

Tag	Description
<a href="#"><code>&lt;!--...--&gt;</code></a>	Defines a comment
<a href="#"><code>&lt;!DOCTYPE&gt;</code></a>	Defines the document type
<a href="#"><code>&lt;a&gt;</code></a>	Defines a hyperlink
<a href="#"><code>&lt;abbr&gt;</code></a>	Defines an abbreviation or an acronym
<a href="#"><code>&lt;address&gt;</code></a>	Defines contact information for the author/owner of a document
<a href="#"><code>&lt;area&gt;</code></a>	Defines an area inside an image map
<a href="#"><code>&lt;article&gt;</code></a>	Defines an article
<a href="#"><code>&lt;aside&gt;</code></a>	Defines content aside from the page content
<a href="#"><code>&lt;audio&gt;</code></a>	Defines embedded sound content
<a href="#"><code>&lt;b&gt;</code></a>	Defines bold text
<a href="#"><code>&lt;base&gt;</code></a>	Specifies the base URL/target for all relative URLs in a document
<a href="#"><code>&lt;bdi&gt;</code></a>	Isolates a part of text that might be formatted in a different direction from other text outside it
<a href="#"><code>&lt;bdo&gt;</code></a>	Overrides the current text direction
<a href="#"><code>&lt;blockquote&gt;</code></a>	Defines a section that is quoted from another source
<a href="#"><code>&lt;body&gt;</code></a>	Defines the document's body
<a href="#"><code>&lt;br&gt;</code></a>	Defines a single line break
<a href="#"><code>&lt;button&gt;</code></a>	Defines a clickable button
<a href="#"><code>&lt;canvas&gt;</code></a>	Used to draw graphics, on the fly, via scripting (usually JavaScript)
<a href="#"><code>&lt;caption&gt;</code></a>	Defines a table caption
<a href="#"><code>&lt;cite&gt;</code></a>	Defines the title of a work
<a href="#"><code>&lt;code&gt;</code></a>	Defines a piece of computer code
<a href="#"><code>&lt;col&gt;</code></a>	Specifies column properties for each column within a <code>&lt;colgroup&gt;</code> element
<a href="#"><code>&lt;colgroup&gt;</code></a>	Specifies a group of one or more columns in a table for formatting
<a href="#"><code>&lt;data&gt;</code></a>	Adds a machine-readable translation of a given content
<a href="#"><code>&lt;datalist&gt;</code></a>	Specifies a list of pre-defined options for input controls
<a href="#"><code>&lt;dd&gt;</code></a>	Defines a description/value of a term in a description list
<a href="#"><code>&lt;del&gt;</code></a>	Defines text that has been deleted from a document

<a href="#"><code>&lt;details&gt;</code></a>	Defines additional details that the user can view or hide
<a href="#"><code>&lt;dfn&gt;</code></a>	Specifies a term that is going to be defined within the content
<a href="#"><code>&lt;dialog&gt;</code></a>	Defines a dialog box or window
<a href="#"><code>&lt;div&gt;</code></a>	Defines a section in a document
<a href="#"><code>&lt;dl&gt;</code></a>	Defines a description list
<a href="#"><code>&lt;dt&gt;</code></a>	Defines a term/name in a description list
<a href="#"><code>&lt;em&gt;</code></a>	Defines emphasized text
<a href="#"><code>&lt;embed&gt;</code></a>	Defines a container for an external application
<a href="#"><code>&lt;fieldset&gt;</code></a>	Groups related elements in a form
<a href="#"><code>&lt;figcaption&gt;</code></a>	Defines a caption for a <code>&lt;figure&gt;</code> element
<a href="#"><code>&lt;figure&gt;</code></a>	Specifies self-contained content
<a href="#"><code>&lt;footer&gt;</code></a>	Defines a footer for a document or section
<a href="#"><code>&lt;form&gt;</code></a>	Defines an HTML form for user input
<a href="#"><code>&lt;h1&gt; to &lt;h6&gt;</code></a>	Defines HTML headings
<a href="#"><code>&lt;head&gt;</code></a>	Contains metadata/information for the document
<a href="#"><code>&lt;header&gt;</code></a>	Defines a header for a document or section
<a href="#"><code>&lt;hgroup&gt;</code></a>	Defines a header and related content
<a href="#"><code>&lt;hr&gt;</code></a>	Defines a thematic change in the content
<a href="#"><code>&lt;html&gt;</code></a>	Defines the root of an HTML document
<a href="#"><code>&lt;i&gt;</code></a>	Defines a part of text in an alternate voice or mood
<a href="#"><code>&lt;iframe&gt;</code></a>	Defines an inline frame
<a href="#"><code>&lt;img&gt;</code></a>	Defines an image
<a href="#"><code>&lt;input&gt;</code></a>	Defines an input control
<a href="#"><code>&lt;ins&gt;</code></a>	Defines a text that has been inserted into a document
<a href="#"><code>&lt;kbd&gt;</code></a>	Defines keyboard input
<a href="#"><code>&lt;label&gt;</code></a>	Defines a label for an <code>&lt;input&gt;</code> element
<a href="#"><code>&lt;legend&gt;</code></a>	Defines a caption for a <code>&lt;fieldset&gt;</code> element
<a href="#"><code>&lt;li&gt;</code></a>	Defines a list item
<a href="#"><code>&lt;link&gt;</code></a>	Defines the relationship between a document and an external resource (most used to link to style sheets)

