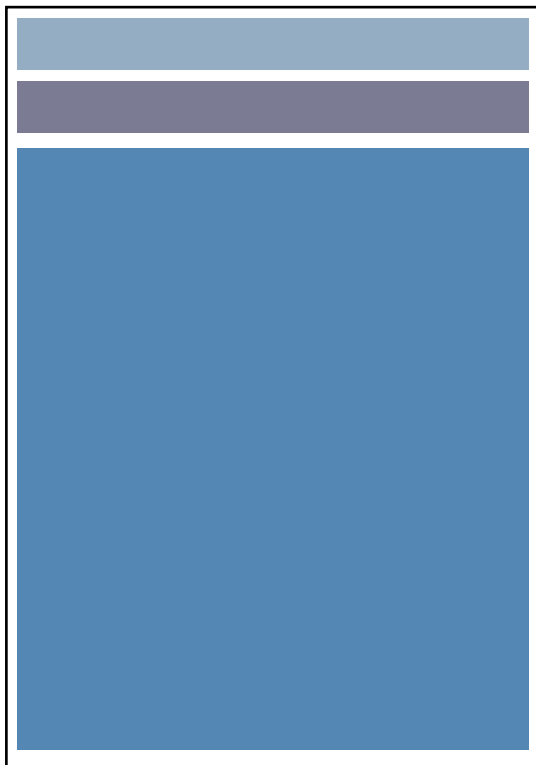


# introduction to XHTML



XHTML stands for Extensible HyperText Markup Language and is based on HTML 4.0, incorporating XML. Due to this 'fusion' the mark up language will remain compatible with existing browsers and remain so in future versions and updates.

An XHTML document consists of 3 main parts:



## DOCTYPE

document type definition (DTD)

- first element on page
- validates page
- activates standard compliant mode in InternetExplorer and Mozilla browsers

## head

<head> element

- contains metadata for page
- not displayed by browser
- links to external script files, such as css, javascript, etc...

## body

<body> element

- contains page content
- displays page elements
- required valid use / structure of tags

## DOCTYPE - content

### DOCTYPE

XHTML 1.0\* specifies three XML document types that correspond to the three HTML 4.0 DTDs: Strict, Transitional, and Frameset.

Strict:

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

Transitional:

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

*>> see sample on following page >>*

Frameset:

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

\* Although proper XML structure requires placing the DOCTYPE after the XML prolog, IE6 has a bug that causes the browser render in quirks mode if there is anything before the DOCTYPE definition





## head element - content

■ head

`<title>...</title>`

`<title>`      `</title>`

The `title` element gives the page a name - title - label - which appears on top of the browser window. The text given within the title tag is used for the History within the browser as well as the Bookmarks.

The title elements is often neglected and therefore confuses the site's visitors. It is essential to give each page within a site a meaningful and original name to aid ease of use.

syntax | open and close tag   `<` `>`   `</` `>`

*» see sample on previous page and below »*

## body element - content

■ body

`<body>...</body>`

`<body>`      `</body>`

The `body` element contains all displayable content of the page - including text, images, animations, sound and other media types. It is important to enclose all content within the body tag, ie it opens right after the head tag - followed by all page content - and closes at the bottom of the page - followed by the closing html tag.

syntax | open and close tag   `<` `>`   `</` `>`

If this is not set up correctly the page might still display but show glitches and misalignments. For correct interpretation of the code - always make sure to follow the rules ;)

```
1  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
2  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
3  <head>
4      <meta    />
5      ...
6      <link    />
7      <title>webeyedea.info - welcome</title>
15 </head>
16 <body>
17     <h1>firstheading</h1>
18     <p>
19         content text with some links
20         <a href="http://www.alistapart.com" target="_blank" >
21             alistapart.com</a>
22     </p>
23 </body>
24 </html>
```

# body element - content



body

`<h1> ... </h1>` `<h1>` `</h1>`

» sizes recognised by as defaults by most browsers - from h1 to h6

The `h` tag is used to define headings within the body text and give these certain properties such as size, position, font styling and more. If no properties have been defined - the browser will interpret these rules as set by the user, or its default settings - setting sizes in hierarchie of numbers (h1 largest, h6 smallest).

syntax | open and close tag `< >` `</ >`

» see example below »

`<p> ... </p>` `<p>` `</p>`

The `p` tag is used to define paragraphs within the body text - again default or custom settings will be applied if no other properties have been set.

