

HTML : Elements & Linking



Element tags and attributes. The structure of links

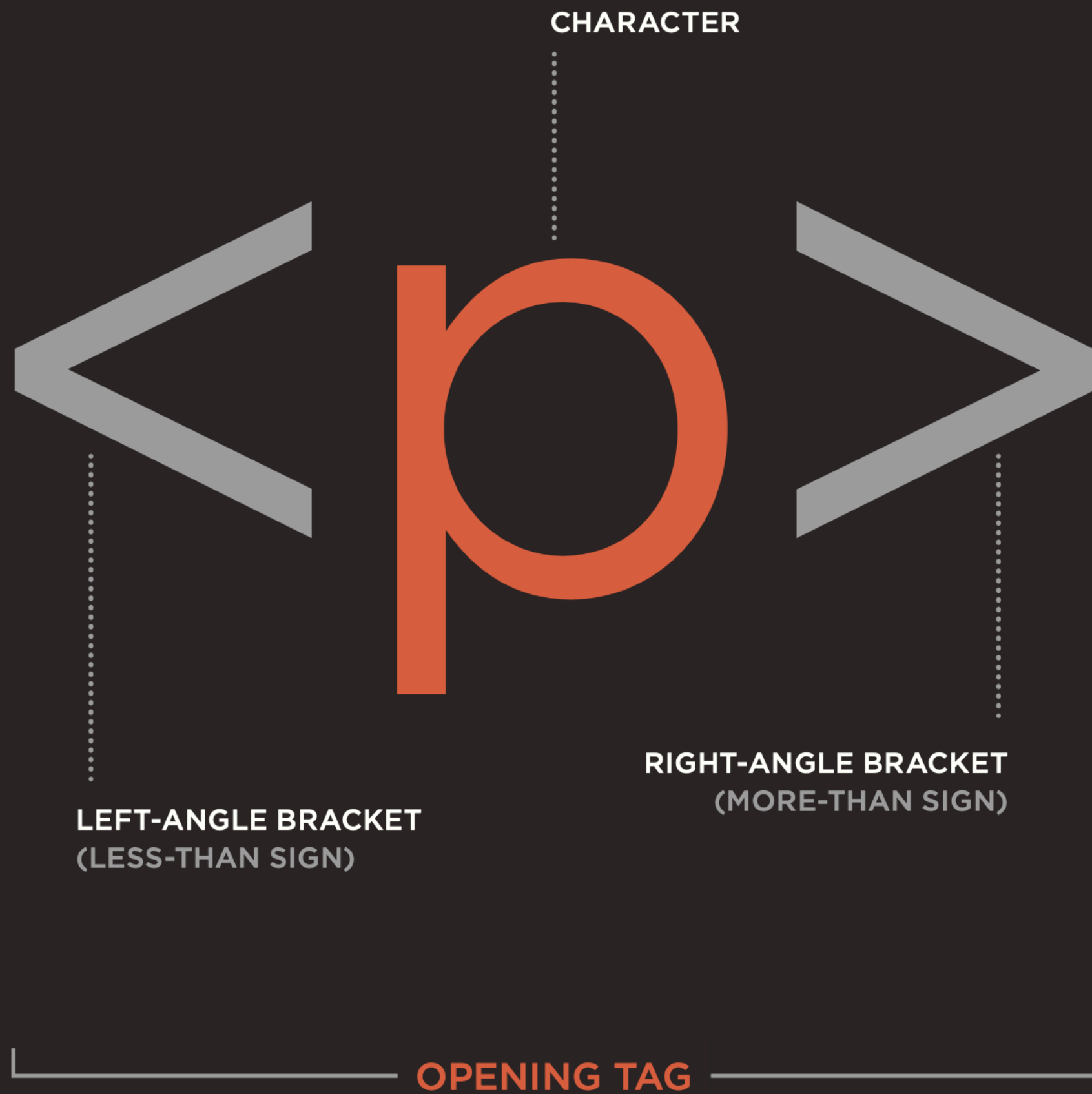
Some Key Concepts

- The structure of an ***HTML Element*** its variants.
- Nature of a ***relative path***, the differences from an ***absolute path***.