<a href="#"><code>&lt;main&gt;</code></a>	Specifies the main content of a document
<a href="#"><code>&lt;map&gt;</code></a>	Defines an image map
<a href="#"><code>&lt;mark&gt;</code></a>	Defines marked/highlighted text
<a href="#"><code>&lt;menu&gt;</code></a>	Defines an unordered list
<a href="#"><code>&lt;meta&gt;</code></a>	Defines metadata about an HTML document
<a href="#"><code>&lt;meter&gt;</code></a>	Defines a scalar measurement within a known range (a gauge)
<a href="#"><code>&lt;nav&gt;</code></a>	Defines navigation links
<a href="#"><code>&lt;noscript&gt;</code></a>	Defines an alternate content for users that do not support client-side scripts
<a href="#"><code>&lt;object&gt;</code></a>	Defines a container for an external application
<a href="#"><code>&lt;ol&gt;</code></a>	Defines an ordered list
<a href="#"><code>&lt;optgroup&gt;</code></a>	Defines a group of related options in a drop-down list
<a href="#"><code>&lt;option&gt;</code></a>	Defines an option in a drop-down list
<a href="#"><code>&lt;output&gt;</code></a>	Defines the result of a calculation
<a href="#"><code>&lt;p&gt;</code></a>	Defines a paragraph
<a href="#"><code>&lt;param&gt;</code></a>	Defines a parameter for an object
<a href="#"><code>&lt;picture&gt;</code></a>	Defines a container for multiple image resources
<a href="#"><code>&lt;pre&gt;</code></a>	Defines preformatted text
<a href="#"><code>&lt;progress&gt;</code></a>	Represents the progress of a task
<a href="#"><code>&lt;q&gt;</code></a>	Defines a short quotation
<a href="#"><code>&lt;rp&gt;</code></a>	Defines what to show in browsers that do not support ruby annotations
<a href="#"><code>&lt;rt&gt;</code></a>	Defines an explanation/pronunciation of characters (for East Asian typography)
<a href="#"><code>&lt;ruby&gt;</code></a>	Defines a ruby annotation (for East Asian typography)
<a href="#"><code>&lt;s&gt;</code></a>	Defines text that is no longer correct
<a href="#"><code>&lt;samp&gt;</code></a>	Defines sample output from a computer program
<a href="#"><code>&lt;script&gt;</code></a>	Defines a client-side script
<a href="#"><code>&lt;search&gt;</code></a>	Defines a search section
<a href="#"><code>&lt;section&gt;</code></a>	Defines a section in a document
<a href="#"><code>&lt;select&gt;</code></a>	Defines a drop-down list

<a href="#"><code>&lt;small&gt;</code></a>	Defines smaller text
<a href="#"><code>&lt;source&gt;</code></a>	Defines multiple media resources for media elements ( <code>&lt;video&gt;</code> and <code>&lt;audio&gt;</code> )
<a href="#"><code>&lt;span&gt;</code></a>	Defines a section in a document
<a href="#"><code>&lt;strong&gt;</code></a>	Defines important text
<a href="#"><code>&lt;style&gt;</code></a>	Defines style information for a document
<a href="#"><code>&lt;sub&gt;</code></a>	Defines subscripted text
<a href="#"><code>&lt;summary&gt;</code></a>	Defines a visible heading for a <code>&lt;details&gt;</code> element
<a href="#"><code>&lt;sup&gt;</code></a>	Defines superscripted text
<a href="#"><code>&lt;svg&gt;</code></a>	Defines a container for SVG graphics
<a href="#"><code>&lt;table&gt;</code></a>	Defines a table
<a href="#"><code>&lt;tbody&gt;</code></a>	Groups the body content in a table
<a href="#"><code>&lt;td&gt;</code></a>	Defines a cell in a table
<a href="#"><code>&lt;template&gt;</code></a>	Defines a container for content that should be hidden when the page loads
<a href="#"><code>&lt;textarea&gt;</code></a>	Defines a multiline input control (text area)
<a href="#"><code>&lt;tfoot&gt;</code></a>	Groups the footer content in a table
<a href="#"><code>&lt;th&gt;</code></a>	Defines a header cell in a table
<a href="#"><code>&lt;thead&gt;</code></a>	Groups the header content in a table
<a href="#"><code>&lt;time&gt;</code></a>	Defines a specific time (or datetime)
<a href="#"><code>&lt;title&gt;</code></a>	Defines a title for the document
<a href="#"><code>&lt;tr&gt;</code></a>	Defines a row in a table
<a href="#"><code>&lt;track&gt;</code></a>	Defines text tracks for media elements ( <code>&lt;video&gt;</code> and <code>&lt;audio&gt;</code> )
<a href="#"><code>&lt;u&gt;</code></a>	Defines some text that is unarticulated and styled differently from normal text
<a href="#"><code>&lt;ul&gt;</code></a>	Defines an unordered list
<a href="#"><code>&lt;var&gt;</code></a>	Defines a variable
<a href="#"><code>&lt;video&gt;</code></a>	Defines embedded video content
<a href="#"><code>&lt;wbr&gt;</code></a>	Defines a possible line-break

# What is HTML?

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

**HTML**chapter-02/paragraphs.html

```
<p>A paragraph consists of one or more sentences that form a self-contained unit of discourse. The start of a paragraph is indicated by a new line.</p>
<p>Text is easier to understand when it is split up into units of text. For example, a book may have chapters. Chapters can have subheadings. Under each heading there will be one or more paragraphs.</p>
```

To create a paragraph, surround the words that make up the paragraph with an opening `<p>` tag and closing `</p>` tag.

