to <map>.

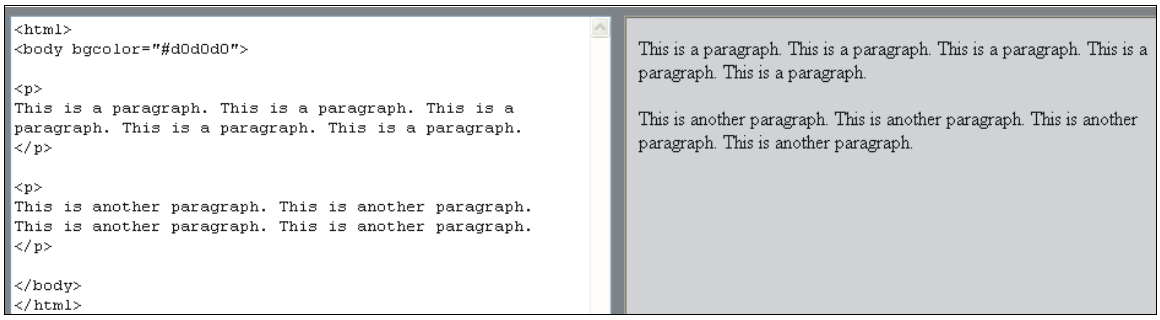
Example for Map + area

Source	Output
Click on one of the planets: <img src ="planets.gif" width ="145" height ="126" alt="Planets" usemap ="#planetmap" /> <map id ="planetmap" name="planetmap"> <area shape ="rect" coords ="0,0,82,126" href ="sun.htm" target ="_blank" alt="Sun" /> <area shape ="circle" coords ="90,58,3" href ="mercur.htm" target ="_blank" alt="Mercury" /> <area shape ="circle" coords ="124,58,8" href ="venus.htm" target ="_blank" alt="Venus" /> </map>	Click on one of the planets: 

HTML Backgrounds

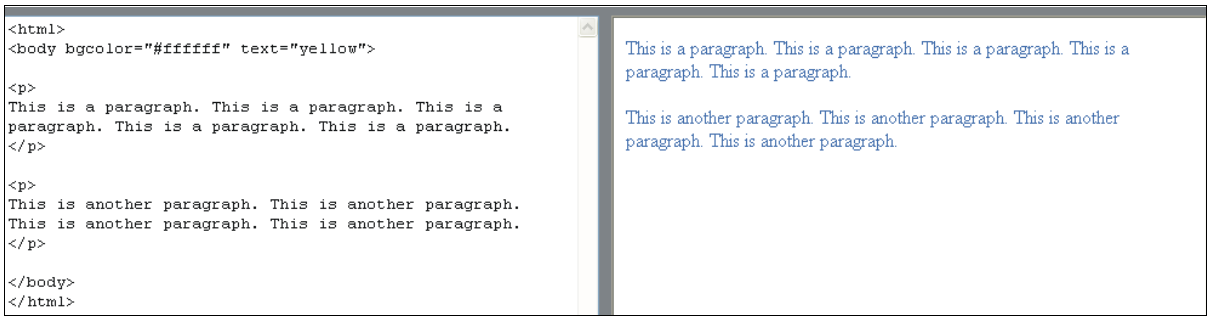
A good background can make a Web site look really great.

Good background and text color



An example of a background color and a text color that makes the text on the page easy to read.

Bad background and text color



An example of a background color and a text color that makes the text on the page difficult to read.
(You can find more examples at the bottom of this page)

Backgrounds

The <body> tag has two attributes where you can specify backgrounds. The background can be a color or an image.

Bgcolor

The bgcolor attribute specifies a background-color for an HTML page. The value of this attribute can be a hexadecimal number, an RGB value, or a color name:

```
<body bgcolor="#000000">
<body bgcolor="rgb(0,0,0)">
<body bgcolor="black">
```

The lines above all set the background-color to black.

Background

The background attribute specifies a background-image for an HTML page. The value of this attribute is the URL of the image you want to use. If the image is smaller than the browser window, the image will repeat itself until it fills the entire browser window.

```
<body background="clouds.gif">
<body background="http://www.w3schools.com/clouds.gif">
```

The URL can be relative (as in the first line above) or absolute (as in the second line above).

Note: If you want to use a background image, you should keep in mind:

- Will the background image increase the loading time too much?
- Will the background image look good with other images on the page?

- Will the background image look good with the text colors on the page?
- Will the background image look good when it is repeated on the page?
- Will the background image take away the focus from the text?

Basic Notes - Useful Tips
The bgcolor, background, and the text attributes in the <body> tag are deprecated in the latest versions of HTML (HTML 4 and XHTML). The World Wide Web Consortium (W3C) has removed these attributes from its recommendations.
Style sheets (CSS) should be used instead (to define the layout and display properties of HTML elements).

HTML Colors

Color Values
HTML colors can be defined as a hexadecimal notation for the combination of Red, Green, and Blue color values (RGB).
The lowest value that can be given to one light source is 0 (hex #00) and the highest value is 255 (hex #FF).
The table below shows the result of combining Red, Green, and Blue light sources:.

Color	Color HEX	Color RGB
	#000000	rgb(0,0,0)
	#FF0000	rgb(255,0,0)
	#00FF00	rgb(0,255,0)
	#0000FF	rgb(0,0,255)
	#FFFF00	rgb(255,255,0)
	#00FFFF	rgb(0,255,255)
	#FF00FF	rgb(255,0,255)
	#C0C0C0	rgb(192,192,192)
	#FFFFFF	rgb(255,255,255)

W3C Standard Color Names
W3C has listed 16 color names that will validate with an HTML validator.
The color names are: aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow.

Cross-browser Color Names
A collection of nearly 150 color names are supported by all major browsers.
View the cross-browser color names

HTML Color Names

HTML Color Names

The table below provides a list of the color names that are supported by all major browsers.
Note: If you want your pages to validate with an HTML or a CSS validator, W3C has listed 16 color names that you can use: aqua, black, blue, fuchsia, gray, green, lime, maroon, navy,

olive, purple, red, silver, teal, white, and yellow. If you want to use other colors, you must specify their RGB or HEX value.
Click on a color name (or a hex value) to view the color as the background-color along with different text colors:

Color Name	Color HEX	Color
AliceBlue	#F0F8FF	
AntiqueWhite	#FAEBD7	
Aqua	#00FFFF	
Aquamarine	#7FFFD4	
Azure	#F0FFFF	
Beige	#F5F5DC	
Bisque	#FFE4C4	
Black	#000000	
BlanchedAlmond	#FFEBCD	
Blue	#0000FF	
BlueViolet	#8A2BE2	
Brown	#A52A2A	
BurlyWood	#DEB887	
CadetBlue	#5F9EA0	
Chartreuse	#7FFF00	
Chocolate	#D2691E	
Coral	#FF7F50	
CornflowerBlue	#6495ED	
Cornsilk	#FFF8DC	
Crimson	#DC143C	
Cyan	#00FFFF	
DarkBlue	#00008B	
DarkCyan	#008B8B	
DarkGoldenRod	#B8860B	
DarkGray	#A9A9A9	
DarkGrey	#A9A9A9	
DarkGreen	#006400	
DarkKhaki	#BDB76B	
DarkMagenta	#8B008B	
DarkOliveGreen	#556B2F	
Darkorange	#FF8C00	
DarkOrchid	#9932CC	
DarkRed	#8B0000	
DarkSalmon	#E9967A	
DarkSeaGreen	#8FBC8F	
DarkSlateBlue	#483D8B	
DarkSlateGray	#2F4F4F	
DarkSlateGrey	#2F4F4F	
DarkTurquoise	#00CED1	

DarkViolet	#9400D3	
DeepPink	#FF1493	
DeepSkyBlue	#00BFFF	
DimGray	#696969	
DimGrey	#696969	
DodgerBlue	#1E90FF	
FireBrick	#B22222	
FloralWhite	#FFFAF0	
ForestGreen	#228B22	
Fuchsia	#FF00FF	
Gainsboro	#DCDCDC	
GhostWhite	#F8F8FF	
Gold	#FFD700	
GoldenRod	#DAA520	
Gray	#808080	
Grey	#808080	
Green	#008000	
GreenYellow	#ADFF2F	
HoneyDew	#F0FFF0	
HotPink	#FF69B4	
IndianRed	#CD5C5C	
Indigo	#4B0082	
Ivory	#FFFFF0	
Khaki	#F0E68C	
Lavender	#E6E6FA	
LavenderBlush	#FFF0F5	
LawnGreen	#7CFC00	
LemonChiffon	#FFFACD	
LightBlue	#ADD8E6	
LightCoral	#F08080	
LightCyan	#E0FFFF	
LightGoldenRodYellow	#FAFAD2	
LightGray	#D3D3D3	
LightGrey	#D3D3D3	
LightGreen	#90EE90	
LightPink	#FFB6C1	
LightSalmon	#FFA07A	
LightSeaGreen	#20B2AA	
LightSkyBlue	#87CEFA	
LightSlateGray	#778899	
LightSlateGrey	#778899	
LightSteelBlue	#B0C4DE	
LightYellow	#FFFFE0	
Lime	#00FF00	

LimeGreen	#32CD32	
Linen	#FAF0E6	
Magenta	#FF00FF	
Maroon	#800000	
MediumAquaMarine	#66CDAA	
MediumBlue	#0000CD	
MediumOrchid	#BA55D3	
MediumPurple	#9370D8	
MediumSeaGreen	#3CB371	
MediumSlateBlue	#7B68EE	
MediumSpringGreen	#00FA9A	
MediumTurquoise	#48D1CC	
MediumVioletRed	#C71585	
MidnightBlue	#191970	
MintCream	#F5FFFA	
MistyRose	#FFE4E1	
Moccasin	#FFE4B5	
NavajoWhite	#FFDEAD	
Navy	#000080	
OldLace	#FDF5E6	
Olive	#808000	
OliveDrab	#6B8E23	
Orange	#FFA500	
OrangeRed	#FF4500	
Orchid	#DA70D6	
PaleGoldenRod	#EEE8AA	
PaleGreen	#98FB98	
PaleTurquoise	#AFEEEE	
PaleVioletRed	#D87093	
PapayaWhip	#FFEFD5	
PeachPuff	#FFDAB9	
Peru	#CD853F	
Pink	#FFC0CB	
Plum	#DDA0DD	
PowderBlue	#B0E0E6	
Purple	#800080	
Red	#FF0000	
RosyBrown	#BC8F8F	
RoyalBlue	#4169E1	
SaddleBrown	#8B4513	
Salmon	#FA8072	
SandyBrown	#F4A460	
SeaGreen	#2E8B57	
SeaShell	#FFF5EE	

Sienna	#A0522D	
Silver	#C0C0C0	
SkyBlue	#87CEEB	
SlateBlue	#6A5ACD	
SlateGray	#708090	
SlateGrey	#708090	
Snow	#FFFAFA	
SpringGreen	#00FF7F	
SteelBlue	#4682B4	
Tan	#D2B48C	
Teal	#008080	
Thistle	#D8BFD8	
Tomato	#FF6347	
Turquoise	#40E0D0	
Violet	#EE82EE	
Wheat	#F5DEB3	
White	#FFFFFF	
WhiteSmoke	#F5F5F5	
Yellow	#FFFF00	
YellowGreen	#9ACD32	

Cross-browser Color Values

Some years ago, when most computers only supported 256 different colors, a list of 216 Web Safe Colors was suggested as a Web standard. The reason for this was that the Microsoft and Mac operating system used 40 different "reserved" fixed system colors (about 20 each).

We are not sure how important this is now, since most computers today have the ability to display millions of different colors, but the choice is left to you.

The 216 cross-browser color palette was created to ensure that all computers would display the colors correctly when running a 256 color palette:

000000	000033	000066	000099	0000CC	0000FF
003300	003333	003366	003399	0033CC	0033FF
006600	006633	006666	006699	0066CC	0066FF
009900	009933	009966	009999	0099CC	0099FF
00CC00	00CC33	00CC66	00CC99	00CCCC	00CCFF
00FF00	00FF33	00FF66	00FF99	00FFCC	00FFFF
330000	330033	330066	330099	3300CC	3300FF
333300	333333	333366	333399	3333CC	3333FF
336600	336633	336666	336699	3366CC	3366FF
339900	339933	339966	339999	3399CC	3399FF
33CC00	33CC33	33CC66	33CC99	33CCCC	33CCFF
33FF00	33FF33	33FF66	33FF99	33FFCC	33FFFF

660000	660033	660066	660099	6600CC	6600FF
663300	663333	663366	663399	6633CC	6633FF
666600	666633	666666	666699	6666CC	6666FF
669900	669933	669966	669999	6699CC	6699FF
66CC00	66CC33	66CC66	66CC99	66CCCC	66CCFF
66FF00	66FF33	66FF66	66FF99	66FFCC	66FFFF
990000	990033	990066	990099	9900CC	9900FF
993300	993333	993366	993399	9933CC	9933FF
996600	996633	996666	996699	9966CC	9966FF
999900	999933	999966	999999	9999CC	9999FF
99CC00	99CC33	99CC66	99CC99	99CCCC	99CCFF
99FF00	99FF33	99FF66	99FF99	99FFCC	99FFFF
CC0000	CC0033	CC0066	CC0099	CC00CC	CC00FF
CC3300	CC3333	CC3366	CC3399	CC33CC	CC33FF
CC6600	CC6633	CC6666	CC6699	CC66CC	CC66FF
CC9900	CC9933	CC9966	CC9999	CC99CC	CC99FF
CCCC00	CCCC33	CCCC66	CCCC99	CCCCCC	CCCCFF
CCFF00	CCFF33	CCFF66	CCFF99	CCFFCC	CCFFFF
FF0000	FF0033	FF0066	FF0099	FF00CC	FF00FF
FF3300	FF3333	FF3366	FF3399	FF33CC	FF33FF
FF6600	FF6633	FF6666	FF6699	FF66CC	FF66FF
FF9900	FF9933	FF9966	FF9999	FF99CC	FF99FF
FFCC00	FFCC33	FFCC66	FFCC99	FFCCCC	FFCCFF
FFFF00	FFFF33	FFFF66	FFFF99	FFFFCC	FFFFFF

HTML Color Values

Colors are displayed combining RED, GREEN, and BLUE light sources.

Color Values

HTML colors are defined using a hexadecimal notation for the combination of Red, Green, and Blue color values (RGB). The lowest value that can be given to one of the light sources is 0 (hex #00). The highest value is 255 (hex #FF).