Agenda

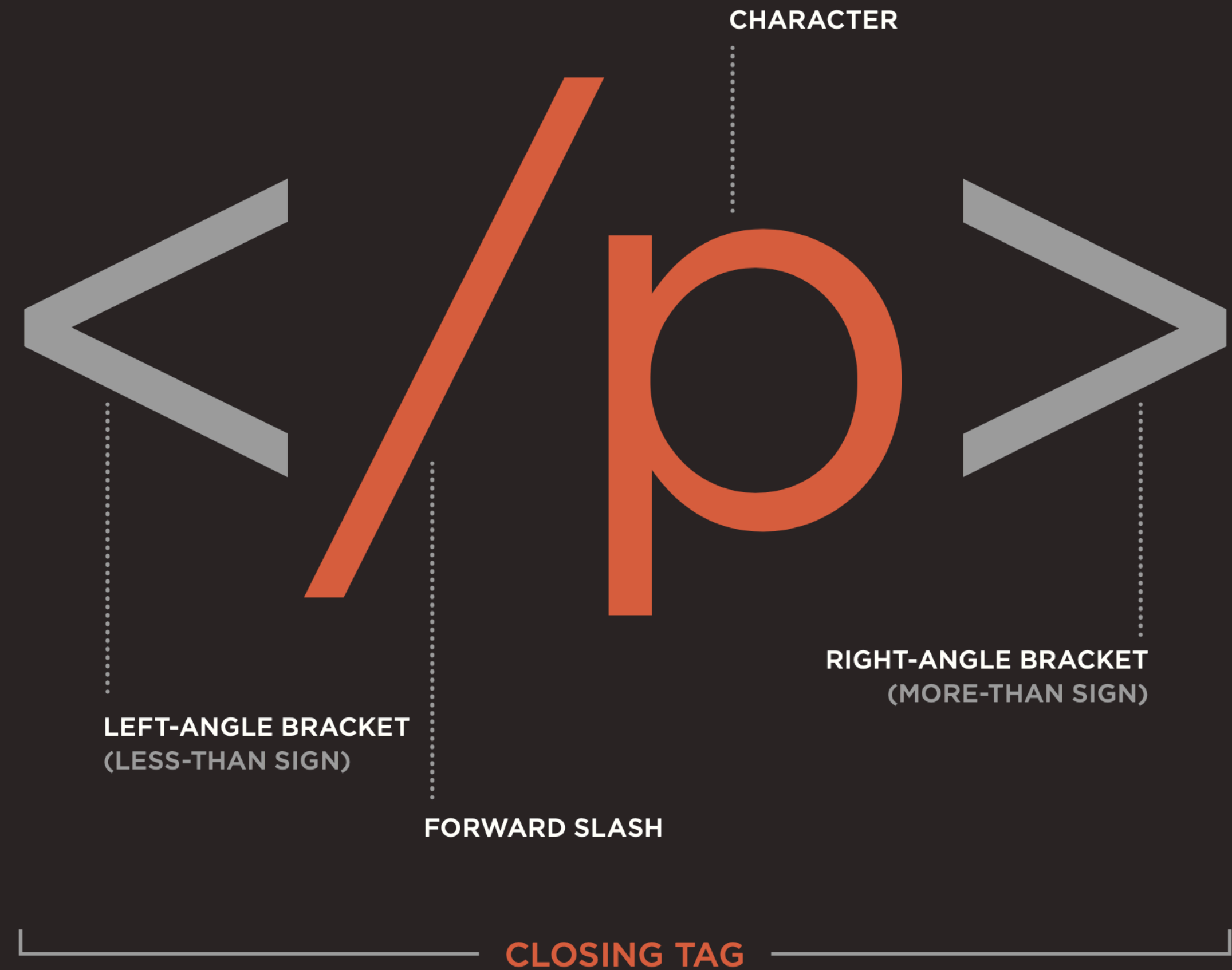
- Elements, Attributes, & Documents
- Linking
- Nesting
- Line break, Block & Inline Elements



The characters in the brackets indicate the tag's purpose.