By default, a browser will show each paragraph on a new line with some space between it and any subsequent paragraphs.

**RESULT**

A paragraph consists of one or more sentences that form a self-contained unit of discourse. The start of a paragraph is indicated by a new line.

Text is easier to understand when it is split up into units of text. For example, a book may have chapters. Chapters can have subheadings. Under each heading there will be one or more paragraphs.

**<b>**

By enclosing words in the tags `<b>` and `</b>` we can make characters appear bold.

The `<b>` element also represents a section of text that would be presented in a visually different way (for example key words in a paragraph) although the use of the `<b>` element does not imply any additional meaning.

chapter-02/bold.html**HTML**

```
<p>This is how we make a word appear <b>bold.</b>
</p>
<p>Inside a product description you might see some
<b>key features</b> in bold.</p>
```

**RESULT**

This is how we make a word appear **bold**.

Inside a product description you might see some **key features** in bold.

## HTML

chapter-02/superscript-and-subscript.html

```
<p>On the 4<sup>th</sup> of September you will learn  
about E=MC<sup>2</sup>.</p>  
<p>The amount of CO<sub>2</sub> in the atmosphere  
grew by 2ppm in 2009<sub>1</sub>.</p>
```

## <sup>

The <sup> element is used to contain characters that should be superscript such as the suffixes of dates or mathematical concepts like raising a number to a power such as 2<sup>2</sup>.

## <sub>

The <sub> element is used to contain characters that should be subscript. It is commonly used with foot notes or chemical formulas such as H<sub>2</sub>O.

## RESULT

On the 4<sup>th</sup> of September you will learn about E=MC<sup>2</sup>.

The amount of CO<sub>2</sub> in the atmosphere grew by 2ppm in 2009<sub>1</sub>.

## <i>

By enclosing words in the tags <i> and </i> we can make characters appear italic.

The <i> element also represents a section of text that would be said in a different way from surrounding content — such as technical terms, names of ships, foreign words, thoughts, or other terms that would usually be italicized.

chapter-02/italic.html

## HTML

```
<p>This is how we make a word appear <i>italic</i>.  
</p>  
<p>It's a potato <i>Solanum teberosum</i>.</p>  
<p>Captain Cook sailed to Australia on the  
<i>Endeavour</i>.</p>
```

## RESULT

This is how we make a word appear *italic*.

It's a potato *Solanum teberosum*.

Captain Cook sailed to Australia on the *Endeavour*.

## HTML

chapter-02/line-breaks.html

```
<p>The Earth<br />gets one hundred tons heavier  
every day<br />due to falling space dust.</p>
```

## RESULT

The Earth  
gets one hundred tons heavier every day  
due to falling space dust.

<br />

As you have already seen, the browser will automatically show each new paragraph or heading on a new line. But if you wanted to add a line break inside the middle of a paragraph you can use the line break tag `<br />`.

<hr />

To create a break between themes — such as a change of

## HTML

chapter-02/horizontal-rules.html

```
<p>Venus is the only planet that rotates  
clockwise.</p>  
<hr />  
<p>Jupiter is bigger than all the other planets  
combined.</p>
```

## RESULT

Venus is the only planet that rotates clockwise.

---

Jupiter is bigger than all the other planets combined.

topic in a book or a new scene in a play — you can add a horizontal rule between sections using the `<hr />` tag.

There are a few elements that do not have any words between an opening and closing tag. They are known as **empty elements** and they are written differently.

An empty element usually has only one tag. Before the closing angled bracket of an empty element there will often be a space and a forward slash character. Some web page authors miss this out but it is a good habit to get into.

## <strong>

The use of the <strong> element indicates that its content has strong importance. For example, the words contained in this element might be said with strong emphasis.

By default, browsers will show the contents of a <strong> element in bold.

chapter-02/strong.html

HTML

```
<p><strong>Beware:</strong> Pickpockets operate in  
this area.</p>  
<p>This toy has many small pieces and is <strong>not  
suitable for children under five years old.  
</strong></p>
```

**Beware:** Pickpockets operate in this area.

RESULT

This toy has many small pieces and is **not  
suitable for children under five years old.**

## <em>

The <em> element indicates emphasis that subtly changes the meaning of a sentence.

By default browsers will show the contents of an <em> element in italic.

chapter-02/emphasis.html

HTML

```
<p>I <em>think</em> Ivy was the first.</p>  
<p>I think <em>Ivy</em> was the first.</p>  
<p>I think Ivy was the <em>first</em>.</p>
```

*I think* Ivy was the first.

RESULT

I think *Ivy* was the first.

I think Ivy was the *first*.



```
<blockquote cite="http://en.wikipedia.org/wiki/
Winnie-the-Pooh">
  <p>Did you ever stop to think, and forget to start
  again?</p>
</blockquote>
<p>As A.A. Milne said, <q>Some people talk to
animals. Not many listen though. That's the
problem.</q></p>
```

## RESULT

Did you ever stop to think, and forget  
to start again?

As A.A. Milne said, "Some people talk to animals.  
Not many listen though. That's the problem."

There are two elements  
commonly used for marking up  
quotations:

&lt;q&gt;

## &lt;blockquote&gt;

The <blockquote> element is  
used for longer quotes that take  
up an entire paragraph. Note  
how the <p> element is still  
used inside the <blockquote>  
element.

Browsers tend to indent the  
contents of the <blockquote>  
element, however you should not  
use this element just to indent a  
piece of text — rather you should  
achieve this effect using CSS.