syntax | open and close tag `< >` `</ >`

» see example below »

`<br />` `<br />`

The `br` tag is used as the application of a soft return, ie it breaks the flow of the text onto a new line. This is a single tag which is inserted into the text as appropriate (without end tag).

syntax | single tag ending in 'space'+forward slash `< />`

» see example below »

`<a> ... </a>` `<a>` `</a>`

» can be linked to link or anchor

The `a` tag is used to link to either an anchor specified within the current page - or link to another page within the same site or anywhere else on the net. It contains a minimum of 2 attributes:

`href=" "` location of specified link  
`target=" "` window targeted  
    "`_self`" opens in current window  
    "`_blank`" opens in new window

syntax | open and close tag `< >` `</ >`

» see example below »

```
<h2>welcome to 'webeyedeia.info'</h2>
<p>
  introductory text - welcoming visitor and
  introducing purpose of the site <br />
  more text with news and updates or other comments
  content text with some links to inspirational and resource sites such as
  <a href="http://www.alistapart.com" target="_blank" >
  alistapart.com</a>
</p>
```

# body element - content

body



`<img ... />`

`<img />`

The `img` tag is used to insert an image or a graphic into the page. It can contain several attributes and properties.

There are 2 required attributes which will bring in the image and give alternative text should the image not display (due to error or disabled graphics within browser)

`src=""` " image source - image in suitable format (jpg, gif)

*\*required by standards for XHTML*

`alt=""` " alternative text

*\*required by standards for XHTML*

*note: the alt text is intended to display only when the image doesn't load - correctly implemented by Firefox, Safari, Opera and mozilla driven browsers  
Certain browsers however display these as comments on mouse over, such as Internet Explorer.*

2 more attributes ensure efficient rendering by the browser. By adding the specific size of the image - the browser is told which size of graphic will be displayed, allowing simultaneous loading of text and image content speeding up loading time and ensuring the correct size of image (as edited to suit in graphics program!!!).

`width=""` " width of image display

units: pixels `px`, percent `%`

*\*improves browser rendering*

`height=""` " height of image display

units: pixels `px`, percent `%`

*\*improves browser rendering*

syntax | single tag ending in 'space'+forward slash `< />`

*» see example below »*

```
<h2>welcome to `webedea.info`</h2>
```

```
<p>
```

```
  some relevant text <br />
```

```
  <a href="http://www.alistapart.com" target="_blank" >
```

```
    
```

```
    alistapart.com</a>
```

```
</p>
```



# body element - content

body



```
<dl>
  <dt> ... </dt>
  <dd> ... </dd>
</dl>
```

```
<dl>
  <dt>      </dt>
  <dd>      </dd>
</dl>
```

The `dl` tag is used in combination with the `dt` and `dd` tag to format a definition list, ie a list which is similar in layout to text in a dictionary. Note that the tags are embedded into each other - and not overlapping.

Again, default or custom settings will be applied in the browser display if no other properties have been set.

syntax | open and close tag < > < > </ ></ >

» see example below »

## XHTML code

```
<dl>
  <dt>term</dt>
  <dd>definition text to go here with
  a paragraph of text explaining the
  requested phrase</dd>
  <dt>term</dt>
  <dd>definition text to go here with
  a paragraph of text explaining the
  requested phrase</dd>
  <dt>term</dt>
  <dd>definition text to go here with
  a paragraph of text explaining the
  requested phrase</dd>
</dl>
```

## in browser

```
term
  definition text to go here
  explaining the requested
term
  definition text to go here
  explaining the requested
term
  definition text to go here
  explaining the requested
```

## rules

→ for each document - all main 3 elements to be defined - cannot be omitted



→ all **tags** and **attributes** to be written in **lowercase**

~~<BODY BGCOLOR="#ff6600">~~

<body bgcolor="#f60">



→ all **attribute values** to be quoted

~~<body margin=0>~~

<body margin="0">



→ all **non-empty tag** (tags which were previously permitted to be open) to be closed

~~paragraph text paragraph<p>~~

<p>paragraph text paragraph</p>



→ all **empty tag** (tags which were previously in the format of eg <br>) to be terminated

~~paragraph text paragraph<br>~~

paragraph text paragraph<br />



→ all elements must be nested - no overlaps permitted

~~<ul><li>text</ul></li>~~

<ul><li>text</li></ul>

