4

LINKS

Links are the defining feature of the web because they allow you to move from one web page to another — enabling the very idea of browsing or surfing.

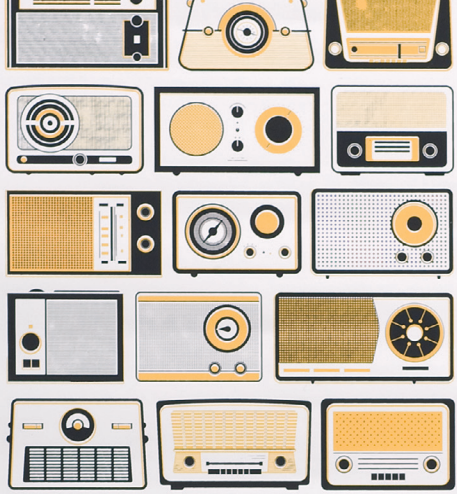You will commonly come across the following types of links:

- Links from one website to another

- Links from one page to another on the same website

- Links from one part of a web page to another part of the same page

- Links that open in a new browser window

- Links that start up your email program and address a new email to someone
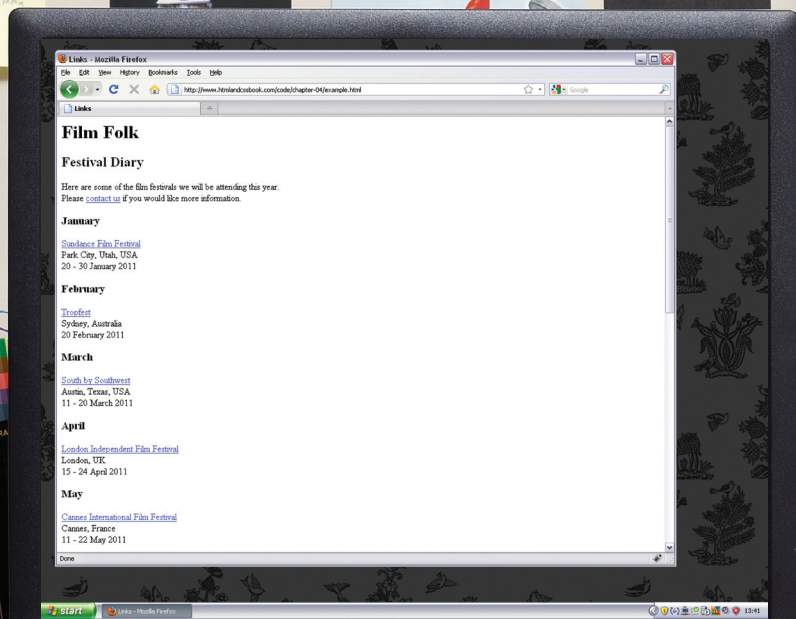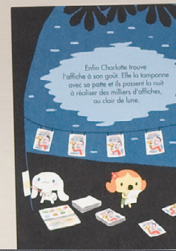
Film Folk

Festival Diary

Here are some of the film festivals we will be attending this year.
Please contact us if you would like more information.

January

Sundance Film Festival
Park City, Utah, USA
20 - 30 January 2011

February

Tropfest
Sydney, Australia
20 February 2011

March

South by Southwest
Austin, Texas, USA
11 - 20 March 2011

April

London Independent Film Festival
London, UK
15 - 24 April 2011

May

Cannes International Film Festival
Cannes, France
11 - 22 May 2011
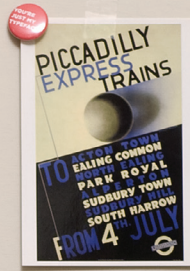
WRITING LINKS

Links are created using the <a> element. Users can click on anything between the opening <a> tag and the closing tag. You specify which page you want to link to using the href attribute.

THIS IS THE PAGE THE LINK TAKES YOU TO

THIS IS THE TEXT THE USER CLICKS ON

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

OPENING LINK TAG

CLOSING LINK TAG

The text between the opening `<a>` tag and closing `</a>` tag is known as link text. Where possible, your link text should explain where visitors will be taken if they click on it (rather than just saying "click here"). Below you can see the link to IMDB that was created on the previous page.