The <q> element is used for  
shorter quotes that sit within  
a paragraph. Browsers are  
supposed to put quotes around  
the <q> element, however  
Internet Explorer does not —  
therefore many people avoid  
using the <q> element.

Both elements may use the cite  
attribute to indicate where the  
quote is from. Its value should  
be a URL that will have more  
information about the source of  
the quotation.

## &lt;abbr&gt;

If you use an abbreviation or  
an acronym, then the <abbr>  
element can be used. A title  
attribute on the opening tag is  
used to specify the full term.

In HTML 4 there was a separate  
<acronym> element for  
acronyms. To spell out the full  
form of the acronym, the title  
attribute was used (as with the  
<abbr> element above). HTML5  
just uses the <abbr> element  
for both abbreviations and  
acronyms.

```
<p><abbr title="Professor">Prof</abbr> Stephen
Hawking is a theoretical physicist and
cosmologist.</p>
<p><acronym title="National Aeronautics and Space
Administration">NASA</acronym> do some crazy
space stuff.</p>
```

## RESULT

Prof Stephen Hawking is a theoretical physicist and cosmologist.

NASA do some crazy space stuff.

National Aeronautics and Space  
Administration

## HTML

chapter-02/citations.html

```
<p><cite>A Brief History of Time</cite> by Stephen  
Hawking has sold over ten million copies  
worldwide.</p>
```

## RESULT

*A Brief History of Time* by Stephen Hawking has  
sold over ten million copies worldwide.

## <cite>

When you are referencing a piece of work such as a book, film or research paper, the `<cite>` element can be used to indicate where the citation is from.

In HTML5, `<cite>` should not really be used for a person's name — but it was allowed in HTML 4, so most people are likely to continue to use it.

Browsers will render the content of a `<cite>` element in italics.

## HTML

chapter-02/definitions.html

```
<p>A <dfn>black hole</dfn> is a region of space from  
which nothing, not even light, can escape.</p>
```

## RESULT

A black hole is a region of space from which  
nothing, not even light, can escape.

## <dfn>

The first time you explain some new terminology (perhaps an academic concept or some jargon) in a document, it is known as the defining instance of it.

The `<dfn>` element is used to indicate the defining instance of a new term.

Some browsers show the content of the `<dfn>` element in italics. Safari and Chrome do not change its appearance.

## <address>

The <address> element has quite a specific use: to contain contact details for the author of the page.

It can contain a physical address, but it does not have to. For example, it may also contain a phone number or email address.

Browsers often display the content of the <address> element in italics.

You may also be interested in something called the hCard microformat for adding physical address information to your markup.

### ONLINE EXTRA:

You can find out more about hCards on the website accompanying this book.

chapter-02/address.html

HTML

```
<address>
  <p><a href="mailto:homer@example.org">
    homer@example.org</a></p>
  <p>742 Evergreen Terrace, Springfield.</p>
</address>
```

*[homer@example.org](mailto:homer@example.org)*

RESULT

*742 Evergreen Terrace, Springfield.*

HTML

chapter-02/insert-and-delete.html

```
<p>It was the <del>worst</del> <ins>best</ins> idea
  she had ever had.</p>
```

RESULT

It was the ~~worst~~ best idea she had ever had.

## <ins> <del>

The <ins> element can be used to show content that has been inserted into a document, while the <del> element can show text that has been deleted from it.

The content of a <ins> element is usually underlined, while the content of a <del> element usually has a line through it.

## HTML

chapter-02/strikethrough.html



```
<p>Laptop computer:</p>
<p><s>Was $995</s></p>
<p>Now only $375</p>
```

The `<s>` element indicates something that is no longer accurate or relevant (but that should not be deleted).

Visually the content of an `<s>` element will usually be displayed with a line through the center.

Older versions of HTML had a `<u>` element for content that was underlined, but this is being phased out.

## RESULT

Laptop computer:

~~Was \$995~~

Now only \$375



The ordered list is created with the `<ol>` element.



Each item in the list is placed between an opening `<li>` tag and a closing `</li>` tag. (The `li` stands for list item.)

Browsers indent lists by default.

Sometimes you may see a type attribute used with the `<ol>` element to specify the type of numbering (numbers, letters, roman numerals and so on). It is better to use the CSS `list-style-type` property covered on pages 333-335.

chapter-03/ordered-lists.html

## HTML

```
<ol>
  <li>Chop potatoes into quarters</li>
  <li>Simmer in salted water for 15-20
    minutes until tender</li>
  <li>Heat milk, butter and nutmeg</li>
  <li>Drain potatoes and mash</li>
  <li>Mix in the milk mixture</li>
</ol>
```

## RESULT

1. Chop potatoes into quarters
2. Simmer in salted water for 15-20 minutes until tender
3. Heat milk, butter and nutmeg
4. Drain potatoes and mash
5. Mix in the milk mixture

## HTML

chapter-03/unordered-lists.html

```
<ul>
  <li>1kg King Edward potatoes</li>
  <li>100ml milk</li>
  <li>50g salted butter</li>
  <li>Freshly grated nutmeg</li>
  <li>Salt and pepper to taste</li>
</ul>
```

## RESULT

- 1kg King Edward potatoes
- 100ml milk
- 50g salted butter
- Freshly grated nutmeg
- Salt and pepper to taste

## <ul>

The unordered list is created with the <ul> element.

## <li>

Each item in the list is placed between an opening <li> tag and a closing </li> tag. (The li stands for list item.)

Browsers indent lists by default.

