

How HTML gets interpreted by the browser

The code on the left can be written in bbedit, word, simpleteXt, or any other program that can save a text file. It then gets saved as a file on your hard drive. When you open it in your favorite web browser, it shows up on screen as fig. 2.1.

The first section of every web page is the "head" section. It is invisible to the viewer, except for the title.

```
<html>
  <head>
    <title>A very simple web page</title>
  </head>
  <body bgcolor="white">
    <table width="500" height="100%"
      cellpadding="10" border="5">
      <tr valign="top">
        <td width="125" bgcolor="red">
          This is a table cell with some
          text in it!
        </td>
        <td>This is a bigger table cell
          with some text in it as well!
        </td>
      </tr>
    </table>
  </body>
</html>
```

The other section is the "body" section of an html file. It contains html code or "markup", telling the browser how to display the information in the text file. It's important to note that the only readable information in this file is: "A very simple web page", "This is a table cell with some text in it!", and "This is a bigger table cell with some text in it as well!". It's information that gets marked up by the tags surrounding it.

The Tag in a nutshell

Tags are enclosed in brackets. `<body>` is a tag. Most tags need another tag to indicate that they are finished, like `</body>` (notice the forward-slash before the word body). Some tags don't need a closing tag, however. `` is one such tag.

Sometimes tags can have attributes and values, like `<body bgcolor="blue">`

In this case, `bgcolor` is an attribute (or a property if you like), and "blue" is a value.

All html documents have the following basic tags:
`<html><head></head><body></body></html>`

Fig. 2.1

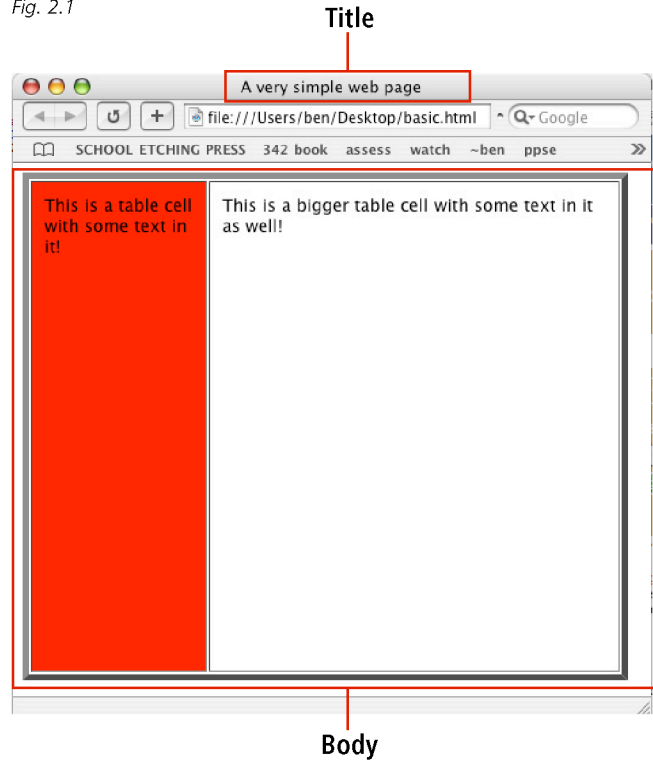
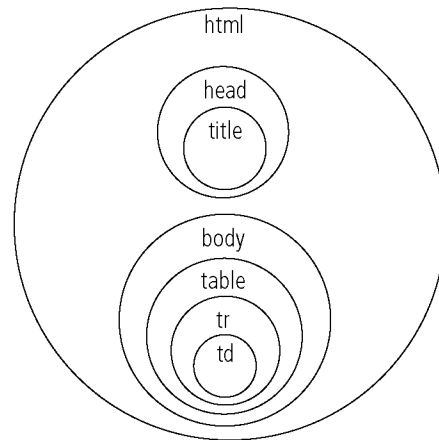


Fig. 2.2

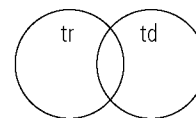
Try to envision the code on the left as a series of circles, or nutshells, each enclosing other things. Any time you have an html tag that has a /tag, it is like a circle that encloses the information within.