Many people navigate websites by scanning the text for links. Clear link text can help visitors find what they want. This will give them a more positive impression of your site and may encourage them to visit it for longer. (It also helps people using screen reader software.)

To write good link text, you can think of words people might use when searching for the page that you are linking to. (For example, rather than write "places to stay" you could use something more specific such as "hotels in New York.")

[IMDB](#)

LINKING TO OTHER SITES

<a>

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 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.

```
<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
- Metacritic
- Rotten Tomatoes
- Variety

ABSOLUTE URLS

URL stands for Uniform Resource Locator. Every web page has its own URL. This is the web address that you would type into a browser if you wanted to visit that specific page.

An absolute URL starts with the domain name for that site, and can be followed by the path to a specific page. If no page is specified, the site will display the homepage.

LINKING TO OTHER PAGES ON THE SAME SITE

```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>
```

<a>

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.

RESULT

- Home
- About
- Movies
- Contact

RELATIVE URLS

When linking to other pages within the same site, you can use relative URLs. These are like a shorthand version of absolute URLs because you do not need to specify the domain name.

We will take a closer look at relative URLs on pages 83-84 as there are several helpful shortcuts you can use to write links to other pages on your own website.

Relative URLs help when building a site on your computer because you can create links between pages without having to set up your domain name or hosting.

DIRECTORY STRUCTURE

On larger websites it's a good idea to organize your code by placing the pages for each different section of the site into a new folder. Folders on a website are sometimes referred to as directories.

STRUCTURE

The diagram on the right shows the directory structure for a fictional entertainment listings website called ExampleArts.

The top-level folder is known as the **root** folder. (In this example, the root folder is called *examplearts*.) The root folder contains all of the other files and folders for a website.

Each section of the site is placed in a separate folder; this helps organize the files.

If you are working with a content management system, blogging software, or an e-commerce system, you might not have individual files for each page of the website.

RELATIONSHIPS

The relationship between files and folders on a website is described using the same terminology as a family tree.

In the diagram on the right, you can see some relationships have been drawn in.

The *examplearts* folder is a parent of the *movies*, *music* and *theater* folders. And the the *movies*, *music* and *theater* folders are children of the *examplearts* folder.

Instead, these systems often use one template file for each different type of page (such as news articles, blog posts, or products).
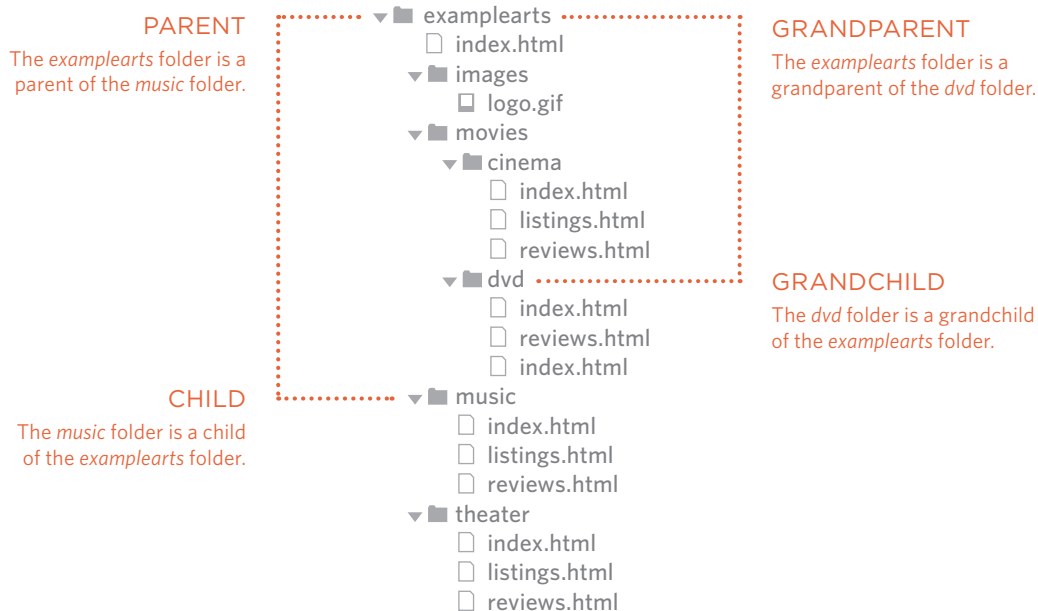
HOMEPAGES

The main homepage of a site written in HTML (and the homepages of each section in a child folder) is called *index.html*.

Web servers are usually set up to return the *index.html* file if no file name is specified.

Therefore, if you enter examplearts.com it will return examplearts.com/index .html, and examplearts.com/ music will return examplearts .com/music/index.html.

Editing the template file would change all of the pages that use that template. Do not change any code that is not HTML or you may break the page.

The *examplearts* folder is a parent of the *music* folder.

The *examplearts* folder is a grandparent of the *dvd* folder.