Sometimes you may see a type attribute used with the <ul> element to specify the type of bullet point (circles, squares, diamonds and so on). It is better to use the CSS list-style-type property covered on pages 333-335.

## <d1>

The definition list is created with the <d1> element and usually consists of a series of terms and their definitions.

Inside the <d1> element you will usually see pairs of <dt> and <dd> elements.

## <dt>

This is used to contain the term being defined (the definition term).

chapter-03/definition-lists.html

## HTML

```
<d1>
  <dt>Sashimi</dt>
  <dd>Sliced raw fish that is served with
    condiments such as shredded daikon radish or
    ginger root, wasabi and soy sauce</dd>
  <dt>Scale</dt>
  <dd>A device used to accurately measure the
    weight of ingredients</dd>
  <dd>A technique by which the scales are removed
    from the skin of a fish</dd>
  <dt>Scamorze</dt>
  <dt>Scamorzo</dt>
  <dd>An Italian cheese usually made from whole
    cow's milk (although it was traditionally made
    from buffalo milk)</dd>
</d1>
```

## RESULT

Sashimi  
Sliced raw fish that is served with condiments such as shredded daikon radish or ginger root, wasabi and soy sauce

Scale  
A device used to accurately measure the weight of ingredients  
A technique by which the scales are removed from the skin of a fish

Scamorze  
Scamorzo  
An Italian cheese usually made from whole cow's milk (although it was traditionally made from buffalo milk)

## <dd>

This is used to contain the definition.

Sometimes you might see a list where there are two terms used for the same definition or two different definitions for the same term.

## HTML

chapter-03/nested-lists.html

```
<ul>
  <li>Mousses</li>
  <li>Pastries
    <ul>
      <li>Croissant</li>
      <li>Mille-feuille</li>
      <li>Palmier</li>
      <li>Profiterole</li>
    </ul>
  </li>
  <li>Tarts</li>
</ul>
```

You can put a second list inside an `<li>` element to create a sub-list or nested list.

Browsers display nested lists indented further than the parent list. In nested unordered lists, the browser will usually change the style of the bullet point too.

## RESULT

- Mousses
- Pastries
  - Croissant
  - Mille-feuille
  - Palmier
  - Profiterole
- Tarts



Links are created using the `<a>` element which has an attribute called `href`. The value of the `href` attribute is the page that you want people to go to when they click on the link.

Users can click on anything that appears between the opening `<a>` tag and the closing `</a>` tag and will be taken to the page specified in the `href` attribute.

When you link to a different website, the value of the `href` attribute will be the full web address for the site, which is known as an **absolute** URL.

Browsers show links in blue with an underline by default.

chapter-04/linking-to-other-sites.html

HTML

```
<p>Movie Reviews:
  <ul>
    <li><a href="http://www.empireonline.com">
      Empire</a></li>
    <li><a href="http://www.metacritic.com">
      Metacritic</a></li>
    <li><a href="http://www.rottentomatoes.com">
      Rotten Tomatoes</a></li>
    <li><a href="http://www.variety.com">
      Variety</a></li>
  </ul>
</p>
```

RESULT

Movie Reviews:

- [Empire](http://www.empireonline.com)
- [Metacritic](http://www.metacritic.com)
- [Rotten Tomatoes](http://www.rottentomatoes.com)
- [Variety](http://www.variety.com)

HTML

chapter-04/linking-to-other-pages.html

```
<p>
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="about-us.html">About</a></li>
    <li><a href="movies.html">Movies</a></li>
    <li><a href="contact.html">Contact</a></li>
  </ul>
</p>
```

RESULT

- [Home](#)
- [About](#)
- [Movies](#)
- [Contact](#)



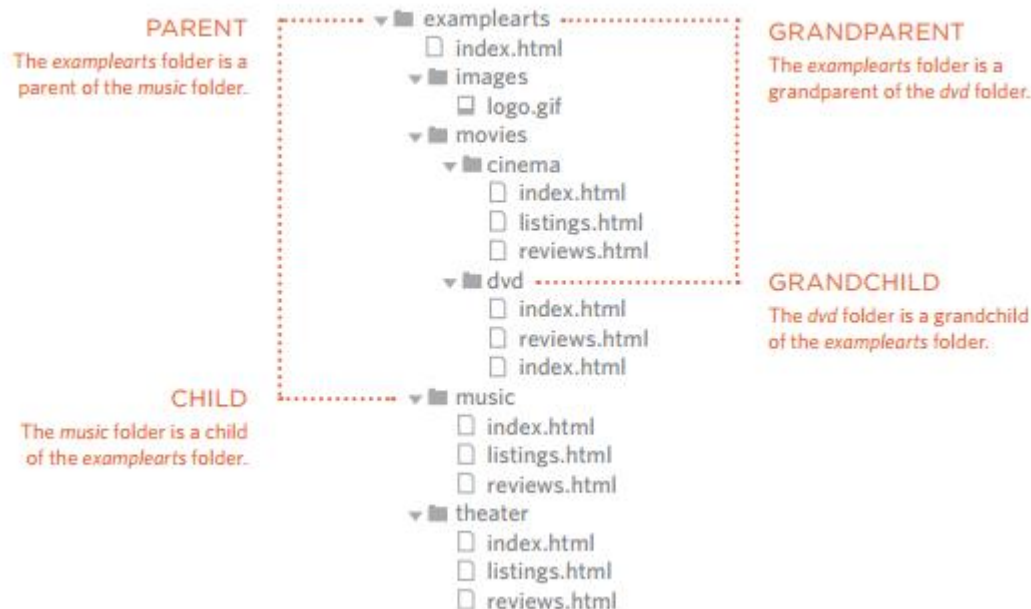
When you are linking to other pages within the same site, you do not need to specify the domain name in the URL. You can use a shorthand known as a **relative** URL.