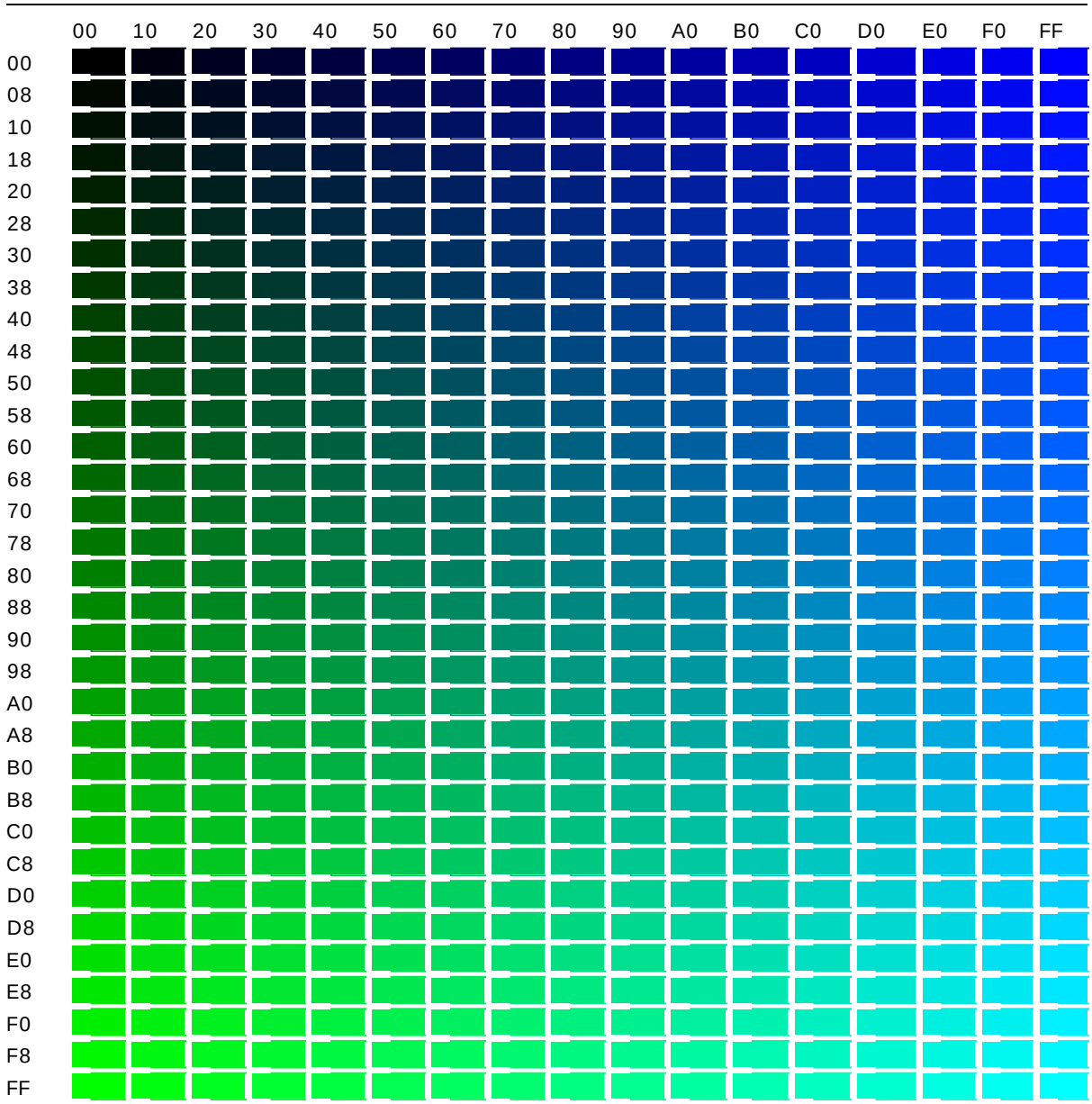
Turn Off the Red

If you turn off the Red light completely, there are 65536 different combination of Green and Blue (256 x 256) to experiment with.
Click here to see some of these combinations of Green and Blue.

HTML More Colors

The Red value is: #00	

The vertical numbers are the Green values, horizontal values are the Blue.



Turn On the Red

By setting the Red parameter to its maximum value, there are still 65536 different combination of Green and Blue (256 x 256) to experiment with.

Click here to see some of these combinations of Green and Blue.

16 Million Different Colors

The combination of Red, Green and Blue values from 0 to 255 gives a total of more than 16 million different colors to play with (256 x 256 x 256).

Most modern monitors are capable of displaying at least 16384 different colors.

If you look at the color table below, you will see the result of varying the red light from 0 to 255, while keeping the green and blue light at zero.

To see a full list of 16384 different colors based on red light varying from 0 to 255, click on one of the hexadecimal or rgb values below.

Red Light	HEX	RGB
	#000000	rgb(0,0,0)
	#080000	rgb(8,0,0)
	#100000	rgb(16,0,0)
	#180000	rgb(24,0,0)
	#200000	rgb(32,0,0)
	#280000	rgb(40,0,0)
	#300000	rgb(48,0,0)
	#380000	rgb(56,0,0)
	#400000	rgb(64,0,0)
	#480000	rgb(72,0,0)
	#500000	rgb(80,0,0)
	#580000	rgb(88,0,0)
	#600000	rgb(96,0,0)
	#680000	rgb(104,0,0)
	#700000	rgb(112,0,0)
	#780000	rgb(120,0,0)
	#800000	rgb(128,0,0)
	#880000	rgb(136,0,0)
	#900000	rgb(144,0,0)
	#980000	rgb(152,0,0)
	#A00000	rgb(160,0,0)
	#A80000	rgb(168,0,0)
	#B00000	rgb(176,0,0)
	#B80000	rgb(184,0,0)
	#C00000	rgb(192,0,0)
	#C80000	rgb(200,0,0)
	#D00000	rgb(208,0,0)
	#D80000	rgb(216,0,0)
	#E00000	rgb(224,0,0)
	#E80000	rgb(232,0,0)
	#F00000	rgb(240,0,0)
	#F80000	rgb(248,0,0)
	#FF0000	rgb(255,0,0)

Shades of Gray

Gray colors are displayed using an equal amount of power to all of the light sources. To make it easier for you to select the right gray color we have compiled a table of gray shades for you:

	RGB(0,0,0)	#000000
	RGB(8,8,8)	#080808
	RGB(16,16,16)	#101010
	RGB(24,24,24)	#181818
	RGB(32,32,32)	#202020
	RGB(40,40,40)	#282828
	RGB(48,48,48)	#303030
	RGB(56,56,56)	#383838
	RGB(64,64,64)	#404040
	RGB(72,72,72)	#484848
	RGB(80,80,80)	#505050

	RGB(88,88,88)	#585858
	RGB(96,96,96)	#606060
	RGB(104,104,104)	#686868
	RGB(112,112,112)	#707070
	RGB(120,120,120)	#787878
	RGB(128,128,128)	#808080
	RGB(136,136,136)	#888888
	RGB(144,144,144)	#909090
	RGB(152,152,152)	#989898
	RGB(160,160,160)	#A0A0A0
	RGB(168,168,168)	#A8A8A8
	RGB(176,176,176)	#B0B0B0
	RGB(184,184,184)	#B8B8B8
	RGB(192,192,192)	#C0C0C0
	RGB(200,200,200)	#C8C8C8
	RGB(208,208,208)	#D0D0D0
	RGB(216,216,216)	#D8D8D8
	RGB(224,224,224)	#E0E0E0
	RGB(232,232,232)	#E8E8E8
	RGB(240,240,240)	#F0F0F0
	RGB(248,248,248)	#F8F8F8
	RGB(255,255,255)	#FFFFFF

HTML Color Names

HTML Color Names

The table below provides a list of the color names that are supported by all major browsers.
Note: If you want your pages to validate with an HTML or a CSS validator, W3C has listed 16 color names that you can use: aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow. If you want to use other colors, you must specify their RGB or HEX value.

Click on a color name (or a hex value) to view the color as the background-color along with different text colors:

Color Name	Color HEX	Color
AliceBlue	#F0F8FF	
AntiqueWhite	#FAEBD7	
Aqua	#00FFFF	
Aquamarine	#7FFFD4	
Azure	#F0FFFF	
Beige	#F5F5DC	
Bisque	#FFE4C4	
Black	#000000	
BlanchedAlmond	#FFEBCD	
Blue	#0000FF	
BlueViolet	#8A2BE2	
Brown	#A52A2A	
BurlyWood	#DEB887	
CadetBlue	#5F9EA0	
Chartreuse	#7FFF00	
Chocolate	#D2691E	
Coral	#FF7F50	
CornflowerBlue	#6495ED	
Cornsilk	#FFF8DC	
Crimson	#DC143C	
Cyan	#00FFFF	

DarkBlue	#00008B	
DarkCyan	#008B8B	
DarkGoldenRod	#B8860B	
DarkGray	#A9A9A9	
DarkGrey	#A9A9A9	
DarkGreen	#006400	
DarkKhaki	#BDB76B	
DarkMagenta	#8B008B	
DarkOliveGreen	#556B2F	
Darkorange	#FF8C00	
DarkOrchid	#9932CC	
DarkRed	#8B0000	
DarkSalmon	#E9967A	
DarkSeaGreen	#8FBC8F	
DarkSlateBlue	#483D8B	
DarkSlateGray	#2F4F4F	
DarkSlateGrey	#2F4F4F	
DarkTurquoise	#00CED1	
DarkViolet	#9400D3	
DeepPink	#FF1493	
DeepSkyBlue	#00BFFF	
DimGray	#696969	
DimGrey	#696969	
DodgerBlue	#1E90FF	
FireBrick	#B22222	
FloralWhite	#FFFAF0	
ForestGreen	#228B22	
Fuchsia	#FF00FF	
Gainsboro	#DCDCDC	
GhostWhite	#F8F8FF	
Gold	#FFD700	
GoldenRod	#DAA520	
Gray	#808080	
Grey	#808080	
Green	#008000	
GreenYellow	#ADFF2F	
HoneyDew	#F0FFF0	
HotPink	#FF69B4	
IndianRed	#CD5C5C	
Indigo	#4B0082	
Ivory	#FFFFF0	
Khaki	#F0E68C	
Lavender	#E6E6FA	
LavenderBlush	#FFF0F5	
LawnGreen	#7CFC00	
LemonChiffon	#FFFACD	
LightBlue	#ADD8E6	
LightCoral	#F08080	
LightCyan	#E0FFFF	
LightGoldenRodYellow	#FAFAD2	
LightGray	#D3D3D3	
LightGrey	#D3D3D3	
LightGreen	#90EE90	
LightPink	#FFB6C1	
LightSalmon	#FFA07A	
LightSeaGreen	#20B2AA	
LightSkyBlue	#87CEFA	

LightSlateGray	#778899	
LightSlateGrey	#778899	
LightSteelBlue	#B0C4DE	
LightYellow	#FFFFE0	
Lime	#00FF00	
LimeGreen	#32CD32	
Linen	#FAF0E6	
Magenta	#FF00FF	
Maroon	#800000	
MediumAquaMarine	#66CDAA	
MediumBlue	#0000CD	
MediumOrchid	#BA55D3	
MediumPurple	#9370D8	
MediumSeaGreen	#3CB371	
MediumSlateBlue	#7B68EE	
MediumSpringGreen	#00FA9A	
MediumTurquoise	#48D1CC	
MediumVioletRed	#C71585	
MidnightBlue	#191970	
MintCream	#F5FFFA	
MistyRose	#FFE4E1	
Moccasin	#FFE4B5	
NavajoWhite	#FFDEAD	
Navy	#000080	
OldLace	#FDF5E6	
Olive	#808000	
OliveDrab	#6B8E23	
Orange	#FFA500	
OrangeRed	#FF4500	
Orchid	#DA70D6	
PaleGoldenRod	#EEE8AA	
PaleGreen	#98FB98	
PaleTurquoise	#AFEEEE	
PaleVioletRed	#D87093	
PapayaWhip	#FFEFD5	
PeachPuff	#FFDAB9	
Peru	#CD853F	
Pink	#FFC0CB	
Plum	#DDA0DD	
PowderBlue	#B0E0E6	
Purple	#800080	
Red	#FF0000	
RosyBrown	#BC8F8F	
RoyalBlue	#4169E1	
SaddleBrown	#8B4513	
Salmon	#FA8072	
SandyBrown	#F4A460	
SeaGreen	#2E8B57	
SeaShell	#FFF5EE	
Sienna	#A0522D	
Silver	#C0C0C0	
SkyBlue	#87CEEB	
SlateBlue	#6A5ACD	
SlateGray	#708090	
SlateGrey	#708090	
Snow	#FFFAFA	
SpringGreen	#00FF7F	

SteelBlue	#4682B4	
Tan	#D2B48C	
Teal	#008080	
Thistle	#D8BFD8	
Tomato	#FF6347	
Turquoise	#40E0D0	
Violet	#EE82EE	
Wheat	#F5DEB3	
White	#FFFFFF	
WhiteSmoke	#F5F5F5	
Yellow	#FFFF00	
YellowGreen	#9ACD32	

HTML 4.01 Quick List

HTML Quick List from W3Schools. Print it, fold it, and put it in your pocket.

HTML Basic Document

```
<html>
<head>
<title>Document name goes here</title>
</head>

<body>
Visible text goes here
</body>

</html>
```

Heading Elements

```
<h1>Largest Heading</h1>

<h2> . . . </h2>
<h3> . . . </h3>
<h4> . . . </h4>
<h5> . . . </h5>

<h6>Smallest Heading</h6>
```

Text Elements

```
<p>This is a paragraph</p>
<br> (line break)
<hr> (horizontal rule)
<pre>This text is preformatted</pre>
```

Logical Styles

```
<em>This text is emphasized</em>
<strong>This text is strong</strong>
<code>This is some computer code</code>
```

Physical Styles

```
<b>This text is bold</b>
<i>This text is italic</i>
```

Links, Anchors, and Image Elements

```
<a href="http://www.example.com/">This is a Link</a>
<a href="http://www.example.com/"><img src="URL" alt="Alternate Text"></a>
<a href="mailto:webmaster@example.com">Send e-mail</a>
```

A named anchor:

```
<a name="tips">Useful Tips Section</a>
<a href="#tips">Jump to the Useful Tips Section</a>
```

Unordered list

```
<ul>
<li>First item</li>
<li>Next item</li>
</ul>
```

Ordered list

```
<ol>
<li>First item</li>
<li>Next item</li>
</ol>
```

Definition list

```
<dl>
<dt>First term</dt>
<dd>Definition</dd>
<dt>Next term</dt>
<dd>Definition</dd>
</dl>
```

Tables

```
<table border="1">
<tr>
<th>someheader</th>
<th>someheader</th>
</tr>
<tr>
<td>sometext</td>
<td>sometext</td>
</tr>
</table>
```

Frames

```
<frameset cols="25%,75%">
  <frame src="page1.htm">
  <frame src="page2.htm">
</frameset>
```

Forms

```
<form action="http://www.example.com/test.asp" method="post/get">

<input type="text" name="lastname" value="Nixon" size="30" maxlength="50">
<input type="password">
<input type="checkbox" checked="checked">
<input type="radio" checked="checked">
<input type="submit">
<input type="reset">
<input type="hidden">

<select>
```

```
<option>Apples
<option selected>Bananas
<option>Cherries
</select>

<textarea name="Comment" rows="60" cols="20"></textarea>

</form>
```

Entities

```
&lt; is the same as <
&gt; is the same as >
&#169; is the same as ©
```

Other Elements

```
<!-- This is a comment -->

<blockquote>
Text quoted from some source.
</blockquote>

<address>
Address 1<br>
Address 2<br>
City<br>
</address>
```

HTML Layout

Everywhere on the Web you will find pages that are formatted like newspaper pages using HTML columns.