```
▼ ■ examplearts
    □ index.html
  ▼ ■ images
      □ logo.gif
  ▼ ■ movies
    ▼ ■ cinema
        □ index.html
        □ listings.html
        □ reviews.html
    ▼ ■ dvd
        □ index.html
        □ reviews.html
        □ index.html
  ▼ ■ music
      □ index.html
      □ listings.html
      □ reviews.html
  ▼ ■ theater
      □ index.html
      □ listings.html
      □ reviews.html
```

CHILD

The *music* folder is a child of the *examplearts* folder.

GRANDCHILD

The *dvd* folder is a grandchild of the *examplearts* folder.

Every page and every image on a website has a **URL** (or Uniform Resource Locator). The URL is made up of the domain name followed by the **path** to that page or image.

The path to the homepage of this site is `www.examplearts .com/index.html`. The path to the logo for the site is `examplearts.com/images/ logo.gif`.

You use URLs when linking to other web pages and when including images in your own site. On the next page, you will meet a shorthand way to link to files on your own site.

The root folder contains:

- A file called *index.html* which is the homepage for the entire site

- Individual folders for the movies, music and theatre sections of the site

Each sub-directory contains:

- A file called *index.html* which is the homepage for that section

- A reviews page called *reviews .html*

- A listings page called *listings .html* (except for the DVD section)

The movies section contains:

- A folder called *cinema*

- A folder called *DVD.*

RELATIVE URLS

Relative URLs can be used when linking to pages within your own website. They provide a shorthand way of telling the browser where to find your files.

When you are linking to a page on your own website, you do not need to specify the domain name. You can use **relative URLs** which are a shorthand way to tell the browser where a page is in relation to the current page.

This is especially helpful when creating a new website or learning about HTML because you can create links between pages when they are only on your personal computer (before you have got a domain name and uploaded them to the web).

Because you do not need to repeat the domain name in each link, they are also quicker to write.

If all of the files in your site are in one folder, you simply use the file name for that page.

If your site is organized into separate folders (or directories), you need to tell the browser how to get from the page it is *currently on* to the page that you are *linking to*.

If you link to the same page from two different pages you might, therefore, need to write two different relative URLs.

These links make use of the same terminology (borrowed from that of family trees) you met on the previous page which introduces directory structure.

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>`

When a website is live (that is, uploaded to a web server) you may see a couple of other techniques used that do not work when the files are on your local computer.

For example, you may see the name of a child folder without the name of a file. In this case the web server will usually try to show the homepage for that section.

A forward slash will return the homepage for the entire site, and a forward slash followed by a file name will return that file providing it is in the root directory.

EMAIL LINKS

`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.
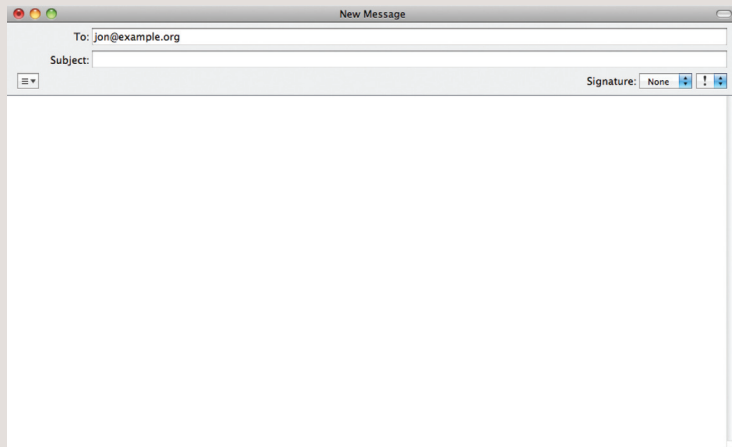
`HTML`

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

`RESULT`

Email Jon

OPENING LINKS IN A NEW WINDOW