For example, in the tags above the p stands for paragraph.

The closing tag has a forward slash after the the < symbol.

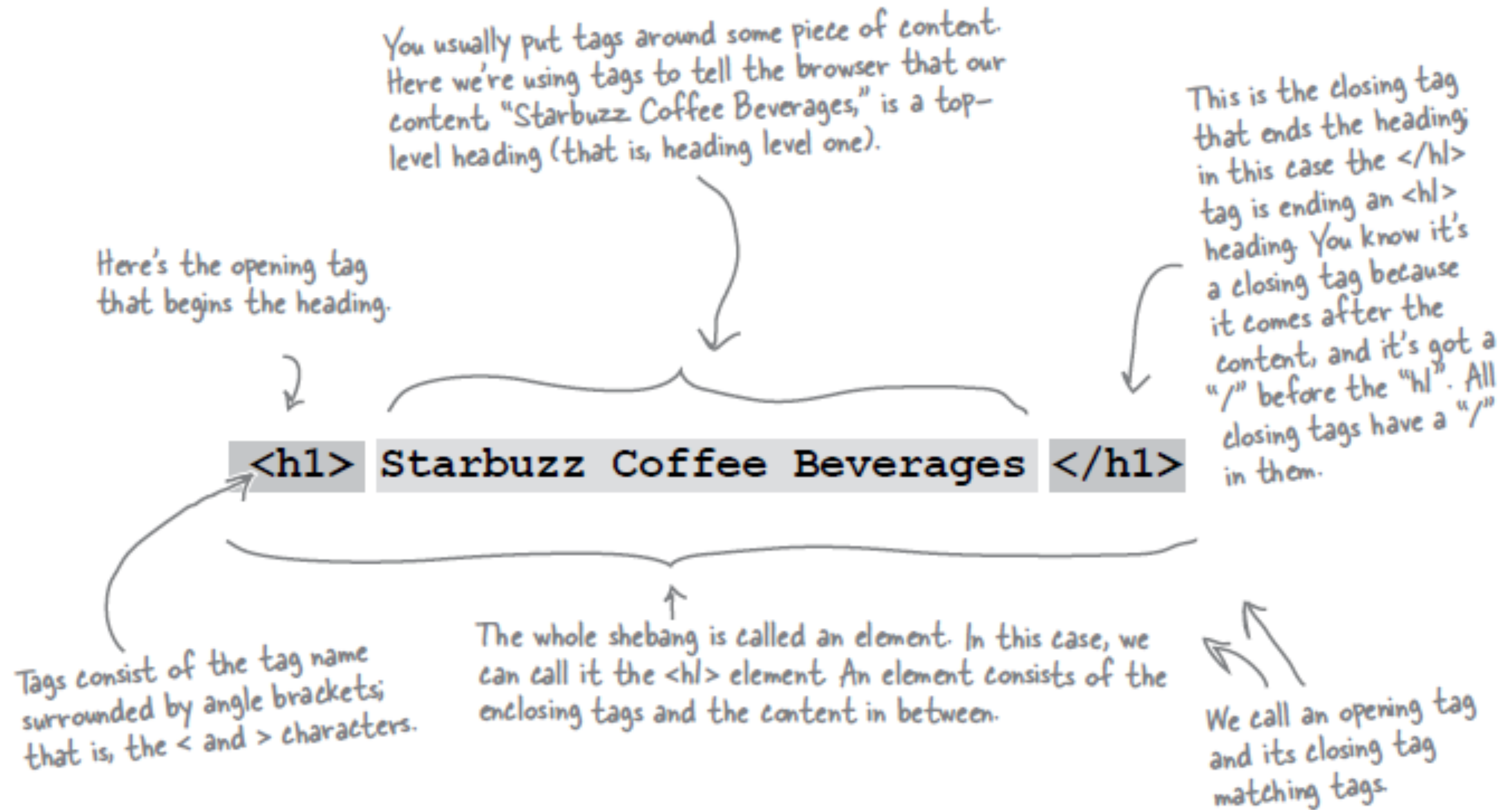


The terms "tag" and "element" are often used interchangeably.