HTML Layout - Using Tables

One very common practice with HTML, is to use HTML tables to format the layout of an HTML page.

A part of this page is formatted with two columns, like a newspaper page.

As you can see on this page, there is a left column and a right column.

This text is displayed in the left column.

An HTML <table> is used to divide a part of this Web page into two columns.

The trick is to use a table without borders, and maybe a little extra cell-padding.

No matter how much text you add to this page, it will stay inside its column borders.

Same Layout - Color Added

One very common practice with HTML, is to use HTML tables to format the layout of an HTML page.

A part of this page is formatted with two columns,

An HTML <table> is used to divide a part of this Web page into two columns.

This text is displayed in the right column.

The trick is to use a table without borders, and

like a newspaper page.

As you can see at this page, there is a left column and a right column.

maybe a little extra cell-padding.

No matter how much text you add to this page, it will stay inside its column borders.

HTML Fonts

The <font> tag in HTML is deprecated. It is supposed to be removed in a future version of HTML.

Even if a lot of people are using it, you should try to avoid it, and use styles instead.

The HTML <font> Tag

With HTML code like this, you can specify both the size and the type of the browser output :

```
<p>
<font size="2" face="Verdana">
This is a paragraph.
</font>
</p>
<p>
<font size="3" face="Times">
This is another paragraph.
</font>
</p>
```

Try it yourself

Font Attributes

Attribute	Example	Purpose
size="number"	size="2"	Defines the font size
size="+number"	size="+1"	Increases the font size
size="-number"	size="-1"	Decreases the font size
face="face-name"	face="Times"	Defines the font-name
color="color-value"	color="#eeff00"	Defines the font color
color="color-name"	color="red"	Defines the font color

The Right Way to Do It - With Styles

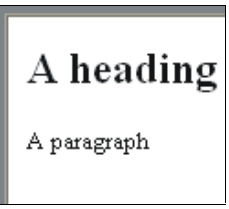
Set the font of text

```
<html>
<body>
<h1 style="font-family:verdana">A heading</h1>
<p style="font-family:courier">A paragraph</p>
</body>
</html>
```

This example demonstrates how to set the font of a text.

Set the font size of text

```
<html>
<body>
<h1 style="font-size:150%">A heading</h1>
<p style="font-size:80%">A paragraph</p>
</body>
</html>
```



This example demonstrates how to set the font size of a text.

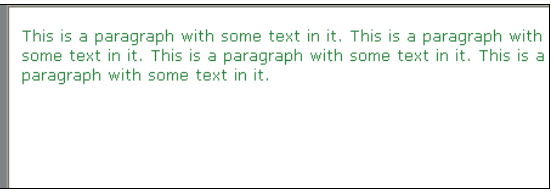
Set the font color of text

```
<html>
<body>
<h1 style="color:blue">A heading</h1>
<p style="color:red">A paragraph</p>
</body>
</html>
```

This example demonstrates how to set the color of a text.

Set the font, font size, and font color of text

```
<html>
<body>
<p style="font-family:verdana;font-size:80%;color:green">
This is a paragraph with some text in it. This is a
paragraph with some text in it. This is a paragraph with
some text in it. This is a paragraph with some text in it.
</p>
</body>
</html>
```



This example demonstrates how to set the font, font size, and font color of a text.

Why use HTML 4.0?

HTML 3.2 Was Very Wrong !

The original HTML was never intended to contain tags for formatting a document. HTML tags were intended to define the content of the document like:

This is a paragraph
<h1>This is a heading</h1>
When tags like <font> and color attributes were added to the HTML 3.2 specification, it started a nightmare for web developers. Development of large web sites where fonts and color information had to be added to every single Web page, became a long, expensive and unduly painful process.

What is so Great About HTML 4.0 ?

In HTML 4.0 all formatting can be removed from the HTML document and stored in a separate style sheet.

Because HTML 4.0 separates the presentation from the document structure, we have what we always needed: Total control of presentation layout without messing up the document content.

What Should You do About it ?

Do not use presentation attributes inside your HTML tags if you can avoid it. Start using styles! Please read our CSS tutorial to learn about style sheets.
Do not use deprecated tags. Visit our complete HTML 4.01 Reference to see which tags and attributes that are deprecated.

Prepare Yourself for XHTML

XHTML is the "new" HTML. The most important thing you can do is to start writing valid HTML 4.01. Also start writing your tags in lower case. Always close your tag elements. Never end a paragraph without </p>.

NOTE: The official HTML 4.01 recommends the use of lower case tags.
If you want to read about how this web site was converted to XHTML, please visit our XHTML tutorial.

Validate Your HTML Files as HTML 4.01

An HTML document is validated against a Document Type Definition (DTD). Before an HTML file can be properly validated, a correct DTD must be added as the first line of the file.
The HTML 4.01 Strict DTD includes elements and attributes that have not been deprecated or do not appear in framesets:

```
<!DOCTYPE HTML PUBLIC
"-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

The HTML 4.01 Transitional DTD includes everything in the strict DTD plus deprecated elements and attributes:

```
<!DOCTYPE HTML PUBLIC
"-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

The HTML 4.01 Frameset DTD includes everything in the transitional DTD plus frames as well:

```
<!DOCTYPE HTML PUBLIC
"-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

Test Your HTML With the W3C Validator

Input your page address in the box below
(like http://www.w3schools.com/)

Validate the page

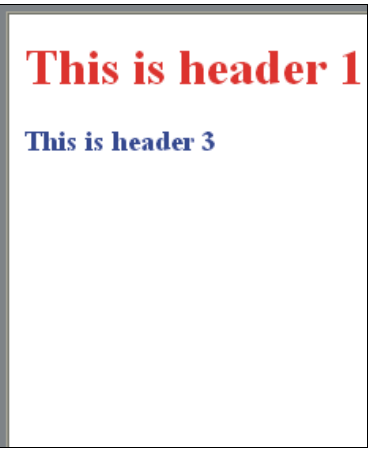
HTML Styles

With HTML 4.0 all formatting can be moved out of the HTML document and into a separate style sheet.

Examples

Styles in HTML

```
<html>

<head>

<style type="text/css">
h1 {color: red}
h3 {color: blue}
</style>

</head>

<body>
<h1>This is header 1</h1>
<h3>This is header 3</h3>
</body>

</html>
```



This example demonstrates how to format an HTML document with style information added to the <head> section.

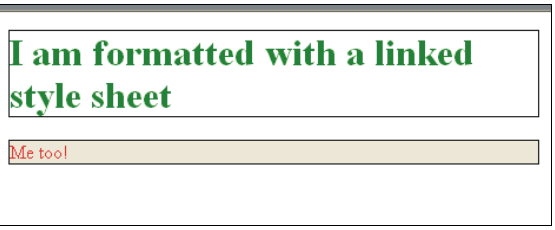
Link that is not underlined

```
<html>
<body>

<a href="lastpage.htm"
style="text-decoration:none">
THIS IS A LINK!
</a>

</body>
</html>
```

This example demonstrates how to make a link that is not underlined, using a style attribute.

Link to an external style sheet

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="styles.css" >
</head>

<body>
<h1>I am formatted with a linked style sheet</h1>
<p>Me too!</p>
</body>

</html>
```



This example demonstrates how to use the <link> tag to link to an external style sheet.

How to Use Styles
When a browser reads a style sheet, it will format the document according to it. There are three ways of inserting a style sheet:
External Style Sheet
An external style sheet is ideal when the style is applied to many pages. With an external style sheet, you can change the look of an entire Web site by changing one file. Each page must link to the style sheet using the <link> tag. The <link> tag goes inside the head section.

```
<head>
<link rel="stylesheet" type="text/css"
href="mystyle.css">
</head>
```

Internal Style Sheet
An internal style sheet should be used when a single document has a unique style. You define internal styles in the head section with the <style> tag.

```
<head>
<style type="text/css">
body {background-color: red}
p {margin-left: 20px}
</style>
</head>
```

Inline Styles
An inline style should be used when a unique style is to be applied to a single occurrence of an element.
To use inline styles you use the style attribute in the relevant tag. The style attribute can contain any CSS property. The example shows how to change the color and the left margin of a paragraph:

```
<p style="color: red; margin-left: 20px">
This is a paragraph
</p>
```

To learn more about styles, visit our CSS tutorial.

Style Tags

Tag	Description
<style>	Defines a style definition
<link>	Defines a resource reference
	Defines a section in a document
	Defines a section in a document
<font>	Deprecated. Use styles instead
<basefont>	Deprecated. Use styles instead
	Deprecated. Use styles instead

HTML <style> tag
Definition and Usage
Defines a style in a document.
The style element goes in the head section. If you want to include a style sheet in your page, you should define the style sheet externally, and link to it using <link>.
Differences Between HTML and XHTML
NONE
Tips and Notes
Tip: To learn more about style sheets, visit our CSS Tutorial.

Example

Source
<head> <style type="text/css"> h1 {color: red} h3 {color: blue} </style> </head>

HTML <link> tag
Definition and Usage
This element defines the relationship between two linked documents.
Differences Between HTML and XHTML
In HTML the <link> tag has no end tag.
In XHTML the <link> tag must be properly closed.
Tips and Notes
Note: The link element is an empty element, it contains attributes only.
Note: This element goes only in the head section, but it can appear any number of times.
Example

How to use the <link> tag to link to an external style sheet: <head> <link rel="stylesheet" type="text/css" href="theme.css" /> </head>

HTML tag
Definition and Usage
The tag defines a division/section in a document.
Differences Between HTML and XHTML
The "align" attribute of the div element was deprecated in HTML 4.01.
The "align" attribute of the div element is not supported in XHTML 1.0 Strict DTD.
Tips and Notes
Note: Browsers usually place a line break before and after the div element.
Tip: Use the tag to group block-elements to format them with styles.
Example

Source	Output
This is some text <h4>This is a header in a div section</h4> This is a paragraph in a div section 	This is some text **This is a header in a div section** This is a paragraph in a div section

HTML tag
Definition and Usage
The tag is used to group inline-elements in a document.
Tips and Notes
Tip: Use the tag to group inline-elements to format them with styles

Example

Source	Output
This is a paragraph This is a paragraph This is a paragraph This is another paragraph 	This is a paragraph This is a paragraph This is a paragraph This is another paragraph

HTML <font> tag
Definition and Usage
The <font> tag specifies the font face, font size, and font color of text.
Differences Between HTML and XHTML
The font element was deprecated in HTML 4.01.
The font element is not supported in XHTML 1.0 Strict DTD.
Tips and Notes
Tip: Use **styles** (instead of the <font> tag) to define the font face, font size, and font color of text.
Example

Source	Output
<font size="3" color="red"> This is some text! </font> <font size="1" color="blue"> This is some text! </font> <font face="arial" color="red"> This is some text! </font>	This is some text! This is some text! This is some text!

HTML <basefont> tag

Definition and Usage
Defines a base font.

Differences Between HTML and XHTML
The basefont element was deprecated in HTML 4.01.
The basefont element is not supported in XHTML 1.0 Strict DTD.

Optional Attributes

DTD indicates in which DTD the attribute is allowed. S=Strict, T=Transitional, and F=Frameset.

Attribute	Value	Description	DTD
color	rgb(x,x,x)	Specifies the text color. Deprecated. Use styles	TF

	#xxxxxx colorname	instead.	
face	list_of_fontnames	Specifies the font to use. Deprecated. Use styles instead.	TF
size	default_text_size (a number from 1 to 7)	Font size for font elements. Deprecated. Use styles instead.	TF

Standard Attributes

id, class, title, style, dir, lang, xml:lang

For a full description, go to Standard Attributes.

HTML Standard Attributes

HTML tags can have attributes. The special attributes for each tag are listed under each tag description. The attributes listed here are the core and language attributes that are standard for all tags (with a few exceptions).

Core Attributes
Not valid in base, head, html, meta, param, script, style, and title elements.

Attribute	Value	Description
class	*class_rule* or *style_rule*	The class of the element
id	*id_name*	A unique id for the element
style	*style_definition*	An inline style definition
title	*tooltip_text*	A text to display in a tool tip

Language Attributes
Not valid in base, br, frame, frameset, hr, iframe, param, and script elements.

Attribute	Value	Description
dir	ltr | rtl	Sets the text direction
lang	*language_code*	Sets the language code

Keyboard Attributes

Attribute	Value	Description
accesskey	*character*	Sets a keyboard shortcut to access an element
tabindex	*number*	Sets the tab order of an element

HTML tag

Definition and Usage
Centers its enclosed text horizontally.

Differences Between HTML and XHTML
The center element was deprecated in HTML 4.01.

The center element is not supported in XHTML 1.0 Strict DTD.

Tips and Notes
Tip: Use CSS styles to center text!

Standard Attributes

id, class, title, style, dir, lang, xml:lang

For a full description, go to Standard Attributes.

Event Attributes

onclick, ondblclick, onmousedown, onmouseup, onmouseover, onmousemove, onmouseout, onkeypress, onkeydown, onkeyup

For a full description, go to Event Attributes.

HTML Event Attributes

New to HTML 4.0 was the ability to let HTML events trigger actions in the browser, like starting a JavaScript when a user clicks on an HTML element. Below is a list of attributes that can be inserted into HTML tags to define event actions.
If you want to learn more about programming with these events, you should study our JavaScript tutorial and our DHTML tutorial.

Window Events
Only valid in body and frameset elements

Attribute	Value	Description
onload	*script*	Script to be run when a document loads
onunload	*script*	Script to be run when a document unloads

Form Element Events
Only valid in form elements.

Attribute	Value	Description
onchange	*script*	Script to be run when the element changes
onsubmit	*script*	Script to be run when the form is submitted
onreset	*script*	Script to be run when the form is reset
onselect	*script*	Script to be run when the element is selected
onblur	*script*	Script to be run when the element loses focus
onfocus	*script*	Script to be run when the element gets focus

Keyboard Events
Not valid in base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, and title elements.

Attribute	Value	Description
onkeydown	*script*	What to do when key is pressed
onkeypress	*script*	What to do when key is pressed and released
onkeyup	*script*	What to do when key is released

Mouse Events

Not valid in base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, and title elements.

