

Whatever you can do, or dream you can do, begin it. Boldness has genius, power, and magic in it! —William Hutchinson Murray



This chapter covers

- Learning the basic page structure and elements
- Learning the most common text elements and styles
- Creating links

Many of the modern technologies that we have to learn—whether it's building spreadsheets with Microsoft Excel, enhancing images with Adobe Photoshop, or maintaining a music collection with Apple's iTunes—require us to master complex features bristling with settings and plagued by unintuitive interfaces. So it's with great pleasure that we come across technologies such as HTML and CSS that have no complicated tools, settings, or interfaces to figure out. In fact, they have no interfaces at all. They're mere text—a blissfully simple symphony of letters and numbers and symbols. They're simple, yes, but not unsophisticated. With HTML tags and CSS properties, you can build a web page that reflects who you are, that shows off your creativity, and announces to the world, "Yes, I built this!"



That's why, after the brief introduction in Chapter 1, you get your HTML and CSS education off to a proper start by building your first web page. You learn the underlying structure that's common to all pages, as well as all the standard text elements, and you learn how to add headings and links. If you've got something to say, in this chapter you learn how to say it with HTML and CSS.

Getting Your Web Page off the Ground

This book's goal is to help you create your own web pages and thus lay claim to a little chunk of personal cyberspace real estate: a home page away from home, if you will. Before you can live in this humble abode, however, you have to pour the concrete that serves as the foundation for the rest of your digital domicile. In this section, I show you a few HTML basics that constitute the underlying structure of all web pages.

Lesson 2.1: Laying Down the Basic Page Structure

Covers: Page-structure elements

Conline: wdpg.io.com/2-1-0

All your web page projects, from the simplest page to the most sophisticated business site, begin with the same basic structure, which I outline in Listing 2.1.

MASTER

Here, I've used four spaces to indent the tags when they fall inside other tags. This indentation isn't strictly necessary, but it's a good idea; indentation makes your code easier to read and troubleshoot because you can more readily see each pair of opening and closing tags.

► Listing 2.1 A Basic HTML Structure for Starting Any Web Page Project

```
<!DOCTYPE html>
<html lang="en">
                                     #2
                                     #3
    <head>
        <meta charset="utf-8">
                                     #4
                                     #5
        <title></title>
        <style></style>
                                     #6
    </head>
                                     #3
                                     #7
    <hodv>
    </body>
                                     #7
</html>
                                     #2
```

No doubt this code looks a little intimidating to you. I apologize for that complication, but it's a necessary one that's baked into the way web pages are built. Fortunately, I can soften the blow somewhat by offering you two bits of good news:

 This code is by far the most complex you'll see in this chapter, so if you can muddle through the next few paragraphs, the sailing the rest of the way will be much easier.

Getting Your Web Page off the Ground



 When you work in the Web Design Playground, you don't even see the code in Listing 2.1, because the Playground hides it behind the scenes. (You're welcome.)

The structure begins with <!DOCTYPE html> right at the top (#1), and this line tells the web browser which version of HTML you're using. This declaration tells the browser that you're using HTML5, which is the latest version and the version you learn in this book. The next part of the structure consists of the <html> tag and its closing </html> tag (#2), which together define the overall container for the rest of the page's HTML and CSS. The <html> tag includes the lang="en" attribute, which tells the web browser that the primary language of the page is English.

The rest of the structure is divided into two sections: the header and the body.

The header section is defined by the <head> tag and its closing </head> tag (#3). The header section acts like an introduction to the page because web browsers use the header to glean various types of information about the page. One important bit of data is the character set used by the page, which is what the <meta> tag is doing (#4). You also use the head section to define the page title (#5), which I talk about in the next section. Most important for this book, the <style> tag and its closing </style> tag (#6) are where you enter your style definitions.

The body section is defined by the <body> tag and its closing </body> tag (#7), and this section is where you'll enter most of your HTML tags. The text and tags that you type in the body section are what appear in the web browser.

PLAY

You can copy and paste the basic web page structure from the Web Design Playground. Online: wdpg.io/2-1-0

REMEMBER

In the Web Design Playground, I've deliberately hidden elements such as <!DOCTYPE>, <html>, <head>, <style>, and <body> because (at least in the Playground) you don't work with these elements directly. When you type tags in the HTML Editor, the Playground adds them between the <body> and </body> tags behind the scenes. Similarly, when you type styles in the CSS Editor, the Playground adds them between the <style> and </style> tags in the background.

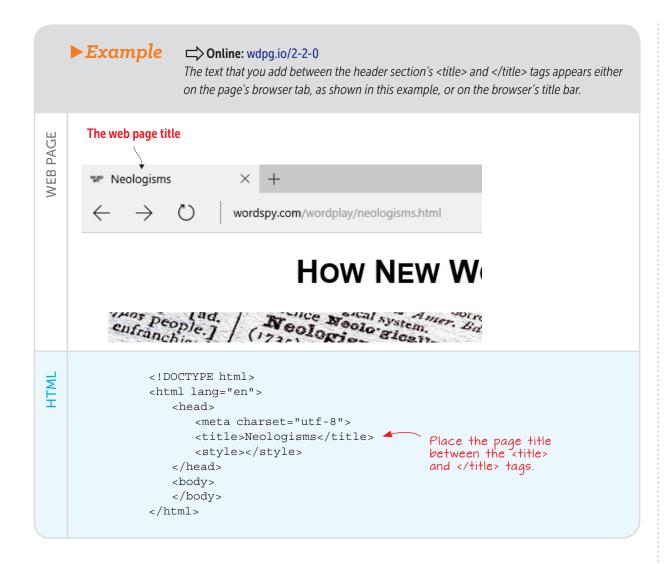
Lesson 2.2: Adding a Title

Covers: The <title> tag

□ Online: wdpg.io/2-2-0

You may be tempted to think of the page title as the text that appears at the top of the page. In HTML, however, the page title is what appears on the web browser's title bar (or the page's tab, if you're using tabbed browsing), as shown in the following example.