Strictly speaking, however, an element comprises the opening

tag *and* the closing tag *and* any content that lies between them.

Components of an HTML Element



Components of an HTML Element

<ElementName >
Content
</ElementName>

← Start Tag

← End Tag

<title>

<title> My App Store </title>

ElementName: *<title>*

Content: *My App Store*

ElementName: *</title>*

<p>

<p>

This store brings you great app bundles week after week. We select the best power user apps from a broad range of suppliers and combine them into great deals. These are the highest quality apps from the best publishers, at great prices.

</p>

ElementName: <p>

Content: This store brings you great app bundles week after week. We select the best power user apps from a broad range of suppliers and combine them into great deals. These are the highest quality apps from the best publishers, at great prices.

ElementName: </p>

<a>

 App Store

ElementName:	<a>
AttributeName:	href
AttributeValue:	"apps.html"
Content:	<i>App Store</i>
ElementName:	

Attributes

- Attributes give you a way to specify additional information about an element.



Attributes are always written the same way: first comes the attribute name, followed by an equals sign, and then the attribute value surrounded in double quotes.

You may see some sloppy HTML on the Web that leaves off the double quotes, but don't get lazy yourself. Being sloppy can cause you a lot of problems down the road (as we'll see later in the book).

Do this (best practice)

```
<a href="top10.html">Great Movies</a>
```

Diagram illustrating the correct HTML attribute syntax: `Great Movies`. Handwritten labels with arrows point to the components: "attribute name" points to `href`, "equals sign" points to `=`, "double quote" points to the opening quote, "attribute value" points to `top10.html`, and "double quote" points to the closing quote.

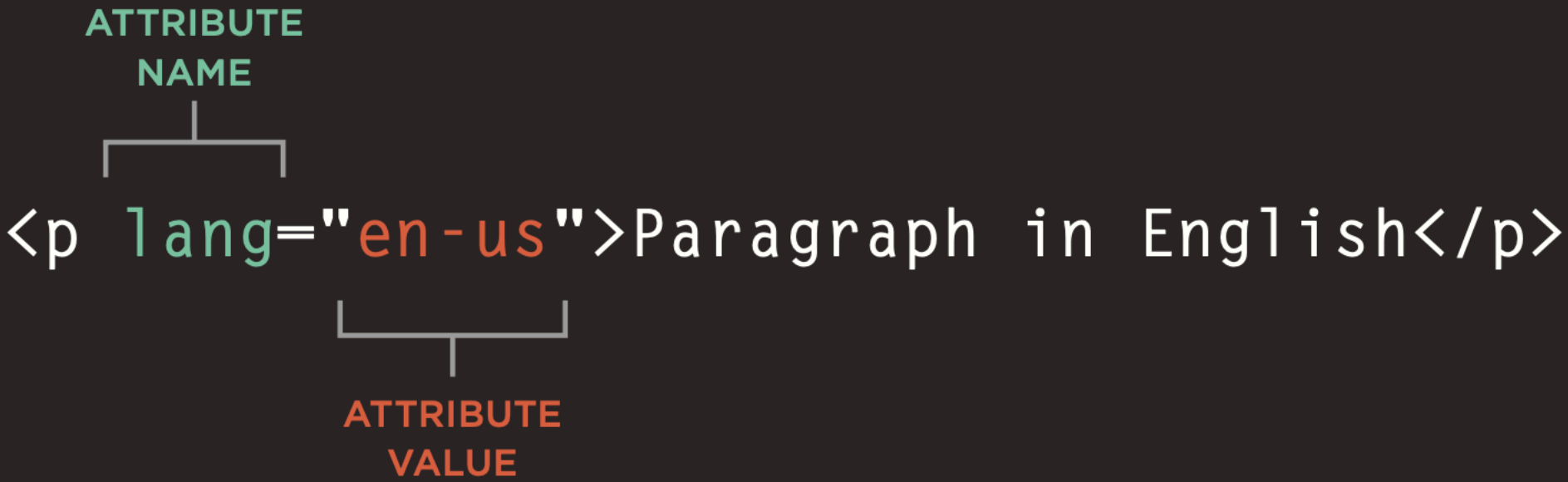
Not this

```
<a href=top10.html>Great Movies</a>
```