If all the pages of the site are in the same folder, then the value of the `href` attribute is just the name of the file.

If you have different pages of a site in different folders, then you can use a slightly more complex syntax to indicate where the page is in relation to the current page. You will learn more about these on the pages 81-84.

If you look at the download code for each chapter, you will see that the `index.html` file contains links that use relative URLs.





## RELATIVE LINK TYPE

EXAMPLE (from diagram on previous page)

### SAME FOLDER

To link to a file in the same folder, just use the file name. (Nothing else is needed.)

To link to music reviews from the music homepage:

```
<a href="reviews.html">Reviews</a>
```

### CHILD FOLDER

For a child folder, use the name of the child folder, followed by a forward slash, then the file name.

To link to music listings from the homepage:

```
<a href="music/listings.html">Listings</a>
```

### GRANDCHILD FOLDER

Use the name of the child folder, followed by a forward slash, then the name of the grandchild folder, followed by another forward slash, then the file name.

To link to DVD reviews from the homepage:

```
<a href="movies/dvd/reviews.html">
Reviews</a>
```

### PARENT FOLDER

Use `../` to indicate the folder above the current one, then follow it with the file name.

To link to the homepage from the music reviews:

```
<a href="../index.html">Home</a>
```

### GRANDPARENT FOLDER

Repeat the `../` to indicate that you want to go up two folders (rather than one), then follow it with the file name.

To link to the homepage from the DVD reviews:

```
<a href="../../index.html">Home</a>
```



## mailto:

To create a link that starts up the user's email program and addresses an email to a specified email address, you use the `<a>` element. However, this time the value of the `href` attribute starts with `mailto:` and is followed by the email address you want the email to be sent to.

On the right you can see that an email link looks just like any other link but, when it is clicked on, the user's email program will open a new email message and address it to the person specified in the link.

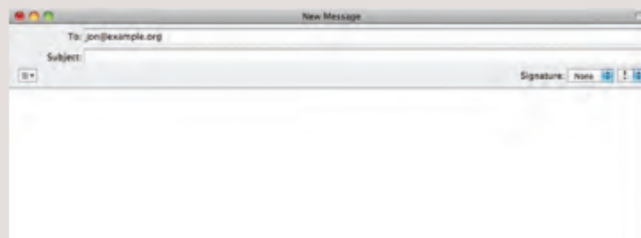
chapter-04/email-links.html

HTML

```
<a href="mailto:jon@example.org">Email Jon</a>
```

RESULT

[Email Jon](mailto:jon@example.org)



HTML

chapter-04/opening-links-in-a-new-window.html

```
<a href="http://www.imdb.com" target="_blank">
Internet Movie Database</a> (opens in new window)
```

RESULT

[Internet Movie Database](http://www.imdb.com) (opens in new window)

## target

If you want a link to open in a new window, you can use the `target` attribute on the opening `<a>` tag. The value of this attribute should be `_blank`.

One of the most common reasons a web page author might want a link to be opened in a new window is if it points to another website. In such cases, they hope the user will return to the window containing their site after finishing looking at the other one.

```

<h1 id="top">Film-Making Terms</h1>
<a href="#arc_shot">Arc Shot</a><br />
<a href="#interlude">Interlude</a><br />
<a href="#prologue">Prologue</a><br /><br />
<h2 id="arc_shot">Arc Shot</h2>
<p>A shot in which the subject is photographed by an
  encircling or moving camera</p>
<h2 id="interlude">Interlude</h2>
<p>A brief, intervening film scene or sequence, not
  specifically tied to the plot, that appears
  within a film</p>
<h2 id="prologue">Prologue</h2>
<p>A speech, preface, introduction, or brief scene
  preceding the the main action or plot of a film;
  contrast to epilogue</p>
<p><a href="#top">Top</a></p>

```

## RESULT

# Film-Making Terms

[Arc Shot](#)

[Interlude](#)

[Prologue](#)

## Arc Shot

A shot in which the subject is photographed by an encircling or moving camera

## Interlude

A brief, intervening film scene or sequence, not specifically tied to the plot, that appears within a film

## Prologue

A speech, preface, introduction, or brief scene preceding the the main action or plot of a film; contrast to epilogue

[Top](#)

If you want to link to a specific part of a different page (whether on your own site or a different website) you can use a similar technique.

As long as the page you are linking to has id attributes that identify specific parts of the page, you can simply add the same syntax to the end of the link for that page.

Therefore, the href attribute will contain the address for the page (either an absolute URL or a relative URL), followed by the # symbol, followed by the value of the id attribute that is used on the element you are linking to.

For example, to link to the bottom of the homepage of the website that accompanies this book, you would write:

```

<a href="http://www.
htmlandcssbook.com/
#bottom">

```

## <img>

To add an image into the page you need to use an `<img>` element. This is an empty element (which means there is no closing tag). It must carry the following two attributes:

### src

This tells the browser where it can find the image file. This will usually be a relative URL pointing to an image on your own site. (Here you can see that the images are in a child folder called **images** — relative URLs were covered on pages 83-84).

chapter-05/adding-images.html

HTML

```

```

RESULT



### alt

This provides a text description of the image which describes the image if you cannot see it.



### title

You can also use the `title` attribute with the `<img>` element to provide additional information about the image. Most browsers will display the content of this attribute in a tooltip when the user hovers over the image.