Attribute	Value	Description
onclick	*script*	What to do on a mouse click
ondblclick	*script*	What to do on a mouse doubleclick
onmousedown	*script*	What to do when mouse button is pressed
onmousemove	*script*	What to do when mouse pointer moves
onmouseover	*script*	What to do when mouse pointer moves over an element
onmouseout	*script*	What to do when mouse pointer moves out of an element
onmouseup	*script*	What to do when mouse button is released

HTML Head

Examples

The title of a document

```
<html>

<head>
<title>The title is not displayed</title>
</head>

<body>
<p>This text is displayed</p>
</body>

</html>
```

This text is displayed

The title information inside a head element is not displayed in the browser window.

One target for all links

```
<html>
<head>
<base target="_blank">
</head>

<body>

<p>
<a href="http://www.w3schools.com"
target="_blank">This link</a>
will load in a new window because the target attribute is
set to "_blank".
</p>

<p>
<a href="http://www.w3schools.com">
This link</a>
will also load in a new window even without a target
attribute.
</p>

</body>
</html>
```

This link will load in a new window because the target attribute is set to "_blank".

This link will also load in a new window even without a target attribute.

This example demonstrates how to use the base tag to let all the links on a page open in a new window.

The Head Element

The head element contains general information, also called meta-information, about a document. Meta means "information about".

You can say that meta-data means information about data, or meta-information means information about information.

Information Inside the Head Element
The elements inside the head element should not be displayed by a browser.
According to the HTML standard, only a few tags are legal inside the head section. These are: <base>, <link>, <meta>, <title>, <style>, and <script>.
Look at the following illegal construct:

```
<head>
  <p>This is some text</p>
</head>
```

In this case the browser has two options:

- Display the text because it is inside a paragraph element
- Hide the text because it is inside a head element

If you put an HTML element like <h1> or <p> inside a head element like this, most browsers will display it, even if it is illegal.
Should browsers forgive you for errors like this? We don't think so. Others do.

Head Tags

Tag	Description
<head>	Defines information about the document
<title>	Defines the document title
<base>	Defines a base URL for all the links on a page
<link>	Defines a resource reference
<meta>	Defines meta information

Tag	Description
<!DOCTYPE>	Defines the document type. This tag goes before the <html> start tag.

HTML <head> tag

Definition and Usage
The head element can contain information about the document. The browser does not display the "head information" to the user. The following tags can be in the head section: <base>, <link>, <meta>, <script>, <style>, and <title>.

Tips and Notes
Always specify a title for the document!

HTML <title> tag

Definition and Usage
This element defines the title of the document

Example

Source
<html> <head> <title>Title of the document</title>

```
</head>
<body>
...
...
...
</body>
</html>
```

HTML <base> tag

Definition and Usage

The base element specifies a base URL for all the links in a page.

Differences Between HTML and XHTML

In HTML the <base> tag has no end tag.

In XHTML the <base> tag must be properly closed.

Tips and Notes

Note: The <base> tag must go inside the head element.

Example

Assume that the absolute address for an image is:

```
<img src="http://www.w3schools.com/images/smile.gif" />
```

Now we insert the <base> tag, which specifies a base URL for all of the links in a page, in the head section of a page:

```
<head>
<base href="http://www.w3schools.com/images/" />
</head>
```

When inserting images on the page in the example above, we just have to specify the relative address, and the browser will look for that file using the full URL, "http://www.w3schools.com/images/smile.gif":

```
<img src="smile.gif" />
```

HTML <link> tag

Definition and Usage

This element defines the relationship between two linked documents.

Differences between HTML and XHTML

In HTML the <link> tag has no end tag.

In XHTML the <link> tag must be properly closed.

Tips and Notes

Note: The link element is an empty element, it contains attributes only.

Note: This element goes only in the head section, but it can appear any number of times.

Example

How to use the <link> tag to link to an external style sheet:

```
<head>
<link rel="stylesheet" type="text/css" href="theme.css" />
</head>
```

HTML <meta> tag

Definition and Usage
The <meta> element provides meta-information about your page, such as descriptions and keywords for search engines and refresh rates.

Differences Between HTML and XHTML
In HTML the <meta> tag has no end tag.
In XHTML the <meta> tag must be properly closed.

Tips and Notes
Note: The <meta> tag always goes inside the head element.
Note: Metadata is always passed as name/value pairs.

Examples

Define keywords for search engines:
```
<meta name="keywords" content="HTML, DHTML, CSS, XML, XHTML, JavaScript, VBScript" />
```

Define a description of your web page:
```
<meta name="description" content="Free Web tutorials on HTML, CSS, XML, and XHTML" />
```

Define the last revision of your page:
```
<meta name="revised" content="Hege Refsnes, 6/10/99" />
```

Refresh page every 5 seconds:
```
<meta http-equiv="refresh" content="5" />
```

HTML <!DOCTYPE> tag

Definition and Usage
The <!DOCTYPE> declaration is the very first thing in your document, before the <html> tag. This tag tells the browser which HTML or XHTML specification the document uses.

Tips and Notes
Note: The <!DOCTYPE> tag does not have an end tag!

HTML
HTML 4.01 specifies three document types: Strict, Transitional, and Frameset.
HTML Strict DTD
Use this when you want clean markup, free of presentational clutter. Use this together with Cascading Style Sheets (CSS):

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

HTML Transitional DTD

The Transitional DTD includes presentation attributes and elements that W3C expects to move to a style sheet. Use this when you need to use HTML's presentational features because your readers don't have browsers that support Cascading Style Sheets (CSS):

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

Frameset DTD
The Frameset DTD should be used for documents with frames. The Frameset DTD is equal to the Transitional DTD except for the frameset element replaces the body element:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

XHTML
XHTML 1.0 specifies three XML document types: Strict, Transitional, and Frameset.

XHTML Strict DTD

Use this DTD when you want clean markup, free of presentational clutter. Use this together with Cascading Style Sheets (CSS):

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

XHTML Transitional DTD
Use this DTD when you need to use XHTML's presentational features because your readers don't have browsers that support Cascading Style Sheets (CSS):

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

XHTML Frameset DTD
Use this DTD when you want to use frames!

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
```

To check that you have written a valid XHTML document with a correct DTD, you can link your XHTML page to an XHTML validator.

HTML Meta

Examples
Document description

```
<html>

<head>

<meta name="author"
content="Jan Egil Refsnes">

<meta name="revised"
content="Jan Egil Refsnes,6/10/99">

<meta name="generator"
content="Microsoft FrontPage 4.0">

</head>

<body>
<p>
The meta attributes of this document identify the author
and the editor software.
</p>
</body>

</html>
```

The meta attributes of this document identify the author and the editor software.

Information inside a meta element describes the document.

Document keywords

```
<html>

<head>

<meta name="description"
content="HTML examples">

<meta name="keywords"
content="HTML, DHTML, CSS, XML, XHTML, JavaScript,
VBScript">

</head>

<body>
<p>
The meta attributes of this document describe the
document and its keywords.
</p>
</body>

</html>
```

The meta attributes of this document describe the document and its keywords.

Information inside a meta element describes the document's keywords.

Redirect a user

```
<html>
<head>
<meta http-equiv="Refresh"
content="5;url=http://www.w3schools.com">
</head>

<body>
<p>
Sorry! We have moved! The new URL is: <a
href="http://www.w3schools.com">http://www.w3schools.com</a>
</p>

<p>
You will be redirected to the new address in five seconds.
</p>

<p>
If you see this message for more than 5 seconds, please
click on the link above!
</p>

</body>
</html>
```

Sorry! We have moved! The new URL is: http://www.w3schools.com

You will be redirected to the new address in five seconds.

If you see this message for more than 5 seconds, please click on the link above!

This example demonstrates how to redirect a user if your site address has changed.

The Meta Element

As we explained in the previous chapter, the head element contains general information (meta-information) about a document.

HTML also includes a meta element that goes inside the head element. The purpose of the meta element is to provide meta-information about the document.

Most often the meta element is used to provide information that is relevant to browsers or search engines like describing the content of your document.
Note: W3C states that "*Some user agents support the use of META to refresh the current page after a specified number of seconds, with the option of replacing it by a different URI. Authors should not use this technique to forward users to different pages, as this makes the page inaccessible to some users. Instead, automatic page forwarding should be done using server-side redirects*" at http://www.w3.org/TR/html4/struct/global.html#adef-http-equiv.

Keywords for Search Engines
Some search engines on the WWW will use the name and content attributes of the meta tag to index your pages.

This meta element defines a description of your page:
```
<meta name="description" content="Free Web tutorials on HTML, CSS, XML, and XHTML">
```

This meta element defines keywords for your page:
```
<meta name="keywords" content="HTML, DHTML, CSS, XML, XHTML, JavaScript, VBScript">
```

The intention of the name and content attributes is to describe the content of a page.
However, since too many webmasters have used meta tags for spamming, like repeating keywords to give pages a higher ranking, some search engines have stopped using them entirely.
You can read more about search engines in our Web Building Tutorial.

Unknown Meta Attributes
Sometimes you will see meta attributes that are unknown to you like this:

```
<meta name="security" content="low">
```

Then you just have to accept that this is something unique to the site or to the author of the site, and that it has probably no relevance to you.
You can see a complete list of the meta element attributes in our
Complete HTML 4.01 Tag Reference.

HTML Uniform Resource Locators

HTML Links
When you click on a link in an HTML document like this: Last Page, an underlying <a> tag points to a place (an address) on the Web with an href attribute value like this: <a href="lastpage.htm">Last Page</a>.
The Last Page link in the example is a link that is relative to the Web site that you are browsing, and your browser will construct a full Web address like http://www.w3schools.com/html/lastpage.htm to access the page.

Uniform Resource Locators
Something called a Uniform Resource Locator (URL) is used to address a document (or other data) on the World Wide Web. A full Web address like this:
http://www.w3schools.com/html/lastpage.htm follows these syntax rules:
scheme://host.domain:port/path/filename
The **scheme** is defining the **type** of Internet service. The most common type is **http**.

The **domain** is defining the Internet **domain name** like w3schools.com.
The **host** is defining the domain host. If omitted, the default host for http is **www**.
The **:port** is defining the **port number** at the host. The port number is normally omitted. The default port number for http is **80**.
The **path** is defining a **path** (a sub directory) at the server. If the path is omitted, the resource (the document) must be located at the root directory of the Web site.
The **filename** is defining the name of a document. The default filename might be default.asp, or index.html or something else depending on the settings of the Web server.

URL Schemes
Some examples of the most common schemes can be found below:

Schemes	Access
file	a file on your local PC
ftp	a file on an FTP server
http	a file on a World Wide Web Server
gopher	a file on a Gopher server
news	a Usenet newsgroup
telnet	a Telnet connection
WAIS	a file on a WAIS server

HTML Scripts
Add scripts to HTML pages to make them more dynamic and interactive.
Examples

Insert a script
This example demonstrates how to insert a script into your HTML document.

Work with browsers that do not support scripts
This example demonstrates how to handle browsers that do not support scripting.

Insert a Script into HTML Page
A script in HTML is defined with the <script> tag. Note that you will have to use the type attribute to specify the scripting language.

```
<html>
<head>
</head>
<body>
<script type="text/javascript">
document.write("Hello World!")
</script>
</body>
</html>
```

The script above will produce this output:

Hello World!
Note: To learn more about scripting in HTML, visit our JavaScript School.

How to Handle Older Browsers

A browser that does not recognize the <script> tag at all, will display the <script> tag's content as text on the page. To prevent the browser from doing this, you should hide the script in comment tags. An old browser (that does not recognize the <script> tag) will ignore the comment and it will not write the tag's content on the page, while a new browser will understand that the script should be executed, even if it is surrounded by comment tags.

Example

```
JavaScript:
<script type="text/javascript">
<!--
document.write("Hello World!")
//-->
</script>
VBScript:
<script type="text/vbscript">
<!--
document.write("Hello World!")
'-->
</script>
```

The <noscript> Tag

In addition to hiding the script inside a comment, you can also add a <noscript> tag.
The <noscript> tag is used to define an alternate text if a script is NOT executed. This tag is used for browsers that recognize the <script> tag, but do not support the script inside, so these browsers will display the text inside the <noscript> tag instead. However, if a browser supports the script inside the <script> tag it will ignore the <noscript> tag.

Example

```
JavaScript:
<script type="text/javascript">
<!--
document.write("Hello World!")
//-->
</script>
<noscript>Your browser does not support JavaScript!</noscript>
VBScript:
<script type="text/vbscript">
<!--
document.write("Hello World!")
'-->
</script>
<noscript>Your browser does not support VBScript!</noscript>
```

Script Tags

Tag	Description
<script>	Defines a script
<noscript>	Defines an alternate text if the script is not executed
<object>	Defines an embedded object
<param>	Defines run-time settings (parameters) for an object
<applet>	Deprecated. Use <object> instead

HTML <script> tag

Definition and Usage
Defines a script, such as a JavaScript.

Differences Between HTML and XHTML
The "language" attribute of the script element was deprecated in HTML 4.01.
The "language" attribute of the script element is not supported in XHTML 1.0 Strict DTD.

Tips and Notes
Note: Code within this element is executed immediately when the page is loaded, if it is not in a function. Script that appears after a <frameset> tag will be ignored.

Example

Source	Output
<script type="text/javascript"> document.write("Hello World!") </script>	Hello World!

HTML <noscript> tag

Definition and Usage
The noscript element is used to define an alternate content (text) if a script is NOT executed. This tag is used for browsers that recognizes the <script> tag, but does not support the script in it.

Tips and Notes
Note: If a browser supports scripting, it will not display the text in the noscript element.
Note: Browsers that do not recognize the <script> tag will display the tag's content as text on the page. To prevent the browser from doing this, you should hide the script in comment tags. An old browser (one that does not recognize the <script> tag) will ignore the comment and will not write the tag's content on the page, while a new browser will understand that the script should be executed, even if it is surrounded by comment tags!

Examples

JavaScript:

```
<body>
...
...
<script type="text/javascript">
<!--
document.write("Hello World!")
//-->
</script>
<noscript>Your browser does not support JavaScript!</noscript>
...
...
</body>
```

VBScript:

```
<body>
...
...
<script type="text/vbscript">
<!--
document.write("Hello World!")
'-->
</script>
<noscript>Your browser does not support VBScript!</noscript>
...
...
</body>
```

HTML <object> tag

Definition and Usage

Defines an embedded object. Use this element to add multimedia to your XHTML page. This element allows you to specify the data and parameters for objects inserted into HTML documents, and the code that can be used to display/manipulate that data.

Tips and Notes

Note: An object element can appear inside the head or the body element. The text between the <object> and </object> is the alternate text, for browsers that do not support this tag. The <param> tags define run-time settings for the object.

Tip: For images use the <img> tag instead of the <object> tag.

Example

Source	Output
<object classid="clsid:F08DF954-8592-11D1-B16A-00C0F0283628" id="Slider1" width="100" height="50"> <param name="BorderStyle" value="1" /> <param name="MousePointer" value="0" /> <param name="Enabled" value="1" /> <param name="Min" value="0" /> <param name="Max" value="10" /> </object>	

HTML <param> tag

Definition and Usage
The param element allows you to specify the run-time settings for an object inserted into XHTML documents.

Differences Between HTML and XHTML
In HTML the <param> tag has no end tag.
In XHTML the <param> tag must be properly closed.

Example

Source	Output
<object classid="clsid:F08DF954-8592-11D1-B16A-00C0F0283628" id="Slider1" width="100" height="50"> <param name="BorderStyle" value="1" /> <param name="MousePointer" value="0" /> <param name="Enabled" value="1" /> <param name="Min" value="0" /> <param name="Max" value="10" /> </object>	**Error! Not a valid embedded object.**

HTML <applet> tag
Definition and Usage
Defines an embedded applet.
Differences Between HTML and XHTML
The applet element was deprecated in HTML 4.01.
The applet element is not supported in XHTML 1.0 Strict DTD.

Tips and Notes
Note: To include applets, use the object element if possible (as the <applet> tag is not supported in XHTML 1.0 Strict DTD).

Attribute	Value	Description	DTD
height	pixels	Defines the height of the applet	TF
width	pixels	Defines the width of the object	TF

Optional Attributes

Attribute	Value	Description	DTD
align	left right top bottom middle baseline texttop absmiddle absbottom	Defines the text alignment around the applet	TF
alt	text	An alternate text to be displayed if the browser support applets but cannot run this applet	TF
archive	URL	A URL to the applet when it is stored in a Java	TF

		Archive or ZIP file	
code	URL	A URL that points to the class of the applet	TF
codebase	URL	Indicates the base URL of the applet if the code attribute is relative	TF
hspace	pixels	Defines the horizontal spacing around the applet	TF
name	unique_name	Defines a unique name for the applet (to use in scripts)	TF
object	name	Defines the name of the resource that contains a serialized representation of the applet	TF
title	text	Additional information to be displayed in tool tip	TF
vspace	pixels	Defines the vertical spacing around the applet	TF

Standard Attributes

id, class, title, style, dir, lang, xml:lang

HTML 4.0 Standard Attributes

HTML tags can have attributes. The special attributes for each tag are listed under each tag description. The attributes listed here are the core and language attributes that are standard for all tags (with a few exceptions):

Core Attributes
Not valid in base, head, html, meta, param, script, style, and title elements.

Attribute	Value	Description
class	*class_rule* or *style_rule*	The class of the element
id	*id_name*	A unique id for the element
style	*style_definition*	An inline style definition
title	*tooltip_text*	A text to display in a tool tip

Language Attributes
Not valid in base, br, frame, frameset, hr, iframe, param, and script elements.

Attribute	Value	Description
dir	ltr | rtl	Sets the text direction
lang	*language_code*	Sets the language code

Keyboard Attributes

Attribute	Value	Description
accesskey	*character*	Sets a keyboard shortcut to access an element
tabindex	*number*	Sets the tab order of an element

HTML 4.0 Event Attributes

New to HTML 4.0 is the ability to let HTML events trigger actions in the browser, like starting a JavaScript when a user clicks on an HTML element. Below is a list of attributes that can be inserted into HTML tags to define event actions.
If you want to learn more about programming with these events, you should study our JavaScript tutorial and our DHTML tutorial.

Window Events
Only valid in body and frameset elements.

Attribute	Value	Description
onload	*script*	Script to be run when a document loads
onunload	*script*	Script to be run when a document unloads

Form Element Events
Only valid in form elements.

Attribute	Value	Description
onchange	*script*	Script to be run when the element changes
onsubmit	*script*	Script to be run when the form is submitted
onreset	*script*	Script to be run when the form is reset
onselect	*script*	Script to be run when the element is selected
onblur	*script*	Script to be run when the element loses focus
onfocus	*script*	Script to be run when the element gets focus

Keyboard Events
Not valid in base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, and title elements.

Attribute	Value	Description
onkeydown	*script*	What to do when key is pressed
onkeypress	*script*	What to do when key is pressed and released
onkeyup	*script*	What to do when key is released

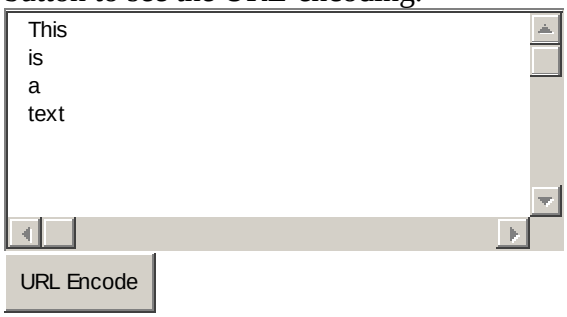
Mouse Events
Not valid in base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, title elements.

Attribute	Value	Description
onclick	*script*	What to do on a mouse click
ondblclick	*script*	What to do on a mouse double-click
onmousedown	*script*	What to do when mouse button is pressed
onmousemove	*script*	What to do when mouse pointer moves
onmouseout	*script*	What to do when mouse pointer moves out of an element
onmouseover	*script*	What to do when mouse pointer moves over an element
onmouseup	*script*	What to do when mouse button is released

HTML URL-encoding Reference
Below is a reference of ASCII characters in URL-encoding form (hexadecimal format).

Hexadecimal values can be used to display non-standard letters and characters in browsers and plug-ins.

Try It
Type some text or an ASCII value in the input field below, and click on the "URL Encode" button to see the URL-encoding.



URL-encoding from %00 to %8f

ASCII Value	URL-encode	ASCII Value	URL-encode	ASCII Value	URL-encode
æ	%00	0	%30	`	%60
	%01	1	%31	a	%61
	%02	2	%32	b	%62
	%03	3	%33	c	%63
	%04	4	%34	d	%64
	%05	5	%35	e	%65
	%06	6	%36	f	%66
	%07	7	%37	g	%67
backspace	%08	8	%38	h	%68
tab	%09	9	%39	i	%69
linefeed	%0a	:	%3a	j	%6a
	%0b	;	%3b	k	%6b
	%0c	<	%3c	l	%6c
c return	%0d	=	%3d	m	%6d
	%0e	>	%3e	n	%6e
	%0f	?	%3f	o	%6f
	%10	@	%40	p	%70
	%11	A	%41	q	%71
	%12	B	%42	r	%72
	%13	C	%43	s	%73
	%14	D	%44	t	%74
	%15	E	%45	u	%75
	%16	F	%46	v	%76
	%17	G	%47	w	%77
	%18	H	%48	x	%78
	%19	I	%49	y	%79
	%1a	J	%4a	z	%7a
	%1b	K	%4b	{	%7b

	%1c	L	%4c	|	%7c
	%1d	M	%4d	}	%7d
	%1e	N	%4e	~	%7e
	%1f	O	%4f		%7f
space	%20	P	%50	€	%80
!	%21	Q	%51		%81
"	%22	R	%52	,	%82
#	%23	S	%53	ƒ	%83
$	%24	T	%54	„	%84
%	%25	U	%55	…	%85
&	%26	V	%56	†	%86
'	%27	W	%57	‡	%87
(	%28	X	%58	ˆ	%88
)	%29	Y	%59	‰	%89
*	%2a	Z	%5a	Š	%8a
+	%2b	[	%5b	‹	%8b
,	%2c	\	%5c	Œ	%8c
-	%2d	]	%5d		%8d
.	%2e	^	%5e	Ž	%8e
/	%2f	_	%5f		%8f

URL-encoding from %90 to %ff

ASCII Value	URL-encode	ASCII Value	URL-encode	ASCII Value	URL-encode
	%90	À	%c0	ð	%f0
‘	%91	Á	%c1	ñ	%f1
’	%92	Â	%c2	ò	%f2
“	%93	Ã	%c3	ó	%f3
”	%94	Ä	%c4	ô	%f4
•	%95	Å	%c5	õ	%f5
–	%96	Æ	%c6	ö	%f6
—	%97	Ç	%c7	÷	%f7
˜	%98	È	%c8	ø	%f8
™	%99	É	%c9	ù	%f9
š	%9a	Ê	%ca	ú	%fa
›	%9b	Ë	%cb	û	%fb
œ	%9c	Ì	%cc	ü	%fc
	%9d	Í	%cd	ý	%fd
ž	%9e	Î	%ce	þ	%fe
Ÿ	%9f	Ï	%cf	ÿ	%ff
	%a0	Ð	%d0		
¡	%a1	Ñ	%d1		
¢	%a2	Ò	%d2		
£	%a3	Ó	%d3		
	%a4	Ô	%d4		
¥	%a5	Õ	%d5		

¦	%a6	Ö	%d6		
§	%a7		%d7		
¨	%a8	Ø	%d8		
©	%a9	Ù	%d9		
ª	%aa	Ú	%da		
«	%ab	Û	%db		
¬	%ac	Ü	%dc		
¯	%ad	Ý	%dd		
®	%ae	Þ	%de		
¯	%af	ß	%df		
°	%b0	à	%e0		
±	%b1	á	%e1		
²	%b2	â	%e2		
³	%b3	ã	%e3		
´	%b4	ä	%e4		
	%b5	å	%e5		
¶	%b6	æ	%e6		
·	%b7	ç	%e7		
¸	%b8	è	%e8		
¹	%b9	é	%e9		
º	%ba	ê	%ea		
»	%bb	ë	%eb		
¼	%bc	ì	%ec		
½	%bd	í	%ed		
¾	%be	î	%ee		
¿	%bf	ï	%ef		

END HTML BOOK

HTML Examples

HTML Basic Tags Examples

A very simple HTML document

```
<html>
<body>
The content of the body element is displayed in your
browser.
</body>
</html>
```

The content of the body element is displayed in your browser.

How text inside paragraphs is displayed

```
<html>
<body>

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

<p>Paragraph elements are defined by the p tag.</p>

</body>
</html>
```

This is a paragraph.

This is a paragraph.

This is a paragraph.

Paragraph elements are defined by the p tag.

More paragraphs

```
<html>
<body>

<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>

<p>
The number of lines in a paragraph depends on the size of
your browser window. If you resize the browser window,
the number of lines in this paragraph will change.
</p>
</body></html>
```

This paragraph contains a lot of lines in the source code, but the browser ignores it.

This paragraph contains a lot of spaces in the source code, but the browser ignores it.

The number of lines in a paragraph depends on the size of your browser window. If you resize the browser window, the number of lines in this paragraph will change.

The use of line breaks

```
<html>
<body>

<p>
To break<br>lines<br>in a<br>paragraph,<br>use the br tag.
</p>

</body>
</html>
```

To break
lines
in a
paragraph,
use the br tag.

Poem problems (some problems with HTML formatting)

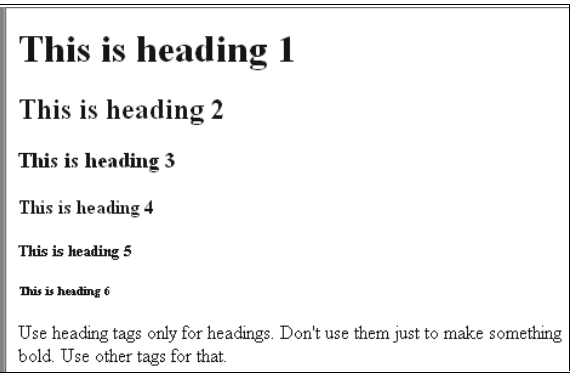
```
<html>
<body>

<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>

<p>Note that your browser simply ignores your formatting!
</p>

</body>
</html>
```

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.

Note that your browser simply ignores your formatting!

Heading tags

```
<html>
<body>

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

<p>Use heading tags only for headings. Don't use them
just to make something bold. Use other tags for that.</p>

</body>
</html>
```

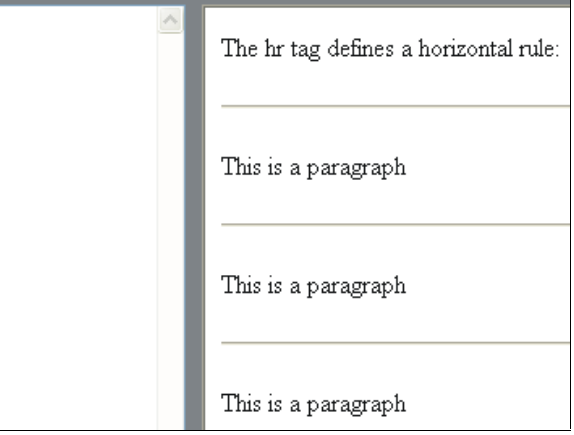


Center aligned heading

```
<html>
<body>

<h1 align="center">This is heading 1</h1>

<p>The heading above is aligned to the center of this
page. The heading above is aligned to the center of this
page. The heading above is aligned to the center of this
page.</p>

</body>
</html>
```

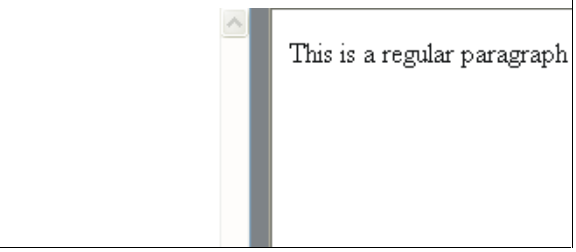
Insert a horizontal rule

```
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
</body>
</html>
```



Comments in the HTML source

```
<html>
<body>

<!--This comment will not be displayed-->
<p>This is a regular paragraph</p>

</body>
</html>
```



Add a background color

```
<html>
<body bgcolor="yellow">
<h2>Look: Colored Background!</h2>
</body>
</html>
```

Look: Colored Background!

HTML Formatting Text Examples

Text formatting

```
<br>
<big>This text is big</big>
<br>
<em>This text is emphasized</em>
<br>
<i>This text is italic</i>
<br>
<small>This text is small</small>
<br>
This text contains
<sub>subscript</sub>
<br>
This text contains
<sup>superscript</sup>

</body>
</html>
```

This text is big
This text is emphasized
This text is italic
This text is small
This text contains subscript
This text contains superscript

Preformatted text (how to control line breaks and spaces)

```
<pre>
This is
preformatted text.
It preserves      both spaces
and line breaks.
</pre>

<p>The pre tag is good for displaying computer code:</p>

<pre>
for i = 1 to 10
     print i
next i
</pre>

</body>
</html>
```

```
and line breaks.

