

24: Links

Links are an essential part of the web, so learning about them is a must. They look complicated at first, but with a little familiarity they're easy to learn.

A link opens another file, either on your own computer or another website. The file can be of any type the browser can display, not just another HTML file. For example, the link can lead to an image or a PDF document.

The 'clickable' part of the link can be just about any element on the page, but usually it's a short piece of text or an image.

HTML for links

Here is an example of the HTML needed to insert a link. It leads to another website.

```
<a href="http://www.shopcat.com/"> </a>
```

Opening and closing tags

Links in HTML take the form of an opening `<a>` and closing `` tag on either side of some text or an image. That text or image becomes clickable, and when clicked it opens another file. This is shown in the incomplete code below:

```
<a> </a> (clickable text or image goes between these tags)
```

To make it complete we need to put an 'href' attribute inside the opening tag.

'href' attribute

The 'href' attribute contains the address of the file to be opened. If it leads to a file on your site (such as another page or an image), it will simply be the file path to the file. If it leads to another website, the address will be the URL (http://www etc) of the linked site.

```
<a href="../images/mid_level.png"> </a> (image on this site)
<a href="lesson_21.htm"> </a> (another page on this site)
<a href="http://www.shopcat.com/"> </a> (another website)
```

Opening the link in a new tab

You may want a link to open in a new tab. To do this add `target="blank"` to the opening tag. This is often used when linking to an another website

```
<a href="http://www.shopcat.com/" target="blank"> </a>
```

Bookmark - Linking to a particular place on a page

Linking to a particular place on your site can save your visitors some searching and frustration. It involves linking to an ID at the desired location.

Link to the page as you normally would (as described above), and then take the following two steps:

- Make sure an element (e.g. heading or paragraph) at the desired location has an ID. Add one if necessary.
- Add a hash/pound (#) sign and the ID name to the end of the file path in the link. (If it's on the same page, just use the pound sign and ID name.)

The link in the first dot point above links to the 'Giving an element a class or ID name' heading in Lesson 12. I gave that heading the ID of 'givenname', and linked to it as described here. 'Lesson_12.htm#givenname' is displayed in the address bar.

```
<a href="lesson_12.htm#givenname"> (The link)
```

```
<h2 class="subheading" id="givenname"> (The ID on the target page)
```

Styling links

Browsers have default styling for links. For example, they may be blue. Whatever the default styling, links stand out from the surrounding text so they can be seen clearly, especially by those with a visual impairment.

However, you can change the link styling. For example, you may wish to include underlining, or have links change colour when the cursor is 'hovered' over them, or after being clicked. The CSS for styling links uses 'pseudoclasses', which style a link according to the 'state' it is in: unvisited, hovered over, or already visited.

There is a ruleset for each of these states.

Layout of pseudo-classes

Here you can see how pseudoclasses are laid out – you can see that they are just like the rulesets you've already learnt about, but the selector is a bit different. This is explained in the next section.

```
a:link { (unvisited link)
  property:value;
  property:value;
}
```

```
a:visited { (visited link)
  property: value;
  property:value;
}
```

```
a:hover { (mouse hovered over link)
  property:value;
  property:value;
}
```

Selectors for pseudo-classes

Below you will see how pseudoclasses are commonly used with links. The pseudoclass selector comprises three parts:

- a** Selects all links (selects by element type, Lesson 15; 'a' = link element)

- :** Indicates that a link will be selected when it is in a specified state

Link, visited or hover

The three possible states: Links that have not been visited, those that have been visited, and one with the cursor hovered over it.

Specifying the link styling

Here are rulesets for three link 'states'. They specify the colour for each state. You will notice that the rulesets have been 'flattened' by putting each on a single line. Don't worry, it's all the same – just a cosmetic change – they are often laid out this way.

<code>a:link {color:indigo;}</code>	(unvisited link)
<code>a:visited {color:brown;}</code>	(visited link)
<code>a:hover {color:orange;}</code>	(mouse over link)