The text used in the `alt` attribute is often referred to as **alt text**. It should give an accurate description of the image content so it can be understood by screen reader software (used by people with visual impairments) and search engines.

If the image is just to make a page look more attractive (and it has no meaning, such as a graphic dividing line), then the `alt` attribute should still be used but the quotes should be left empty.

**HTML**

chapter-05/height-and-width-of-images.html

```

```

**RESULT**

You will also often see an `<img>` element use two other attributes that specify its size:

## height

This specifies the height of the image in pixels.

## width

This specifies the width of the image in pixels.

Images often take longer to load than the HTML code that makes up the rest of the page. It is, therefore, a good idea to specify the size of the image so that the browser can render the rest of the text on the page while leaving the right amount of space for the image that is still loading.

Where an image is placed in the code will affect how it is displayed. Here are three examples of image placement that produce different results:

### 1: BEFORE A PARAGRAPH

The paragraph starts on a new line after the image.

### 2: INSIDE THE START OF A PARAGRAPH

The first row of text aligns with the bottom of the image.

### 3: IN THE MIDDLE OF A PARAGRAPH

The image is placed between the words of the paragraph that it appears in.

chapter-05/where-to-place-images.html

**HTML**

```

<p>There are around 10,000 living species of birds
that inhabit different ecosystems from the
Arctic to the Antarctic. Many species undertake
long distance annual migrations, and many more
perform shorter irregular journeys.</p>
<hr />
<p>There are around 10,000 living
species of birds that inhabit different
ecosystems from the Arctic to the Antarctic. Many
species undertake long distance annual
migrations, and many more perform shorter
irregular journeys.</p>
<hr />
<p>There are around 10,000 living species of birds
that inhabit different ecosystems from the
Arctic to the Antarctic.Many species undertake long
distance annual migrations, and many more perform
shorter irregular journeys.</p>
```



## RESULT



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

---



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

---

There are around 10,000 living species of birds that inhabit different



## align

The align attribute was commonly used to indicate how the other parts of a page should flow around an image. It has been removed from HTML5 and new websites should use CSS to control the alignment of images (as you will see on pages 411-412).

I have discussed it here because you are likely to come across it if you look at older code, and because some visual editors still insert this attribute when you indicate how an image should be aligned.

chapter-05/aligning-images-horizontally.html

HTML

```
<p>There are around
10,000 living species of birds that inhabit
different ecosystems from the Arctic to the
Antarctic. Many species undertake long distance
annual migrations, and many more perform shorter
irregular journeys.</p>
```

```
<hr />
```

```
<p>There are around
10,000 living species of birds that inhabit
different ecosystems from the Arctic to the
Antarctic. Many species undertake long distance
annual migrations, and many more perform shorter
irregular journeys.</p>
```

## RESULT



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.



This looks a lot neater than having one line of text next to the image (as shown on the previous example).

When you give the `align` attribute a value of `left`, the image is placed on the left and text flows around it.

When you give the `align` attribute a value of `right`, the image is placed on the right and the text flows around it.

When text flows right up to the edge of an image it can make it harder to read. You will learn how to add a gap between text and images on pages 313-314 using the CSS padding and margin properties.

## HTML

chapter-05/figure-and-figure-caption.html

```
<figure>
  
  <br />
  <figcaption>Sea otters hold hands when they
    sleep so they don't drift away from each
    other.</figcaption>
</figure>
```

## <figure>

Images often come with captions. HTML5 has introduced a new `<figure>` element to contain images and their caption so that the two are associated.

You can have more than one image inside the `<figure>` element as long as they all share the same caption.

## RESULT



Sea otters hold hands when they sleep so they don't drift away from each other.

the same caption.

## <figcaption>

The <figcaption> element has been added to HTML5 in order to allow web page authors to add a caption to an image.

Before these elements were created there was no way to associate an <img> element with its caption.

Older browsers that do not understand HTML5 elements simply ignore the new elements and display the content of them.

## TABLES

## <table>

The <table> element is used to create a table. The contents of the table are written out row by row.

## <tr>

You indicate the start of each row using the opening <tr> tag. (The tr stands for table row.)

It is followed by one or more <td> elements (one for each cell in that row).

At the end of the row you use a closing </tr> tag.

chapter-06/basic-table-structure.html

HTML

```
<table>
  <tr>
    <td>15</td>
    <td>15</td>
    <td>30</td>
  </tr>
  <tr>
    <td>45</td>
    <td>60</td>
    <td>45</td>
  </tr>
  <tr>
    <td>60</td>
    <td>90</td>
    <td>90</td>
  </tr>
</table>
```

closing </tr> tag.

## <td>

Each cell of a table is represented using a <td> element. (The td stands for table data.)

At the end of each cell you use a closing </td> tag.

## RESULT

15	15	30
45	60	45
60	90	90

## &lt;th&gt;

```
<table>
  <tr>
    <th></th>
    <th scope="col">Saturday</th>
    <th scope="col">Sunday</th>
  </tr>
  <tr>
    <th scope="row">Tickets sold:</th>
    <td>120</td>
    <td>135</td>
  </tr>
  <tr>
    <th scope="row">Total sales:</th>
    <td>$600</td>
    <td>$675</td>
  </tr>
</table>
```

The <th> element is used just like the <td> element but its purpose is to represent the heading for either a column or a row. (The th stands for table heading.)

Even if a cell has no content, you should still use a <td> or <th> element to represent the presence of an empty cell otherwise the table will not render correctly. (The first cell in the first row of this example shows an empty cell.)