The pre tag is good for displaying computer code:

for i = 1 to 10
     print i
next i
```

Different computer-output tags

```
<html>
<body>
<code>Computer code</code>
<br>
<kbd>Keyboard input</kbd>
<br>
<tt>Teletype text</tt>
<br>
<samp>Sample text</samp>
<br>
<var>Computer variable</var>
<br>
<p>
<b>Note:</b> These tags are often used to display
computer/programming code.
</p>
</body>
</html>
```

Computer code
Keyboard input
Teletype text
Sample text
Computer variable

Note: These tags are often used to display computer/programming code.

Insert an address

```
<address>
Donald Duck<br>
BOX 555<br>
Disneyland<br>
USA
</address>

</body>
</html>
```

Disneyland
USA

Abbreviations and acronyms

```
<html>
<body>

<abbr title="United Nations">UN</abbr>
<br>
<acronym title="World Wide Web">WWW</acronym>

<p>The title attribute is used to show the spelled-out
version when holding the mouse pointer over the acronym
or abbreviation.</p>

<p>This only works for the acronym element in IE 5.</p>

<p>This works for both the abbr and acronym element in
Netscape 6.2.</p>

</body>
</html>
```

UN
WWW

The title attribute is used to show the spelled-out version when holding the mouse pointer over the acronym or abbreviation.

This only works for the acronym element in IE 5.

This works for both the abbr and acronym element in Netscape 6.2.

Text direction

```
<html>
<body>

<p>
If your browser supports bi-directional override (bdo),
the next line will be written from the right to the left
(rtl):
</p>

<bdo dir="rtl">
Here is some Hebrew text
</bdo>

</body>
</html>
```

If your browser supports bi-directional override (bdo), the next line will be written from the right to the left (rtl):

txet werbeH emos si ereH

Long and short quotations

```
This is a long quotation. This is a long quotation. This
is a long quotation. This is a long quotation. This is a
long quotation.
</blockquote>

Here comes a short quotation:
<q>
This is a short quotation
</q>

<p>
With the block quote element, the browser inserts line
breaks and margins, but the q element does not render as
anything special.
</p>

</body>
</html>
```

quotation. This is a long quotation. This is a long quotation.

Here comes a short quotation: This is a short quotation

With the block quote element, the browser inserts line breaks and margins, but the q element does not render as anything special.

How to mark deleted and inserted text

```
<html>
<body>

<p>
a dozen is
<del>twenty</del>
<ins>twelve</ins>
pieces
</p>

<p>
Most browsers will overstrike deleted text and underline
inserted text.
</p>

<p>
Some older browsers will display deleted or inserted text
as plain text.
</p>

</body>
</html>
```

a dozen is ~~twenty~~ twelve pieces

Most browsers will overstrike deleted text and underline inserted text.

Some older browsers will display deleted or inserted text as plain text.

Examples explained

HTML Link Examples

How to create hyperlinks

```
<html>
<body>

<p>
<a href="lastpage.htm">
This text</a> is a link to a page on
this Web site.
</p>

<p>
<a href="http://www.microsoft.com/">
This text</a> is a link to a page on
the World Wide Web.
</p>

</body>
</html>
```

This text is a link to a page on this Web site.

This text is a link to a page on the World Wide Web.

Set an image as a link

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65"
height="38">
</a>
</p>

</body>
</html>
```

You can also use an image as a link:

Open a link in a new browser window

```
<html>
<body>

<a href="lastpage.htm" target="_blank">Last Page</a>

<p>
If you set the target attribute of a link to "_blank",
the link will open in a new window.
</p>

</body>
</html>
```

Last Page

If you set the target attribute of a link to "_blank", the link will open in a new window.

Jump to another part of a document (on the same page)

```
<html><body>
<p><a href="#C4">See also Chapter 4.</a></p>
<h2>Chapter 1</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 2</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 3</h2><p>This chapter explains ba bla bla</p>
<h2><a name="C4">Chapter 4</a></h2><p>This chapter
explains ba bla bla</p>
<h2>Chapter 5</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 6</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 7</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 8</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 9</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 10</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 11</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 12</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 13</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 14</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 15</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 16</h2><p>This chapter explains ba bla bla</p>
<h2>Chapter 17</h2><p>This chapter explains ba bla bla</p>
</body></html>
```

See also Chapter 4.

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

Chapter 4

This chapter explains ba bla bla

Break out of a frame

```
<html>
<body>

<p>Locked in a frame?</p>

<a href="http://www.w3schools.com/"
target="_top">Click here!</a>

</body>
</html>
```

Locked in a frame?

Click here!

How to link to a mail message (will only work if you have mail installed)

```
<html>

<body>

<p>
This is a mail link:
<a href="mailto:someone@microsoft.com?subject=Hello%
20again">
Send Mail</a>
</p>

<p>
<b>Note:</b> Spaces between words should be replaced by %
20 to <b>ensure</b> that the browser will display your
text properly.
</p>

</body>
</html>
```

This is a mail link: Send Mail

Note: Spaces between words should be replaced by %20 to **ensure** that the browser will display your text properly.

A more complicated mailto link

```
<html>

<body>

<p>
This is another mailto link:
<a href="mailto:someone@microsoft.com?
cc=someoneelse@microsoft.com&bcc=andsomeoneelse2@microsoft.com&subject=Summer%
20Party&body=You%20are%20invited%20to%20a%20big%20summer%20party!">Send mail!
</a>
</p>

<p>
<b>Note:</b> Spaces between words should be replaced by %20 to <b>ensure</b>
that the browser will display your text properly.
</p>

</body>
</html>
```

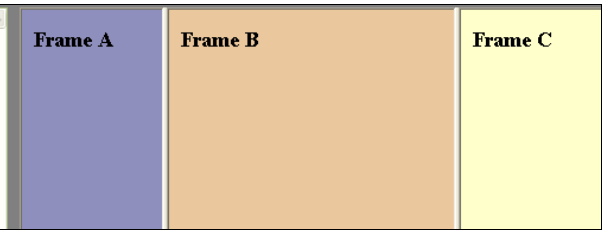
This is another mailto link: Send mail!

Note: Spaces between words should be replaced by %20 to **ensure** that the browser will display your text properly.

HTML Frame Examples

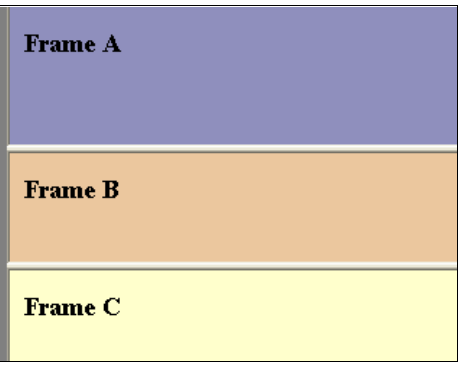
How to create a vertical frameset with 3 different documents

```
<html>

<frameset cols="25%,50%,25%">

  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

</frameset>

</html>
```



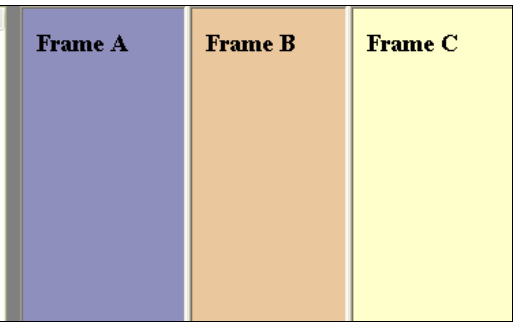
How to create a horizontal frameset with 3 different documents

```
<html>

<frameset rows="25%,50%,25%">

  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

</frameset>

</html>
```



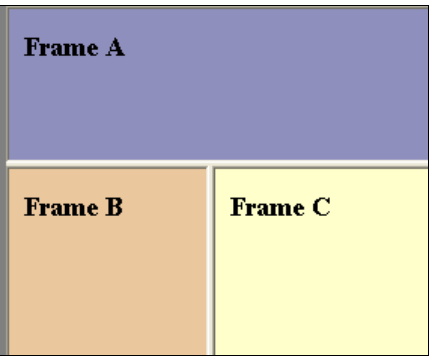
How to use the <noframes> tag

```
<html>

<frameset cols="25%,50%,25%">
  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

<noframes>
<body>Your browser does not handle frames!</body>
</noframes>

</frameset>

</html>
```



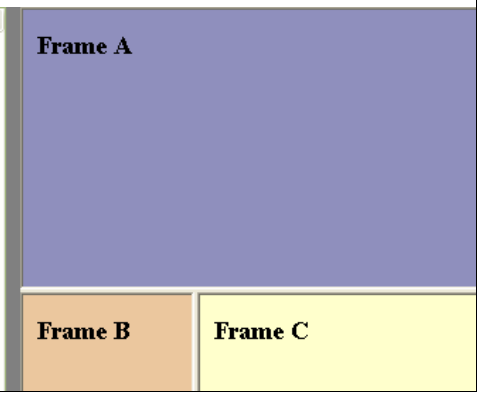
How to mix a frameset in rows and columns

```
<html>

<frameset rows="50%,50%">

<frame src="frame_a.htm">

<frameset cols="25%,75%">
<frame src="frame_b.htm">
<frame src="frame_c.htm">
</frameset>

</frameset>

</html>
```



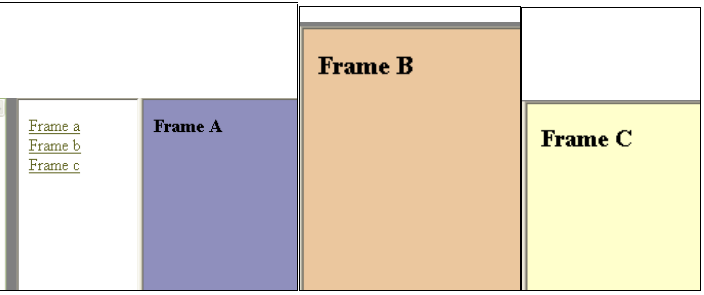
Frameset with noresize="noresize"

```
<html>

<frameset rows="50%,50%">

<frame noresize="noresize" src="frame_a.htm">

<frameset cols="25%,75%">
<frame noresize="noresize" src="frame_b.htm">
<frame noresize="noresize" src="frame_c.htm">
</frameset>

</frameset>

</html>
```



How to create a navigation frame

```
<html>

<frameset cols="120,*">

<frame src="tryhtml_contents.htm">
<frame src="frame_a.htm"
name="showframe">

</frameset>

</html>
```



Inline frame (a frame inside an HTML page)

```
<html>
<body>

<iframe src="default.asp"></iframe>

<p>Some older browsers don't support iframes.</p>
<p>If they don't, the iframe will not be visible.</p>


</body>
</html>
```

Jump to a specified section within a frame

```
<html>

<frameset cols="20%,80%">

 <frame src="frame_a.htm">
 <frame src="link.htm#C10">

</frameset>

</html>
```

Frame A

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

Jump to a specified section with frame navigation

```
<html>

<frameset cols="180,*">

<frame src="content.htm">
<frame src="link.htm" name="showframe">

</frameset>

</html>
```

Link without Anchor
Link with Anchor

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

HTML Table Examples

Simple tables

```
<html><body>
<p>
Each table starts with a table tag.
Each table row starts with a tr tag.
Each table data starts with a td tag.
</p>
<h4>One column:</h4><table border="1">
<tr><td>100</td></tr></table>
<h4>One row and three columns:</h4>
<table border="1">
<tr><td>100</td>
  <td>200</td>
  <td>300</td></tr></table>
<h4>Two rows and three columns:</h4>
<table border="1">
<tr><td>100</td>
  <td>200</td>
  <td>300</td></tr>
<tr><td>400</td>
  <td>500</td>
  <td>600</td></tr></table>
</body>
</html>
```

Each table starts with a table tag. Each table row starts with a tr tag. Each table data starts with a td tag.

One column:

100

One row and three columns:

100	200	300

Two rows and three columns:

100	200	300
400	500	600

Different table borders

```
<h4>With a thick border:</h4>  <table border="8">
<tr> <td>First</td>  <td>Row</td> </tr>
<tr> <td>Second</td> <td>Row</td> </tr> </table>
<h4>With a very thick border:</h4> <table border="15">
<tr> <td>First</td>  <td>Row</td> </tr>
<tr> <td>Second</td> <td>Row</td> </tr>
</table>
</body></html>
```

Second Row

With a thick border:

First	Row
Second	Row

With a very thick border:

First	Row
Second	Row

Table with no borders

```
<h4>This table has no borders:</h4>
<table><tr>
  <td>100</td>
  <td>200</td>
  <td>300</td></tr>
<tr>  <td>400</td>
  <td>500</td>
  <td>600</td>
</tr></table>
<h4>And this table has no borders:</h4>
<table border="0">
<tr>  <td>100</td>
  <td>200</td>
  <td>300</td></tr>
<tr>  <td>400</td>
  <td>500</td>
  <td>600</td></tr>
</table>
</body>
</html>
```

This table has no borders:

100 200 300
400 500 600

And this table has no borders:

100 200 300
400 500 600

Headings in a table

```
<html><body>
<h4>Table headers:</h4>
<table border="1">
<tr>  <th>Name</th>
  <th>Telephone</th>
  <th>Telephone</th></tr>
<tr>  <td>Bill Gates</td>
  <td>555 77 854</td>
  <td>555 77 855</td></tr>
</table>
<h4>Vertical headers:</h4>
<table border="1">
<tr>  <th>First Name:</th>
  <td>Bill Gates</td></tr>
<tr>  <th>Telephone:</th>
  <td>555 77 854</td></tr>
<tr>  <th>Telephone:</th>
  <td>555 77 855</td></tr>
</table>
</body>
</html>
```

Table headers:

Name	Telephone	Telephone
Bill Gates	555 77 854	555 77 855

Vertical headers:

First Name:	Bill Gates
Telephone:	555 77 854
Telephone:	555 77 855

Empty cells

```
<html><body>
<table border="1">
<tr>  <td>Some text</td>
  <td>Some text</td></tr>
<tr>  <td></td>
  <td>Some text</td></tr></table>
<p>As you can see, one of the cells has no border. That
is because it is empty. Try to insert a space in the
cell. Still it has no border.</p>
<p>The trick is to insert a no-breaking space in the cell.
</p>
<p>No-breaking space is a character entity. If you don't
know what a character entity is, read the chapter about
it.</p>
<p>The no-breaking space entity starts with an ampersand
("&"),
then the letters "nbsp", and ends with a semicolon (";")
</p>
<p>
</p>
</body>
</html>
```

Some text	Some text
	Some text

As you can see, one of the cells has no border. That is because it is empty. Try to insert a space in the cell. Still it has no border.

The trick is to insert a no-breaking space in the cell.

No-breaking space is a character entity. If you don't know what a character entity is, read the chapter about it.