```
<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.

Generally you should avoid opening links in a new window, but if you do, it is considered good practice to inform users that the link will open a new window before they click on it.

LINKING TO A SPECIFIC PART OF THE SAME PAGE

At the top of a long page you might want to add a list of contents that links to the corresponding sections lower down. Or you might want to add a link from part way down the page back to the top of it to save users from having to scroll back to the top.

Before you can link to a specific part of a page, you need to identify the points in the page that the link will go to. You do this using the id attribute (which can be used on every HTML element). You can see that the <h1> and <h2> elements in this example have been given id attributes that identify those sections of the page.

The value of the id attribute should start with a letter or an underscore (not a number or any other character) and, on a single page, no two id attributes should have the same value.

To link to an element that uses an id attribute you use the <a> element again, but the value of the href attribute starts with the # symbol, followed by the value of the id attribute of the element you want to link to. In this example, <a href="#top"> links to the <h1> element at the top of the page whose id attribute has a value of top.

```
chapter-05/linking-to-a-specific-part.html                    HTML

<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>
```

LINKING TO A SPECIFIC PART OF ANOTHER PAGE

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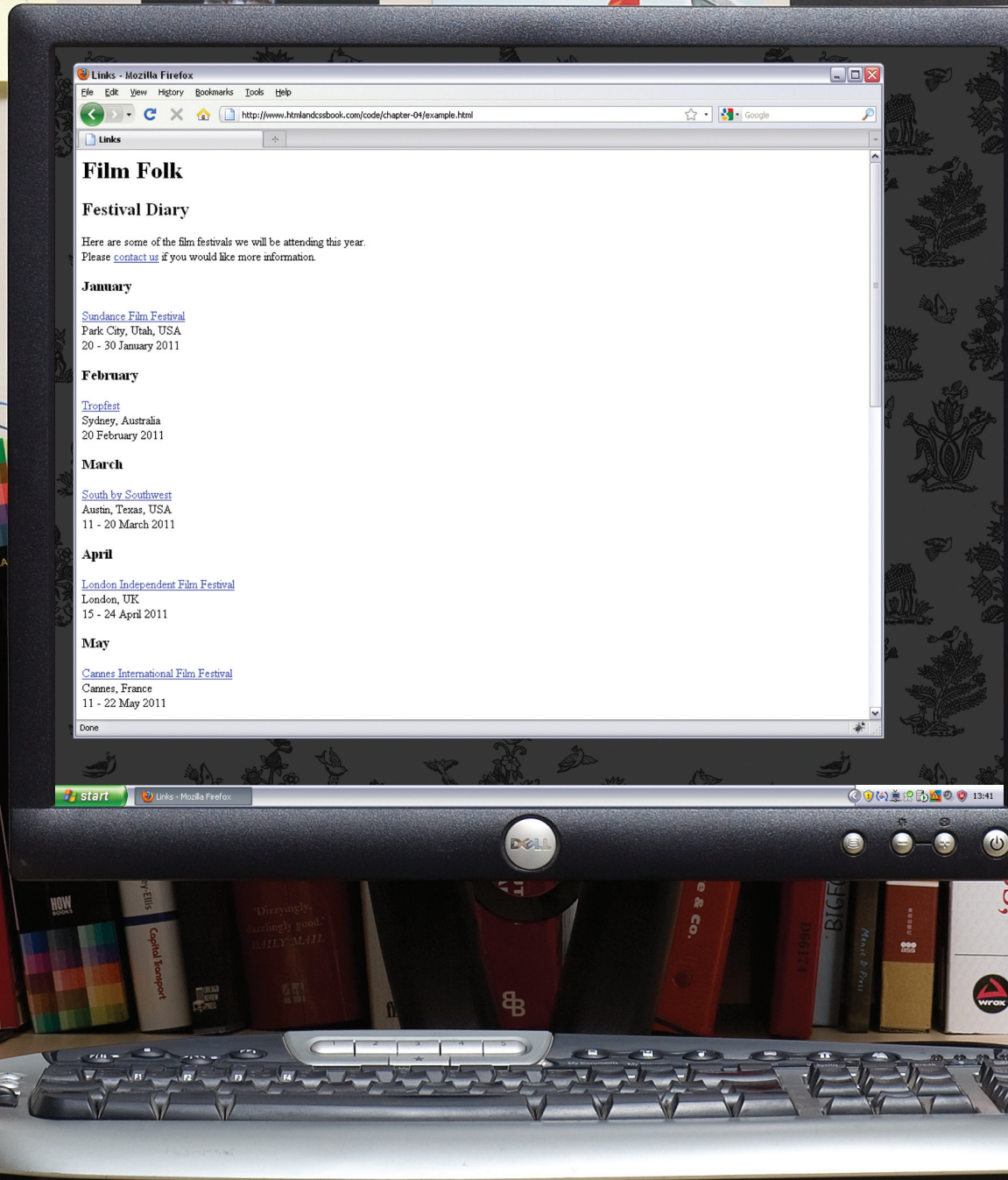
Therefore, the href attribute will contain the address for the page (either an absolute URL or a relative URL), followed by the # symbol, followed by the value of the id attribute that is used on the element you are linking to.