Handwritten note: "No double quotes around the attribute value"

Attributes provide additional information about the contents of an element. They appear on the opening tag of the element and are made up of two parts: a **name** and a **value**, separated by an equals sign.

HTML5 allows you to use uppercase attribute names and omit the quotemarks, but this is not recommended.



The attribute **name** indicates what kind of extra information you are supplying about the element's content. It should be written in lowercase.

The **value** is the information or setting for the attribute. It should be placed in double quotes. Different attributes can have different values.

Here an attribute called `lang` is used to indicate the language used in this element. The value of this attribute on this page specifies it is in US English.

The majority of attributes can only be used on certain elements, although a few attributes (such as `lang`) can appear on any element.

Most attribute values are either pre-defined or follow a stipulated format. We will look at the permitted values as we introduce each new attribute.

The value of the `lang` attribute is an abbreviated way of specifying which language is used inside the element that all browsers understand.

ElementName: **

AttributeName: *src*

AttributeValue: *"../../images/delete.jpg"*

Content: *empty*

ElementName: *none*

HTML Document Structure

- html
 - head
 - title
 - body
 - h1
 - ol
 - etc...

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>APP Store</title>
  </head>
  <body>
    <h1>Mobile Applications</h1>
    <ol>
      <li><a href="apps.html">Apps</a></li>
    </ol>
    <h2>Most Popular Apps</h2>
    <ul>
      <li>Strike I</li>
      <li>Crash Landing</li>
    </ul>
    <h2>Recommended Apps</h2>
    <ul>
      <li>Chop</li>
      <li>XBox mania</li>
    </ul>
  </body>
</html>
```


Tags act like containers. They tell you something about the information that lies between their opening and closing tags.

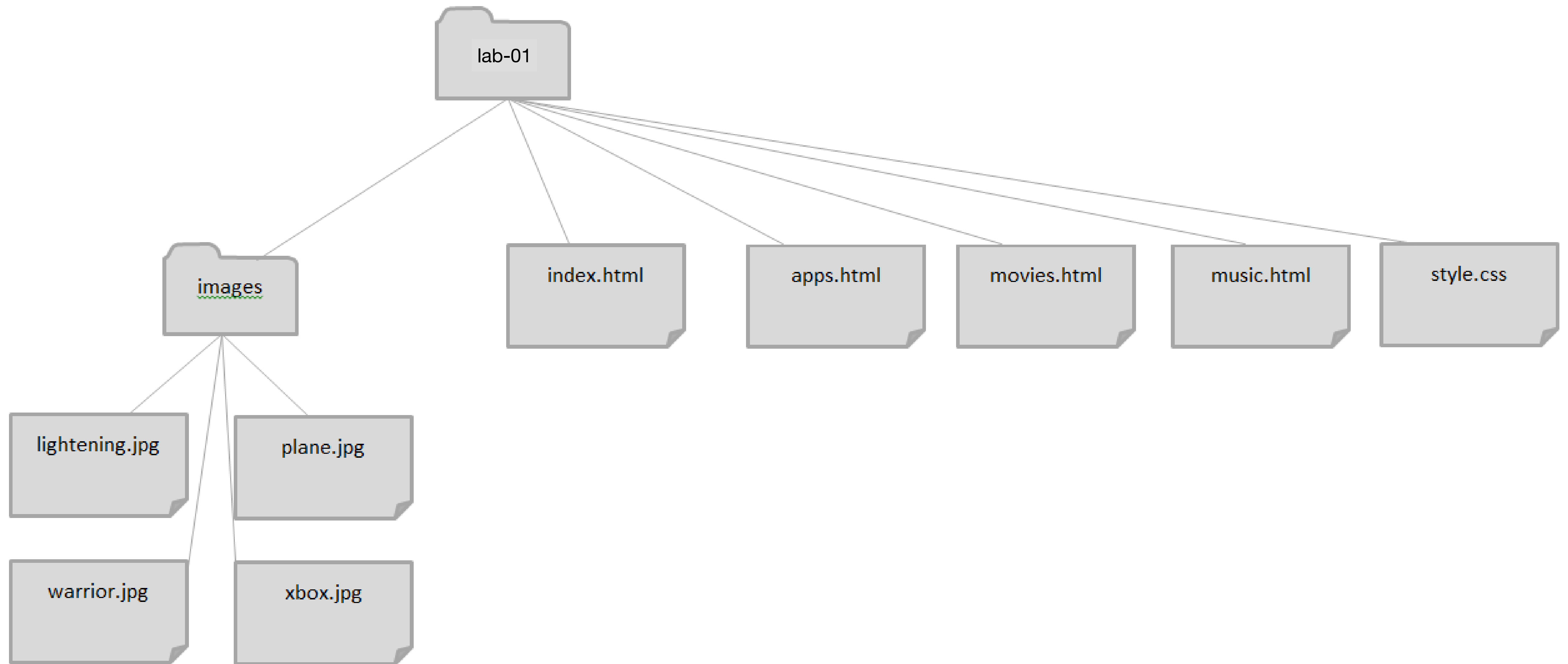
DESCRIPTION

<code><html></code>	The opening <code><html></code> tag indicates that anything between it and a closing <code></html></code> tag is HTML code.
<code><body></code>	The <code><body></code> tag indicates that anything between it and the closing <code></body></code> tag should be shown inside the main browser window.
<code><h1>This is the Main Heading</h1></code>	Words between <code><h1></code> and <code></h1></code> are a main heading.