The no-breaking space entity starts with an ampersand ("&"), then the letters "nbsp", and ends with a semicolon (";")

Table with a caption

```
<html>
<body>

<h4>
This table has a caption,
and a thick border:
</h4>

<table border="6">
<caption>My Caption</caption>
<tr>
  <td>100</td>
  <td>200</td>
  <td>300</td>
</tr>
<tr>
  <td>400</td>
  <td>500</td>
  <td>600</td>
</tr>
</table>

</body>
</html>
```

This table has a caption, and a thick border:

My Caption

100	200	300
400	500	600

Table cells that span more than one row/column

```
<html><body>
<h4>Cell that spans two columns:</h4>
<table border="1">
<tr>  <th>Name</th>
  <th colspan="2">Telephone</th></tr>
<tr>  <td>Bill Gates</td>
  <td>555 77 854</td>
  <td>555 77 855</td></tr>
</table>
<h4>Cell that spans two rows:</h4>
<table border="1"><tr>
  <th>First Name:</th>
  <td>Bill Gates</td></tr>
<tr>  <th rowspan="2">Telephone:</th>
  <td>555 77 854</td></tr>
<tr>  <td>555 77 855</td></tr>
</table>
</body>
</html>
```

Cell that spans two columns:

Name	Telephone	
Bill Gates	555 77 854	555 77 855

Cell that spans two rows:

First Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

Tags inside a table

```
<html><body>
<table border="1">
<tr><td>   <p>This is a paragraph</p>
   <p>This is another paragraph</p>  </td>
  <td>This cell contains a table:
   <table border="1">
<tr>     <td>A</td>
     <td>B</td>   </tr>
   <tr>     <td>C</td>
     <td>D</td>   </tr>
   </table>  </td>   </tr>
<tr>  <td>This cell contains a list   <ul>
    <li>apples</li>
    <li>bananas</li>
    <li>pineapples</li>   </ul>  </td>
  <td>HELLO</td>
</tr>
</table>

</body>
</html>
```

This is a paragraph This is another paragraph	This cell contains a table: A B C D
This cell contains a list • apples • bananas • pineapples	HELLO

Cell padding (control the white space between cell content and the borders

```
<table border="1">
<tr>  <td>First</td>
  <td>Row</td></tr>
<tr>  <td>Second</td>
  <td>Row</td></tr>
</table>
<h4>With cellpadding:</h4>
<table border="1"
cellpadding="10"><tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

First	Row
Second	Row

With cellpadding:

First	Row
Second	Row

Cell spacing (control the distance between cells)

```
<html><body>
<h4>Without cellspacing:</h4>
<table border="1">
<tr>  <td>First</td>
  <td>Row</td></tr>
<tr>  <td>Second</td>
  <td>Row</td></tr>
</table>
<h4>With cellspacing:</h4>
<table border="1"
cellspacing="10">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

Without cellspacing:

First	Row
Second	Row

With cellspacing:

First	Row
Second	Row

Add a background color or a background image to a table

```
<html><body>
<h4>A background color:</h4>
<table border="1"
bgcolor="red">
<tr>  <td>First</td>
  <td>Row</td></tr>
<tr>  <td>Second</td>
  <td>Row</td></tr>
</table>
<h4>A background image:</h4>
<table border="1"
background="bgdesert.jpg">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

A background color:

First	Row
Second	Row

A background image:

First	Row
Second	Row

Add a background color or a background image to a table cell

```
<html>
<body>

<h4>Cell backgrounds:</h4>
<table border="1">
<tr>
  <td bgcolor="red">First</td>
  <td>Row</td>
</tr>
<tr>
  <td
  background="bgdesert.jpg">
  Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

Cell backgrounds:

First	Row
Second	Row

Align the content in a table cell

```
<html><body>
<table width="400" border="1">
 <tr>
  <th align="left">Money spent on....</th>
  <th align="right">January</th>
  <th align="right">February</th> </tr>
 <tr>  <td align="left">Clothes</td>
  <td align="right">$241.10</td>
  <td align="right">$50.20</td> </tr>
 <tr>  <td align="left">Make-Up</td>
  <td align="right">$30.00</td>
  <td align="right">$44.45</td> </tr>
 <tr>  <td align="left">Food</td>
  <td align="right">$730.40</td>
  <td align="right">$650.00</td> </tr>
 <tr>  <th align="left">Sum</th>
  <th align="right">$1001.50</th>
  <th align="right">$744.65</th> </tr>
</table>
</body>
</html>
```

Money spent on....	January	February
Clothes	$241.10	$50.20
Make-Up	$30.00	$44.45
Food	$730.40	$650.00
Sum	**$1001.50**	**$744.65**

The frame attribute

```
<html>
<body>
<p>
If you see no frames around the tables in these examples, your browser is too old, or does not support it.
</p>
<h4>With frame="border":</h4>
<table frame="border">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="box":</h4>
<table frame="box">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="void":</h4>
<table frame="void">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
```

If you see no frames around the tables in these examples, your browser is too old, or does not support it.

With frame="border":

First Row
Second Row

With frame="box":

First Row
Second Row

With frame="void":

First Row
Second Row

With frame="above":

First Row
Second Row

With frame="below":

First Row
Second Row

With frame="hsides":

First Row

```
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="above":</h4>
<table frame="above">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="below":</h4>
<table frame="below">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="hsides":</h4>
<table frame="hsides">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="vsides":</h4>
<table frame="vsides">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
```

Second Row

With frame="vsides":

First	Row
Second	Row

With frame="lhs":

First	Row
Second	Row

With frame="rhs":

First	Row
Second	Row

```
<h4>With frame="lhs":</h4>
<table frame="lhs">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
<h4>With frame="rhs":</h4>
<table frame="rhs">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

The frame and border attributes

```
<html>
<body>

<p>
If you see no frames around the tables in these examples,
your browser does not support the frame attribute.
</p>

<table frame="hsides" border="3">
<tr>
  <td>First row</td>
</tr>
</table>
<br />
<table frame="vsides" border="3">
<tr>
  <td>First row</td>
</tr>
</table>

</body>
</html>
```

If you see no frames around the tables in these examples, your browser does not support the frame attribute.

First row

First row

HTML List Examples

An unordered list

```
<html>
<body>

<h4>An Unordered List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

An Unordered List:

- Coffee
- Tea
- Milk

An ordered list

```
<html>
<body>

<h4>An Ordered List:</h4>
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

An Ordered List:

1. Coffee
2. Tea
3. Milk

Different types of ordered lists

```
<html>
<body>
<h4>Numbered list:</h4>
<ol>

 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>

</ol>

<h4>Letters list:</h4>
<ol type="A">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>

</ol>

h4>Lowercase letters list:</h4>
<ol type="a">
 <li>Apples</li>
 <li>Bananas</li>
```

Numbered list:

1. Apples
2. Bananas
3. Lemons
4. Oranges

Letters list:

A. Apples
B. Bananas
C. Lemons
D. Oranges

Lowercase letters list:

a. Apples
b. Bananas
c. Lemons
d. Oranges

Roman numbers list:

I. Apples
II. Bananas

```
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

<h4>Roman numbers list:</h4>
<ol type="I">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

<h4>Lowercase Roman numbers list:</h4>
<ol type="i">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

</body>
</html>
```

III. Lemons
IV. Oranges

Lowercase Roman numbers list:

i. Apples
ii. Bananas
iii. Lemons
iv. Oranges

Different types of unordered Lists

```
<html>
<body>

<h4>Disc bullets list:</h4>
<ul type="disc">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>

<h4>Circle bullets list:</h4>
<ul type="circle">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>
```

Disc bullets list:

- Apples
- Bananas
- Lemons
- Oranges

Circle bullets list:

- Apples
- Bananas
- Lemons
- Oranges

Square bullets list:

- Apples
- Bananas

<h4>Square bullets list:</h4> <ul type="square"> <li>Apples</li> <li>Bananas</li> <li>Lemons</li> <li>Oranges</li> </ul> </body> </html>	§ Lemons § Oranges

Nested list

```
<html>
<body>

<h4>A nested List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
    <li>Black tea</li>
    <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```

A nested List:

- Coffee
- Tea
  - Black tea
  - Green tea
- Milk

Nested list 2

```
<html>
<body>

<h4>A nested List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
    <li>Black tea</li>
    <li>Green tea
      <ul>
      <li>China</li>
      <li>Africa</li>
      </ul>
    </li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```

A nested List:

- Coffee
- Tea
  - Black tea
  - Green tea
    - China
    - Africa
- Milk

Definition list

```
<html>
<body>

<h4>A Definition List:</h4>
<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl>

</body>
</html>
```

A Definition List:

Coffee
: Black hot drink

Milk
: White cold drink

HTML Form and Input Examples

How to create input fields

```
<html>
<body>

<form action="">
First name:
<input type="text" name="firstname">
<br>
Last name:
<input type="text" name="lastname">
</form>

</body>
</html>
```

First name:

Last name:

Password fields

```
<html>
<body>

<form action="">
Username:
<input type="text" name="user">
<br>
Password:
<input type="password" name="password">
</form>
<p>
Note that when you type characters in a password field,
the browser displays asterisks or bullets instead of the
characters.
</p>
</body>
</html>
```

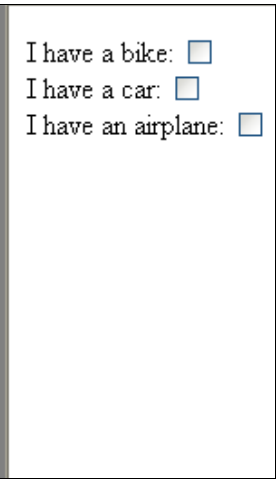
Username:

Password:

Note that when you type characters in a password field, the browser displays asterisks or bullets instead of the characters.

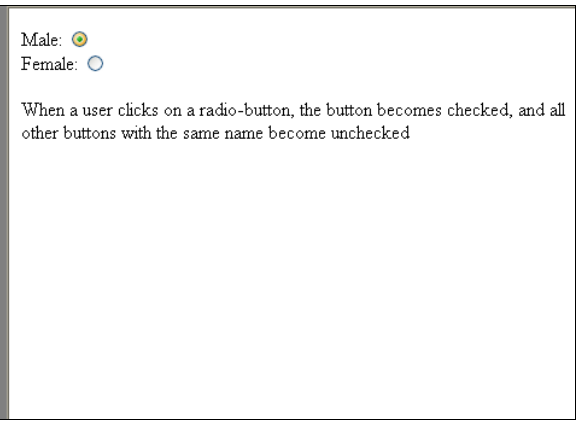
Checkboxes

```
<html>
<body>

<form action="">
I have a bike:
<input type="checkbox" name="vehicle" value="Bike">
<br />
I have a car:
<input type="checkbox" name="vehicle" value="Car">
<br />
I have an airplane:
<input type="checkbox" name="vehicle" value="Airplane">
</form>

</body>
</html>
```



Radiobuttons

```
<html>
<body>

<form action="">
Male:
<input type="radio" checked="checked"
name="Sex" value="male">
<br>
Female:
<input type="radio"
name="Sex" value="female">
</form>

<p>
When a user clicks on a radio-button, the button becomes
checked, and all other buttons with the same name become
unchecked
</p>

</body>
</html>
```



Simple drop-down box (a selectable list)

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

Another drop-down box with a pre-selected value

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat" selected="selected">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

Textarea (a multi-line text input field)

```
<html>
<body>

<p>
This example cannot be edited
because our editor uses a textarea
for input,
and your browser does not allow
a textarea inside a textarea.
</p>

<textarea rows="10" cols="30">
The cat was playing in the garden.
</textarea>

</body>
</html>
```

This example cannot be edited because our editor uses a textarea for input, and your browser does not allow a textarea inside a textarea.

```
The cat was playing in the
garden.
```

Create a button

```
<html>
<body>

<form action="">
<input type="button" value="Hello world!">
</form>

</body>
</html>
```

Draw a border with a caption around data

```
<html>
<body>

<fieldset>
<legend>
Health information:
</legend>
<form action="">
Height <input type="text" size="3">
Weight <input type="text" size="3">
</form>
</fieldset>

<p>
If there is no border around the input form, your browser
is too old.
</p>

</body>
</html>
```

Health information:

Height Weight

If there is no border around the input form, your browser is too old.

Form with an input field and a submit button

```
<html>
<body>

<form name="input" action="html_form_action.asp"
method="get">

Type your first name:
<input type="text" name="FirstName" value="Mickey"
size="20">
<br>Type your last name:
<input type="text" name="LastName" value="Mouse"
size="20">
<br>
<input type="submit" value="Submit">

</form>

<p>
If you click the "Submit" button, you will send your
input to a new page called html_form_action.asp.
</p>

</body>
</html>
```

Type your first name: Mickey

Type your last name: Mouse

Submit

If you click the "Submit" button, you will send your input to a new page called html_form_action.asp.

Form with checkboxes and a submit button

```
<html>
<body>

<form name="input" action="html_form_action.asp"
method="get">

Type your first name:
<input type="text" name="FirstName" value="Mickey"
size="20">
<br>Type your last name:
<input type="text" name="LastName" value="Mouse"
size="20">
<br>
<input type="submit" value="Submit">

</form>

<p>
If you click the "Submit" button, you will send your
input to a new page called html_form_action.asp.
</p>

</body>
</html>
```

Your input was received as:

FirstName=Mickey&LastName=Mouse

This page was returned to you from the server. The server has processed your input and returned this answer. It is not a part of the HTML tutorial to teach you how the server is processing this input. If you want to learn more about processing form input, you can study it in our ASP tutorial.

Use the back button in your browser to return to your example.

Form with radiobuttons and a submit button

```
<html>
<body>

<form name="input" action="html_form_action.asp"
method="get">
Male:
<input type="radio" name="Sex" value="Male"
checked="checked">
<br>
Female:
<input type="radio" name="Sex" value="Female">
<br>
<input type ="submit" value ="Submit">
</form>

<p>
If you click the "Submit" button, you will send your
input to a new page called html_form_action.asp.
</p>

</body>
</html>
```

Male: ◉
Female: ○
[Submit]

If you click the "Submit" button, you will send your input to a new page called html_form_action.asp.

Send e-mail from a form

```
<html>
<body>
<form action="MAILTO:someone@w3schools.com" method="post"
enctype="text/plain">

<h3>This form sends an e-mail to W3Schools.</h3>
Name:<br>
<input type="text" name="name"
value="yourname" size="20">
<br>
Mail:<br>
<input type="text" name="mail"
value="yourmail" size="20">
<br>
Comment:<br>
<input type="text" name="comment"
value="yourcomment" size="40">
<br><br>
<input type="submit" value="Send">
<input type="reset" value="Reset">

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

This form sends an e-mail to W3Schools.

Name:
yourname
Mail:
yourmail
Comment:
yourcomment

[Send] [Reset]

HTML Image Examples

Insert images

```
<html>
<body>

<p>
An image:
<img src="constr4.gif"
width="144" height="50">
</p>

<p>
A moving image:
<img src="hackanm.gif"
width="48" height="48">
</p>

<p>
Note that the syntax of inserting a moving image is no
different from that of a non-moving image.
</p>

</body>
</html>
```

An image:

A moving image:

Note that the syntax of inserting a moving image is no different from that of a non-moving image.