For example, to link to the bottom of the homepage of the website that accompanies this book, you would write:
```
<a href="http:/www.
htmlandcssbookcom/
#bottom">
```

Film Folk

Festival Diary

Here are some of the film festivals we will be attending this year.
Please contact us if you would like more information.

January

Sundance Film Festival
Park City, Utah, USA
20 - 30 January 2011

February

Tropfest
Sydney, Australia
20 February 2011

March

South by Southwest
Austin, Texas, USA
11 - 20 March 2011

April

London Independent Film Festival
London, UK
15 - 24 April 2011

May

Cannes International Film Festival
Cannes, France
11 - 22 May 2011

This example is of a web page about film.

The `<h1>` element is used with an `id` attribute at the top of the page so that a link can be added to take readers from the bottom of the page to the top. There is an email link to allow readers to contact the author of the web page. There are also a number of links to qualified URLs. These link to various film festivals. Below this list is a link to a relative URL which is an "about" page that lives in the same directory.

```html
<html>
  <head>
    <title>Links</title>
  </head>
  <body>
    <h1 id="top">Film Folk</h1>
    <h2>Festival Diary</h2>
    <p>Here are some of the film festivals we
       will be attending this year.<br />Please
       <a href="mailto:filmfolk@example.org">
       contact us</a> if you would like more
       information.</p>
    <h3>January</h3>
    <p><a href="http://www.sundance.org">
       Sundance Film Festival</a><br />
       Park City, Utah, USA<br />
       20 - 30 January 2011</p>
    <h3>February</h3>
    <p><a href="http://www.tropfest.com">
       Tropfest</a><br />
       Sydney, Australia<br />
       20 February 2011</p>
    <!-- additional content -->
    <p><a href="about.html">About Film Folk</a></p>
    <p><a href="#top">Top of page</a></p>
  </body>
</html>
```

▸ Links are created using the `<a>` element.

▸ The `<a>` element uses the `href` attribute to indicate the page you are linking to.

▸ If you are linking to a page within your own site, it is best to use relative links rather than qualified URLs.

▸ You can create links to open email programs with an email address in the "to" field.

▸ You can use the `id` attribute to target elements within a page that can be linked to.