

Building a document structure

Lesson 3

Building your first web page

» Lessons

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Lesson 3



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Setting up a document structure Page 1 of 4

Now that you've built a quick Web page and you know the basics of HTML syntax and controls, it's time to get into the specifics of using tags and content together to build Web pages. As you learned in earlier lessons, the real secret to HTML is using the right combination of tags and content to drive the presentation of your content in a Web browser. This portion of this lesson and the next four lessons all focus on how you use groups of HTML to display different kinds of content.

An HTML document has two distinct pieces: the header and the body. Information that you include in the header, like a title for the document, will not show up in the browser window itself. Instead, header information helps the browser process the content stored inside of the document's body. Every HTML document should have a title as well, stored between the `<title>` and `</title>` tags.

Each and every HTML Document that you build should have this same basic document structure to identify the header and the body:

```
<html>
  <head>
<title></title>
  </head>

  <body>
  </body>
</html>
```

You've actually seen this structure at work already in the two pages you've built thus far.

The basic document structure is comprised of these tags:

- **<html> . . . </html>** includes all of the other elements and text in the HTML document.
- **<head> . . . </head>** identifies the document header. For now the only information that you include in the document header should be the document title.
- **<title> . . . </title>** holds the document's title. Your titles should be descriptive but not lengthy.
- **<body> . . . </body>** includes all of the elements and text you want the Web browser to display. Be sure to include all of your content within the **<body> . . . </body>** element or the Web browser may not display your page correctly.

Of all of these elements, the `body` element is the only tag that takes attributes. The attributes that work with the `body` tag allow you to set the color scheme for the entire document, including text and background color, or to specify an image to tile across the back of the page.

After you set up your basic document structure you're ready to add the actual guts (content) to the page. Headings and paragraphs form the base for most pages and are a good place to start when you are building your page.

Get organized with headings

Use the HTML heading elements to add headings to your page that help organize your content. You can specify up to six heading levels using these elements:

- `<h1> . . . </h1>` describes the topmost heading. First level headings are always displayed by the browser in a large font size.
- `<h2> . . . </h2>` describes a second level heading.
- `<h3> . . . </h3>` describes a third level heading.
- `<h4> . . . </h4>` describes a fourth level heading. From this level down, heading font size is usually smaller than the page's base font size.
- `<h5> . . . </h5>` describes a fifth level heading.
- `<h6> . . . </h6>` describes a sixth level heading.

Figure 3-1 shows how an HTML browser displays the following heading tags and text:

```
<h1>This is a first level heading</h1>  
<h2>This is a second level heading</h2>  
<h3>This is a third level heading</h3>  
<h4>This is a fourth level heading</h4>  
<h5>This is a fifth level heading</h5>  
<h6>This is a sixth level heading</h6>
```

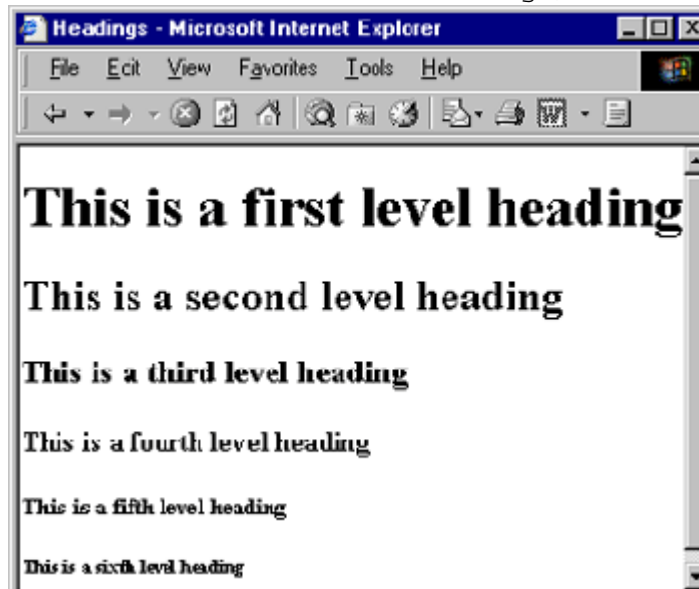


Figure 3-1: Web browsers display heading levels in different sizes of text.

Notice that the font size for each successive heading level grows

Double-check your work

The structure of your HTML document can make or break it. Quickly double check your page organization scheme on a LaserJet from HP.



» [HP Color LaserJet 3800 printer series](#)



» [Printer and MFP buying guide](#)

smaller and smaller. Also notice that there is a line break and a full line of empty space after each heading. The browser puts both the font size and the white space there, based on its interpretation of the heading elements.

Headings illustrate how browsers will set font sizes and generate white space based on a particular element.

All of the heading tags can take the `align=` attribute, which can in turn take these values:

- left
- right
- center
- justify

To create a centered heading simply use this bit of code:

```
<h1 align="center">  
  This first level heading is centered  
</h1>
```

Identifying blocks of text as a paragraph

You've seen the paragraph element used time and again as an example of one of the most basic HTML elements you can use. Most Web pages include a whole slew of paragraphs, each marked with `<p> . . . </p>`.

Web browsers automatically add line breaks and a line space before a paragraph.