Insert images from another folder or another server

```
<html>
<body>

<p>
An image from another folder:
<img src="/images/netscape.gif"
width="33" height="32">
</p>

<p>
An image from W3Schools:
<img src="http://www.w3schools.com/images/ie.gif">
</p>

</body>
</html>
```

An image from another folder:

An image from W3Schools:

Background image

```
<html>
<body background="background.jpg">

<h3>Look: A background image!</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```

Look: A background image!

Both gif and jpg files can be used as HTML backgrounds.

If the image is smaller than the page, the image will repeat itself.

Align an image within a text

```
<html>
<body>

<p>
An image
<img src="hackanm.gif"
align="bottom" width="48"
height="48">
in the text
```

An image in the text

An image in the text

```
</p>

<p>
An image
<img src ="hackanm.gif"
align="middle" width="48"
height="48">
in the text
</p>

<p>
An image
<img src ="hackanm.gif"
align="top" width="48" height="48">
in the text
</p>

<p>Note that bottom alignment is the
default alignment</p>

<p>
An image
<img src ="hackanm.gif"
width="48" height="48">
in the text
</p>

<p>
<img src ="hackanm.gif"
width="48" height="48">
An image before the text
</p>

<p>
An image after the text
<img src ="hackanm.gif"
width="48" height="48">
</p>

</body>
</html>
```

An image in the text

Note that bottom alignment is the default alignment

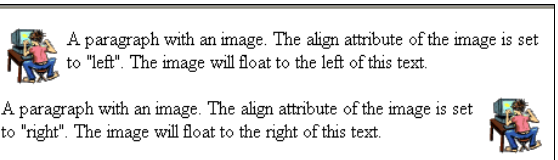
An image in the text

An image before the text

An image after the text

Let the image float to the left/right of a paragraph

```
<html>
<body>

<p>
<img src ="hackanm.gif"
align ="left" width="48" height="48">
A paragraph with an image. The align attribute of the
image is set to "left". The image will float to the left
of this text.
</p>

<p>
<img src ="hackanm.gif"
align ="right" width="48" height="48">
A paragraph with an image. The align attribute of the
image is set to "right". The image will float to the
right of this text.
</p>

</body>
</html>
```



A paragraph with an image. The align attribute of the image is set to "left". The image will float to the left of this text.

A paragraph with an image. The align attribute of the image is set to "right". The image will float to the right of this text.

Adjust images to different sizes

```
<body>

<p>
<img src="hackanm.gif"
width="20" height="20">
</p>

<p>
<img src="hackanm.gif"
width="45" height="45">
</p>

<p>
<img src="hackanm.gif"
width="70" height="70">
</p>

<p>
You can make a picture larger or smaller changing the
values in the "height" and "width" attributes of the
img tag.
</p>
</body></html>
```

You can make a picture larger or smaller changing the values in the "height" and "width" attributes of the img tag.

Display an alternate text for an image (if the browser can't load images)

```
<body>

<img src="goleft.gif" alt="Go Left" width="32"
height="32">

<p>
Text-only browsers cannot display images and will only
display the text that is specified in the "alt" attribute
for the image. Here, the "alt"-text is "Go Left".</p>
<p>
Note that if you hold the mouse pointer over the image,
most browsers will display the "alt"-text.
</p>

</body>
</html>
```

Text-only browsers cannot display images and will only display the text that is specified in the "alt" attribute for the image. Here, the "alt"-text is "Go Left".

Note that if you hold the mouse pointer over the image, most browsers will display the "alt"-text.

Make a hyperlink of an image

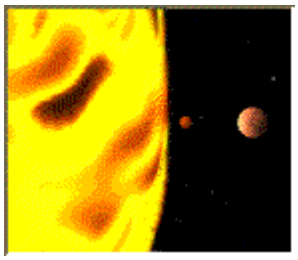
```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65"
height="38">
</a>
</p>

</body>
</html>
```

You can also use an image as a link:

Create an image-map, with clickable regions

```
<html>
<body>
<p>
Click on one of the planets to watch it closer:
</p>

<img src="planets.gif"
width="145" height="126"
usemap="#planetmap">

<map id="planetmap" name="planetmap">

<area shape="rect"
coords="0,0,82,126"
alt="Sun"
href="sun.htm">

<area shape="circle"
coords="90,58,3"
alt="Mercury"
href="mercur.htm">

<area shape="circle"
coords="124,58,8"
alt="Venus"
href="venus.htm">

</map>

<p><b>Note:</b> The "usemap" attribute in the img
element refers to the "id" or "name" (browser dependant)
attribute in
the map element, therefore we have added both the "id" and
"name" attributes to the map element.</p>

</body>
</html>
```

Click on one of the planets to watch it closer:

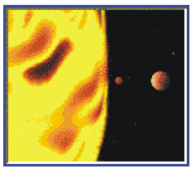


Note: The "usemap" attribute in the img element refers to the "id" or "name" (browser dependant) attribute in the map element, therefore we have added both the "id" and "name" attributes to the map element.

Turn an image into an image map

```
<html>
<body>

<p>
Move the mouse over the image, and look at the status bar
to see how the
coordinates change.
</p>

<p>
<a href="tryhtml_ismap.htm">
<img src="planets.gif"
ismap width="146" height="126">
</a>
</p>

</body>
</html>
```

Move the mouse over the image, and look at the status bar to see how the coordinates change.



HTML Background Examples

Good background and text color

```
<html>
<body bgcolor="#d0d0d0">

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

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

</body>
</html>
```

This is a paragraph. This is a paragraph. This is a paragraph. This is a paragraph. This is a paragraph.

This is another paragraph. This is another paragraph. This is another paragraph. This is another paragraph.

Bad background and text color

```
<html>
<body bgcolor="#ffffff" text="yellow">

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

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

</body>
</html>
```

This is a paragraph. This is a paragraph. This is a paragraph. This is a paragraph. This is a paragraph.

This is another paragraph. This is another paragraph. This is another paragraph. This is another paragraph.

Good background image

```
<html>
<body background="background.jpg">

<h3>Image Background</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```

Image Background

Both gif and jpg files can be used as HTML backgrounds.

If the image is smaller than the page, the image will repeat itself.

Good background image 2

```
<html>
<body background="paper.gif">

<h3>Image Background</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```

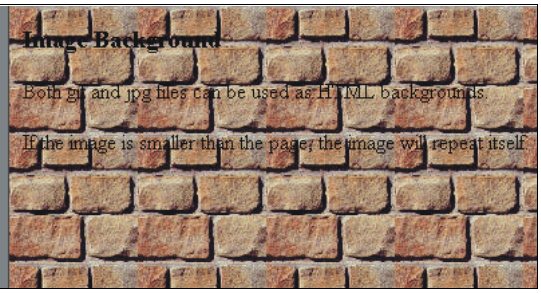
Image Background

Both gif and jpg files can be used as HTML backgrounds.

If the image is smaller than the page, the image will repeat itself.

Bad background image

```
<html>
<body background="rock.jpg">

<h3>Image Background</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```



HTML Style Examples

Styles in the head section of an HTML document

```
<html>

<head>

<style type="text/css">
h1 {color: red}
h3 {color: blue}
</style>

</head>

<body>
<h1>This is header 1</h1>
<h3>This is header 3</h3>
</body>

</html>
```

This is header 1

This is header 3

Link that is not underlined

```
<html>
<body>

<a href="lastpage.htm"
style="text-decoration:none">
THIS IS A LINK!
</a>

</body>
</html>
```

THIS IS A LINK!

Link to an external style sheet

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="styles.css" >
</head>

<body>
<h1>I am formatted with a linked style sheet</h1>
<p>Me too!</p>
</body>

</html>
```

I am formatted with a linked style sheet

Me too!

HTML <head> Examples

Set a title of a document

```
<html>

<head>
<title>The title is not displayed</title>
</head>

<body>
<p>This text is displayed</p>
</body>

</html>
```

This text is displayed

One target for all links on a page

```
<html>
<head>
<base target="_blank">
</head>

<body>

<p>
<a href="http://www.w3schools.com"
target="_blank">This link</a>
will load in a new window because the target attribute is
set to "_blank".
</p>

<p>
<a href="http://www.w3schools.com">
This link</a>
will also load in a new window even without a target
attribute.
</p>

</body>
</html>
```

This link will load in a new window because the target attribute is set to "_blank".

This link will also load in a new window even without a target attribute.

HTML <meta> Examples

Document description

```
<html>

<head>

<meta name="author"
content="Jan Egil Refsnes">

<meta name="revised"
content="Jan Egil Refsnes,6/10/99">

<meta name="generator"
content="Microsoft FrontPage 4.0">

</head>

<body>
<p>
The meta attributes of this document identify the author
and the editor software.
</p>
</body>

</html>
```

The meta attributes of this document identify the author and the editor software.

Document keywords

```
<html>

<head>

<meta name="description"
content="HTML examples">

<meta name="keywords"
content="HTML, DHTML, CSS, XML, XHTML, JavaScript,
VBScript">

</head>

<body>
<p>
The meta attributes of this document describe the
document and its keywords.
</p>
</body>

</html>
```

The meta attributes of this document describe the document and its keywords.

Redirect a user to another URL

```
<html>
<head>
<meta http-equiv="Refresh"
content="5;url=http://www.w3schools.com">
</head>

<body>
<p>
Sorry! We have moved! The new URL is: <a
href="http://www.w3schools.com">http://www.w3schools.com</a>
</p>

<p>
You will be redirected to the new address in five seconds.
</p>

<p>
If you see this message for more than 5 seconds, please
click on the link above!
</p>

</body>
</html>
```

HTML Script Examples

Insert a script

```
<html>
<body>

<script type="text/javascript">
document.write("<h1>Hello World!</h1>")
</script>

</body>
</html>
```

Hello World!

Handle browsers that do not support scripts

```
<html>
<body>

<script type="text/javascript">
<!--
document.write("If this is displayed, your browser
supports scripting!")
//-->
</script>

<noscript>No JavaScript support!</noscript>

<p>
A browser that does not support JavaScript will show the
text in the noscript element.
</p>

</body>
</html>
```

If this is displayed, your browser supports scripting!

A browser that does not support JavaScript will show the text in the noscript element.

Create Your Own Web Page

Step 1

First you need to create a text document containing the words that you want to appear on your Web page. Most word processing programs will work fine, as long as you give your document a name ending in *.html* (or *.htm* if you're working on a PC) and save the document as "Text Only." Type out your story, book review, fascinating facts about Jupiter, or whatever it is you want to publish. Here are some tips for organizing your text:

- Begin with a title and an attention-grabbing greeting or introduction, so people will know immediately what your page is about and will want to read more.
- Think about logical places to insert breaks in your text. No one wants to scroll down a long, uninterrupted block of text. Your page will be a lot more readable if you put in frequent paragraph breaks and horizontal rules (more about these later).
- Think about where you might want to insert pictures, if you have them in electronic files. (More about downloading images in Step #4.) A lot of pages start off with an eye-catching image right at the top, next to the title.
- If your word processing program has an option for "smart" or "curly" quotes, turn it off! Curly quotes will show up on a browser as strange little icons rather than quotation marks. The straight quotes may not look as nice, but they're the ones you have to use for Web authoring.

Step 2

Now you need to insert some formatting tags in your document that will tell an Internet browser (such as Netscape, America Online, or Internet Explorer) how to arrange your words and pictures on the screen. These tags make up a language called HyperText Markup Language, or HTML. The basic skeleton for an HTML document looks like this:

```
<html>
<head>
<title>Title of Page</title>
</head>
<body>
Text of page...
</body>
</html>
```

Notice that **(1)** each formatting tag appears between "less than" (<) and "greater than" (>) signs, and **(2)** the tags often appear in pairs, with the second tag in the pair beginning with a "slash" (/).

Here's a list of some of the basic formatting tags in HTML:

<h1>...</h1>
header, level 1 (the largest size type for a header, usually used at the beginning of a page or the start of a new section). Smaller headers are tagged with <h2>...</h2>, <h3>...</h3>, etc.
...
boldface text
...
italic text
...
centered text
<p>
paragraph return (inserts an extra line space between paragraphs)
Note: Any paragraph returns that you insert in your document by simply hitting the Return key on your keyboard will be ignored by a Web browser. You must use the tag <p> to create a paragraph break on the screen.

line break (no extra space)
<hr>
horizontal rule (a line running left-to-right across the page, to separate one section from the next)
<ol>...</ol>
ordered, or numbered, list. Each list item begins with the tag <li> and falls somewhere between the <ol>...</ol> tags.
<ul>...</ul>
unordered, or bulleted, list. Again, each list item begins with the tag <li>.
<a href="filename.html">...</a>
a hotlink to another file in the same folder
<a href="http://URL">...</a>
a hotlink to another site. You will have to know the Uniform Resource Locator (URL), or Web address, of any site to which you want to link your page.
<img src="image.gif">
This tag would insert an image with the filename "image.gif" on the far left side of your page.
(Note: Don't worry if this information seems confusing or overwhelming right now. It will make more sense as you apply it in the next few steps.)

Step 3

You may feel somewhat baffled after reading that long list of formatting tags in Step #2. It's easier just to look at a real HTML document and then see how it gets translated into a Web page. You can view the "source document" behind any Web page by going to the "View" menu (in Netscape -- other browsers may be slightly different) and selecting "Page Source." When you do this, you'll see the document with HTML tags that creates the page currently in the window of your browser.

We've created a Sample Web Page for you to study. Using the link below, go to the Sample Web Page and look at how the text and image appear on your screen. Then use "View Page Source" to call up the document we used to create the

sample page. If possible, print this document. Compare it line-by-line with the page in your browser window. Do you see how all the formatting tags work?

Step 4

If you don't already have image files for your page, you can download some from other Web pages. Use your common sense to decide which images you're allowed to use and which ones you shouldn't. Images provided by NASA, for example, are for the public's use. A corporate logo is private property. If you're looking for some astronomical images, you might try the list of **Top Ten Shoemaker-Levy 9 Images** on the Comet P/Shoemaker-Levy 9 Home Page. Depending on what kind of computer and browser you're using, you'll have to use a slightly different procedure to download an image onto your hard drive. Here's how you would do it on a Macintosh computer, using a Netscape browser:

1. Use your mouse to position the pointer over the image.
2. Hold down the button on the mouse until you see a menu. Keep the button down and move the pointer to "Save this image as...."
3. Let go of the button, and you'll see a dialog box that lets you choose where you want to put the image and what you want to call it. If you decide to change the name of the file, make sure your new name ends in *.gif* or *.jpg* (This will be important if you use the image in your own Web page).
4. Click on "Save" (or hit the return key), and the image will be downloaded onto your hard drive.

While you're searching for images, don't download every one you see. You'll take up a lot of space on your hard drive if you grab dozens of images. Select just a few -- perhaps your own "Top Five" list -- that you think are the best for your page.