<code><p>This text might be an introduction to the rest of the page. And if the page is a long one it might be split up into several sub-headings.</p></code>	A paragraph of text appears between these <code><p></code> and <code></p></code> tags.
<code><h2>This is a Sub-Heading</h2></code>	Words between <code><h2></code> and <code></h2></code> form a sub-heading.
<code><p>Many long articles have sub-headings so to help you follow the structure of what is being written. There may even be sub-sub-headings (or lower-level headings).</p></code>	Here is another paragraph between opening <code><p></code> and closing <code></p></code> tags.
<code><h2>Another Sub-Heading</h2></code>	Another sub-heading inside <code><h2></code> and <code></h2></code> tags.
<code><p>Here you can see another sub-heading.</p></code>	Another paragraph inside <code><p></code> and <code></p></code> tags.
<code></body></code>	The closing <code></body></code> tag indicates the end of what should appear in the main browser window.
<code></html></code>	The closing <code></html></code> tag indicates that it is the end of the HTML code.

Agenda

- Elements, Attributes, & Documents
- Linking
- Nesting
- Line break, Block & Inline Elements

Linking



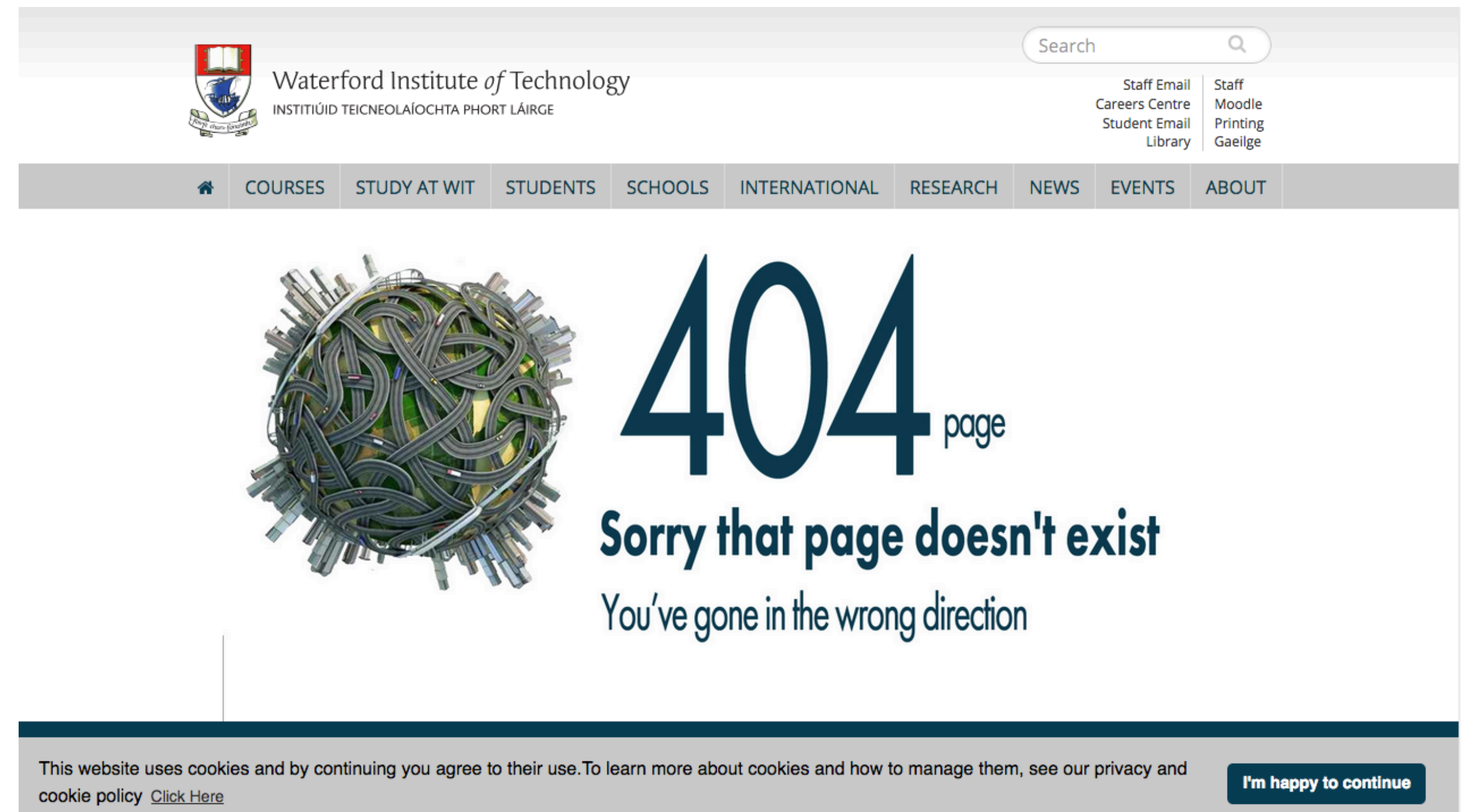
Linking to other pages or images

Creating links to other web pages and to image files can get confusing! If your link to a file or page is incorrect you get:

- Whoops we can't seem to find that page! (404 error)

Or

- No image shows and you have a broken link to an image



Links: Absolute vs Relative

Absolute

- Complete path to a file on the hard disk: e.g:
c:/web-development/lab-01/images/xbox.jpg
c:/web-development/lab-01/index.html

Relative:

./images/xbox.jpg
../apps.html
index.html

You can trace route from “current position” to the destination

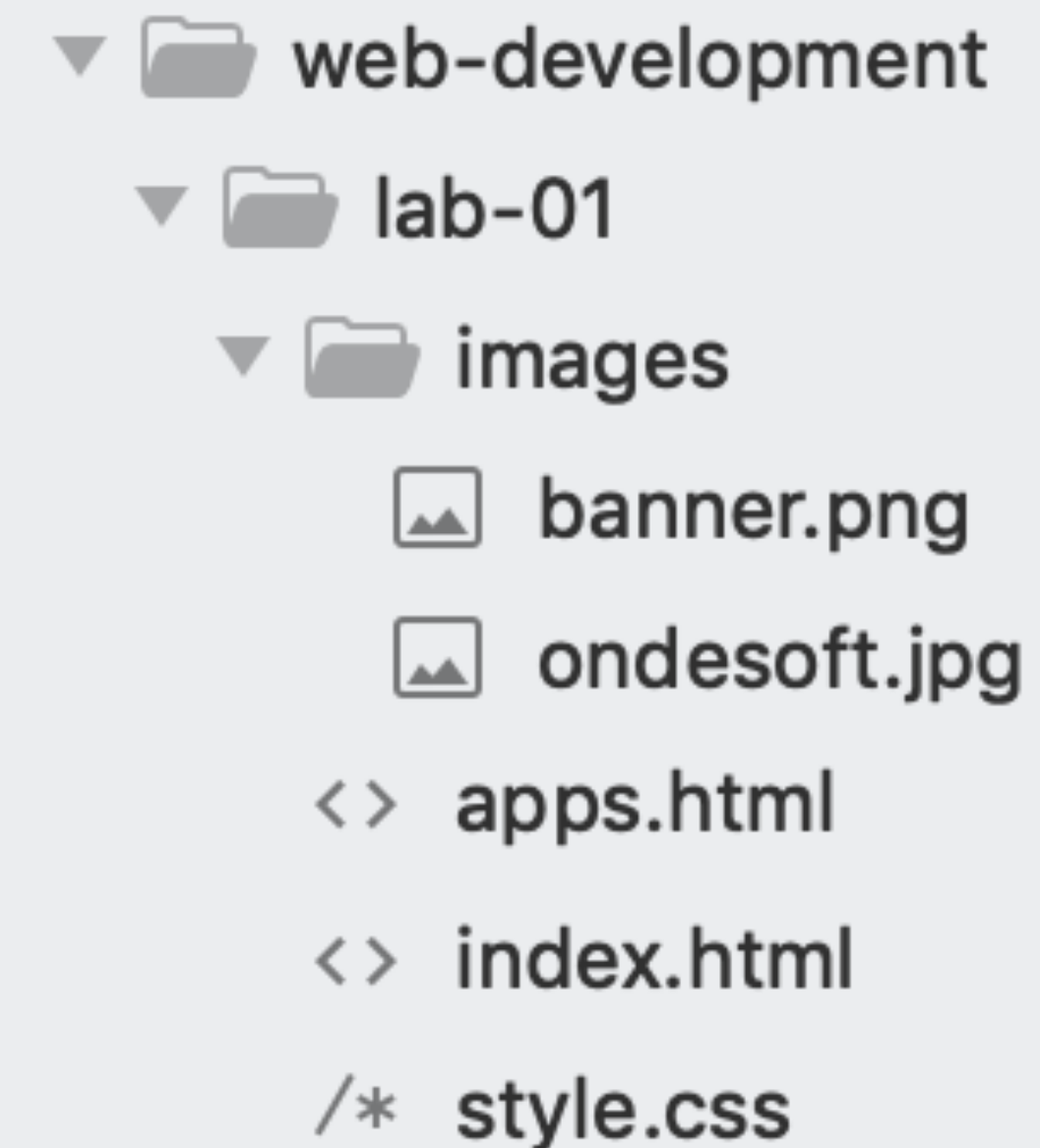
“..” means go up one level

Directory name may prefix filename

Relative Link Examples

- If we are in “lab-01” then “images/banner.png” is a relative link from the current folder (lab-01) to the images folder, and to the file “banner.png” in that folder
- Avoid absolute links!

FOLDERS



```
<a href="apps.html">Movies</a>
```



```

```



```

```



- Relative
 - No drive name
 - ../ one level up,
 - ../../ two levels up, etc
 - **somefolder** one level down into folder named someFolder
 - **somefolder/otherfolder** two levels down
 - **../../baffin/data** two levels up and two levels down

Absolute & Relative paths again

- Absolute
 - Drive + {folder(s)} + {file}
 - e.g. C:\projects\baffin\data

HTML : Elements & Linking



Element tags and attributes. The structure of links