The paragraph element takes the `align=` attribute just like the various heading level elements do. Use the attribute if you want your paragraphs to be centered, aligned to the right, or justified. If you don't specify an alignment your paragraphs will be aligned to the left.

Divide up the page with line breaks and hard rules Page 3 of 4

Headings and paragraphs go a long way towards getting you started building a page with some substance, but chances are you'll want to break your page up and make it more visually interesting. In Lesson 5 you'll learn how to do this with images, but for now let's look at some simpler options for adding some variety to the flow of your page.

Breaking lines with the line break tag

There will be times when you will want to instruct the browser to insert a line break in a particular place. You may not want to use a paragraph tag because all browsers automatically add a full line of white space before each paragraph. The line break tag (`
`) is a singleton tag that inserts a line break (without the space) wherever you place the tag, as in this code example:

Don't lose your hard work

For small or branch offices looking to lower IT costs, storage servers deliver quick-to-install and simple-to-manage networked data storage for file repository.



» [HP ProLiant DL100 G2](#)

```
<p>This line of text<br>
will break<br>
wherever there<br>
is<br>
a line break <br>
tag</p>
```

Figure 3-2 shows how a browser deals with the `
` tags.

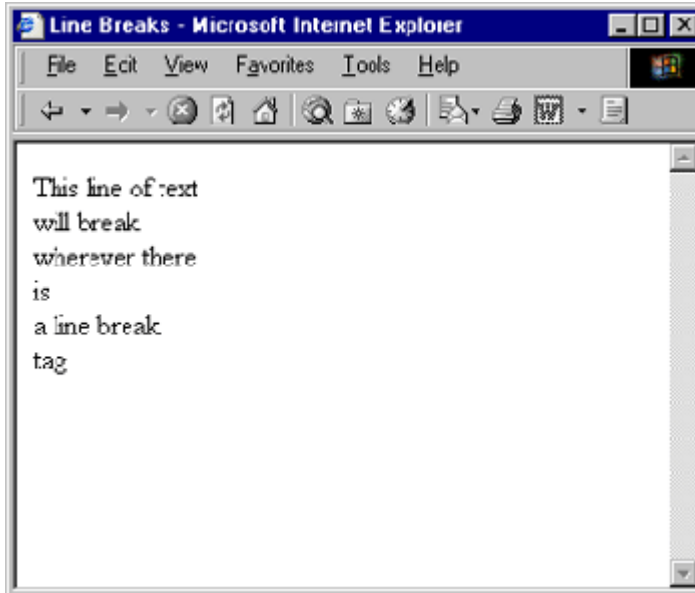


Figure 3-2: Web browsers add line breaks whenever they encounter `
` tags.

You will find that you use line break tags regularly in your Web pages and very often in conjunction with other tags like the paragraph tag.

Lining the page with hard rules

A simple horizontal line can add a nice break in the flow of a page, and a collection of horizontal lines can nicely divide up sections of a page to help users follow its flow. While you could create an image of a line and embed it in your document, HTML provides you with a tag that will do the same thing: `<hr>`.

The horizontal rule tag is a singleton tag that simply adds a graphical line in your Web page wherever the tag is. Browsers also automatically add a line break before and after the line to make sure it doesn't run into any of your other content. The use of `<hr>` is pretty straightforward -- put it wherever you want the line to be.

The `<hr>` tag takes the following attributes:

- **align:** values include left, right, and center; the default is left
- **size:** specify in pixels how tall you want the line to be; the default is one pixel
- **width:** specify how wide you want the line to be, in pixels or

as a percentage of the page width; the default is 100% of the width of the page.

In the following code, the first horizontal rule is a standard line with no modifications. The second has a size (height) of five pixels and a width of 50% and is aligned at the center of the page:

```
<hr>  
<hr align="center" size="5" width="50%">
```

Figure 3-3 shows how a browser interprets both of these tags.



Figure 3-3: Attributes can change the way a horizontal rule appears in a Web browser window.

Moving on Page 4 of 4

As you learn about the different HTML tags and how to use them, keep in mind that the HTML coverage in the rest of the course isn't comprehensive. More advanced concepts such as tables, frames, and forms are beyond the scope of the class. For now, you want to concentrate on becoming comfortable with HTML and the edit-review process that is part of Web page building. However, you'll soon discover that if you can work with a few HTML tags, you can work with the rest of them.

While this lesson has been shorter than others its assignment is a bit more involved so I want to be sure you have plenty of time to create it. The two Web pages you've created so far are very simple and gave you a chance to get used to the idea of using both a text editor and a Web browser to create and view an HTML file. In the assignment for this lesson things get serious. In this assignment you build the foundation for the Widget's Web page, a page you will continue to add to and work with in the remaining lessons of the course. You will practice writing HTML and work with the elements and attributes you've learned about in this lesson.

Building the ACME Widgets web page

Each of the next four lessons focuses on a particular set of HTML elements, just as this lesson focused on basic document structure elements. After you learn about a set of elements, you'll have the opportunity to work with those elements as you complete the assignment for each lesson. As you work through the assignments, you will build the ACME Widgets Web Page -- the home page for a purely fictitious widget company. While the company may be imaginary, the elements and techniques you'll use to build its Web page aren't.