If you screw up your code, you might get something like this:

```
<tr><td></tr></td>
```

Oh no! You've crossed the streams! Using our circles, it looks like this:



Basic Tags

<html></html>
Creates an HTML document
<head></head>
Sets off the title and other information that isn't displayed on the Web page itself
<body></body>
Sets off the visible portion of the document

Header Tags

<title></title>
Puts the name of the document in the title bar

Body Attributes

<body bgcolor=?>
Sets the background color, using name or hex value
<body text=?>
Sets the text color, using name or hex value
<body link=?>
Sets the color of links, using name or hex value
<body vlink=?>
Sets the color of followed links, using name or hex value
<body alink=?>
Sets the color of links on click

Text Tags

<pre></pre>
Creates preformatted text
<h1></h1>
Creates the largest headline
<h6></h6>
Creates the smallest headline

Creates bold text
<i></i>
Creates italic text
<tt></tt>
Creates teletype, or typewriter-style text
<cite></cite>
Creates a citation, usually italic

Emphasizes a word (with italic or bold)

Emphasizes a word (with italic or bold)

Sets size of font, from 1 to 7)

Sets font color, using name or hex value

Links

Creates a hyperlink

Creates a mailto link

Creates a target location within a document

Links to that target location from elsewhere in the document

Formatting

<p></p>
Creates a new paragraph
<p align=?>
Aligns a paragraph to the left, right, or center

Inserts a line break

<blockquote> </blockquote>
Indents text from both sides
<dl></dl>
Creates a definition list
<dt>
Precedes each definition term
<dd>
Precedes each definition

Creates a numbered list

Precedes each list item, and adds a number

Creates a bulleted list
<div align=?>
A generic tag used to format large blocks of HTML, also used for stylesheets

Graphical Elements

Adds an image

Aligns an image: left, right, center; bottom, top, middle

Sets size of border around an image
<hr>
Inserts a horizontal rule
<hr size=?>
Sets size (height) of rule
<hr width=?>
Sets width of rule, in percentage or absolute value
<hr noshade>
Creates a rule without a shadow

Tables

<table></table>
Creates a table
<tr></tr>
Sets off each row in a table
<td></td>
Sets off each cell in a row
<th></th>
Sets off the table header (a normal cell with bold, centered text)

Table Attributes

<table border=#>
Sets width of border around table cells
<table cellspacing=#>
Sets amount of space between table cells
<table cellpadding=#>
Sets amount of space between a cell's border and its contents
<table width=# or %>
Sets width of table - in pixels or as a percentage of document width
<tr align=?> or <td align=?>
Sets alignment for cell(s) (left, center, or right)
<tr valign=?> or <td valign=?>
Sets vertical alignment for cell(s) (top, middle, or bottom)
<td colspan=#>
Sets number of columns a cell should span
<td rowspan=#>
Sets number of rows a cell should span (default=1)
<td nowrap>
Prevents the lines within a cell from being broken to fit

Frames

<frameset></frameset>
tag in a frames document; can also be nested in other framesets
<frameset rows="value,value">
Defines the rows within a frameset, using number in pixels, or percentage of width
<frameset cols="value,value">
Defines the columns within a frameset, using number in pixels, or percentage of width
<frame>
Defines a single frame - or region - within a frameset
<noframes></noframes>
Defines what will appear on browsers that don't support frames

Frames Attributes

<frame src="URL">
Specifies which HTML document should be displayed
<frame name="name">
Names the frame, or region, so it may be targeted by other frames
<frame marginwidth=#>
Defines the left and right margins for the frame; must be equal to or greater than 1
<frame marginheight=#>
Defines the top and bottom margins for the frame; must be equal to or greater than 1
<frame scrolling=VALUE>
Sets whether the frame has a scrollbar; value may equal "yes," "no," or "auto." The default, as in ordinary documents, is auto.
<frame noresize>
Prevents the user from resizing a frame

Forms

For functional forms, you'll have to run a CGI script. The HTML just creates the appearance of a form.
<form></form>
Creates all forms
<select multiple name="NAME" size=?></select>
Creates a scrolling menu. Size sets the number of menu items visible before you need to scroll.
<option>
Sets off each menu item
<select name="NAME"></select>
Creates a pulldown menu
<option>
Sets off each menu item
<textarea name="NAME" cols=40 rows=8></textarea>
Creates a text box area. Columns set the width; rows set the height.
<input type="checkbox" name="NAME">
Creates a checkbox. Text follows tag.
<input type="radio" name="NAME" value="x">
Creates a radio button. Text follows tag
<input type="text" name="foo" size=20>
Creates a one-line text area. Size sets length, in characters.
<input type="submit" value="NAME">
Creates a Submit button
<input type="image" border=0 name="NAME" src="name.gif">
Creates a Submit button using an image
<input type="reset">
Creates a Reset button