## RESULT

	Saturday	Sunday
Tickets sold:	120	135
Total sales:	\$600	\$675

headings helps people who use screen readers, improves the ability for search engines to index your pages, and also enables you to control the appearance of tables better when you start to use CSS.

You can use the scope attribute on the <th> element to indicate whether it is a heading for a column or a row. It can take the values: row to indicate a heading for a row or col to indicate a heading for a column.



Sometimes you may need the entries in a table to stretch across more than one column.

The `colspan` attribute can be used on a `<th>` or `<td>` element and indicates how many columns that cell should run across.

In the example on the right you can see a timetable with five columns; the first column contains the heading for that row (the day), the remaining four represent one hour time slots.

If you look at the table cell that contains the words 'Geography' you will see that the value of the `colspan` attribute is 2, which indicates that the cell should run across two columns. In the third row, 'Gym' runs across three columns.

chapter-06/spanning-columns.html

HTML

```
<table>
  <tr>
    <th></th>
    <th>9am</th>
    <th>10am</th>
    <th>11am</th>
    <th>12am</th>
  </tr>
  <tr>
    <th>Monday</th>
    <td colspan="2">Geography</td>
    <td>Math</td>
    <td>Art</td>
  </tr>
  <tr>
    <th>Tuesday</th>
    <td colspan="3">Gym</td>
    <td>Home Ec</td>
  </tr>
</table>
```

columns.

You can see that the second and third rows have fewer `<td>` elements than there are columns. This is because, when a cell extends across more than one column, the `<td>` or `<th>` cells that would have been in the place of the wider cells are not included in the code.

RESULT

	9am	10am	11am	12am
Monday	Geography		Math	Art
Tuesday	Gym			Home Ec

```
<table>
  <tr>
    <th></th>
    <th>ABC</th>
    <th>BBC</th>
    <th>CNN</th>
  </tr>
  <tr>
    <th>6pm - 7pm</th>
    <td rowspan="2">Movie</td>
    <td>Comedy</td>
    <td>News</td>
  </tr>
  <tr>
    <th>7pm - 8pm</th>
    <td>Sport</td>
    <td>Current Affairs</td>
  </tr>
</table>
```

You may also need entries in a table to stretch down across more than one row.

The rowspan attribute can be used on a <th> or <td> element to indicate how many rows a cell should span down the table.

In the example on the left you can see that ABC is showing a movie from 6pm - 8pm, whereas the BBC and CNN channels are both showing two programs during this time period (each of which lasts one hour).

If you look at the last <tr> element, it only contains three elements even though there are four columns in the result below. This is because the movie in the <tr> element above it uses the rowspan attribute to stretch

## RESULT

	ABC	BBC	CNN
6pm - 7pm	Movie	Comedy	News
7pm - 8pm		Sport	Current Affairs

the <td> element above it uses the rowspan attribute to stretch down and take over the cell below.

I have added some CSS styles to this example so that you can see how the cells span more than one row. You will learn how to apply these CSS styles to tables on pages 250, 337-340.

There are three elements that help distinguish between the main content of the table and the first and last rows (which can contain different content).

These elements help people who use screen readers and also allow you to style these sections in a different manner than the rest of the table (as you will see when you learn about CSS).

## <thead>

The headings of the table should sit inside the <thead> element.

chapter-06/long-tables.html

HTML

```
<table>
  <thead>
    <tr>
      <th>Date</th>
      <th>Income</th>
      <th>Expenditure</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th>1st January</th>
      <td>250</td>
      <td>36</td>
    </tr>
    <tr>
      <th>2nd January</th>
      <td>285</td>
      <td>48</td>
```

## <tbody>

The body should sit inside the <tbody> element.

## <tfoot>

The footer belongs inside the <tfoot> element.

By default, browsers rarely treat the content of these elements any differently than other elements however designers often use CSS styles to change their appearance.

```

    </tr>
    <!-- additional rows as above -->
    <tr>
      <th>31st January</th>
      <td>129</td>
      <td>64</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td></td>
      <td>7824</td>
      <td>1241</td>
    </tr>
  </tfoot>
</table>
```

## RESULT

Date	Income	Expenditure
1st January	250	36
2nd January	285	48
3rd January	260	42
4th January	290	38
5th January	310	115
6th January	168	14
7th January	226	20
8th January	253	37
9th January	294	33
10th January	216	46
11th January	244	29
12th January	297	32
13th January	328	86
14th January	215	38
15th January	254	30
16th January	256	27
17th January	311	68
18th January	212	39
19th January	234	36
20th January	221	43
21st January	259	38
22nd January	246	31
23rd January	248	17
24th January	229	45
25th January	263	34
26th January	258	41
27th January	283	22
28th January	256	30
29th January	278	47
30th January	251	15
31st January	129	64
	7824	1241

Some of the HTML editors that come in content management systems offer tools to help draw tables. If the first row of your table only contains `<th>` elements then you may find that the editor inserts a `<thead>` element automatically.

Part of the reason for having separate `<thead>` and `<tfoot>` elements is so that, if you have a table that is taller than the screen (or, if printed, longer than one page) then the browser can keep the header and footer visible whilst the contents of the table scroll. This is intended to make it easier for users to see which column the data is in (however this functionality is not implemented by default in any current browser).

current browser).

I have added some CSS styles to this example so that you can see the contents of the `<thead>` and `<tfoot>` being treated differently than the rest of the rows. You will learn how to apply these CSS styles to tables on pages 309-312 and 337-340.