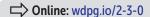
Here are a few things to keep in mind when thinking of a title for your page:

- Make sure that your title reflects what the page is about.
- Make the title unique with respect to your other pages.
- Because a longish title often gets truncated when it's displayed in the narrow confines of a browser tab, put a truly descriptive word or two at the beginning of the title.
- Use a title that makes sense when someone views it out of context. A person who really likes your page may bookmark it, and the browser displays the page title in the bookmarks list, so it's important that the title makes sense when that person looks at the bookmarks later.



Lesson 2.3: Adding Some Text

Covers: Adding web page text



If you tried to load a page containing only the basic structure from Listing 1.1, you wouldn't see anything in the browser. Although the browser uses the tags in the header section internally, including displaying the title in the browser's current tab or title bar, the browser's content area displays only the tags and text that you place between the <body> and </body> tags.

CUltimately, users visit your website for its content. Everything else is just the backdrop. —Jakob Nielsen

In the example below, I added the text Hello HTML World! to the body section.

```
► Example
                      Conline: wdpg.io/2-3-1
                      The text that you add between the <body> and </body> tags appears in the browser
                      window.
PAGE
                     The Web Design Playground
WEB
                      webdesignplayground.io/lessons/2-3-1
      Hello HTML World!
      The text between the <body> and </body>
     tags appears in the browser's content area.
                <!DOCTYPE html>
                <html lang="en">
                   <head>
                       <meta charset="utf-8">
                       <title>The Web Design Playground</title>
                       <style></style>
                   </head>
                    <body>
                       Hello HTML World!
                                                    Place the page text
                    </body>
                                                    between the <body>
                                                    and </body> tags.
                </html>
```



Here are a few things you should know about adding text to a web page:

- If you're working in the Web Design Playground, remember that the HTML Editor assumes that what you type in that box will be inserted between the <body> and </body> tags, so you don't need to enter them.
- You may think that you can line things up and create some interesting effects by stringing together two or more spaces. Alas, no, that effect won't work. Web browsers chew up all those extra spaces and spit them out into the nether regions of cyberspace. Why? Well, the philosophy of the web is that you can use only HTML tags to structure a document and CSS to style it. So a run of multiple spaces—whitespace, as it's called—is ignored.
- Tabs also fall under the rubric of whitespace. You can enter tabs all day long, but the browser ignores them.
- Other things that browsers like to ignore are carriage returns. It may sound reasonable that pressing Enter or Return starts a new paragraph, but that's not so in the HTML world. I talk more about this topic in the next section.
- Earlier, I mentioned that web pages consist only of the characters that you can peck out on your keyboard. Does that mean you're out of luck if you need to use characters that don't appear on the keyboard, such as the copyright symbol or an em dash? Luckily, you're not. HTML has special codes for these kinds of characters, and I talk about them in Chapter 16.

Learning the Most Common Text Elements

Having great content is essential for any web page, and as you've seen so far in this chapter, you can get started on a web page by typing some text. But content is only the beginning. Figure 2.1 shows an example of a text-only web page.

How New Words Are Created Where do new words come from? Sometimes we're lucky enough to know the answer. For example, the word scofflaw originated as a contest winner and Frankenfood came from a letter to the editor of a newspaper. But for every word with a definite origin, there are hundreds, nay thousands whose beginnings are unknown and probably unknowable. That's because, according to the linguist Victoria Neufeldt (writing in her book A Civil But Untrammelled Tongue), most word invention goes on as a matter of course: Neology, far from being a separable linguistic phenomenon that manifests itself periodically or sporadically in response to social stimuli, in fact rises out of ordinary linguistic competence, what might be called the linguistic collective unconscious of the speech community. This "ordinary linguistic competence" manifests as various mechanisms that people use to forge new words.

Figure 2.1 A web page with nothing but text

Learning the Most Common Text Elements



Content precedes design. Design in the absence of content is not design, it's decoration. —Jeffrey Zeldman

What you're seeing in Figure 2.1 is a page in which the text isn't adorned with any HTML elements. Yes, you can read the page, but would you really want to? I didn't think so. The page as it stands is fundamentally unappealing because it's a bunch of undifferentiated text, which makes it both difficult to read and dull to look at. By contrast, check out the revised version of the page shown in Figure 2.2.

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Neology, far from being a separable linguistic phenomenon that manifests itself periodically or sporadically in response to social stimuli, in fact rises out of ordinary linguistic competence, what might be called the linguistic collective unconscious of the speech community.

This "ordinary linguistic competence" manifests as various mechanisms that people use to forge new words.

► Figure 2.2 The web page from Figure 2.1 with some basic HTML text elements added

Ah, that's better! Now the page is easy to read and reasonably nice to look at. The difference is that in this version, I used some basic HTML text elements to redisplay the text in a form that's readable and understandable. You'll learn how I did that as you read this chapter. In the next section, you learn how to use the HTML required to mark text as important.

Lesson 2.4: Marking Important Text

Covers: The strong element

Conline: wdpg.io/2-4-0

In your web page, you may have a word, phrase, or sentence that you want to be sure that the reader sees because it's important. This text may be a vital instruction, a crucial condition, or a similarly significant passage that needs to stand out from the regular text because you don't want the reader to miss it. In HTML, you mark text as important by using the strong element:

important text goes here

All browsers render the text between the and tags in a bold font. The following example shows some web page text with an important passage displayed in bold and the HTML markup used with the text.

MASTER

All web browsers define a default style for every text element, such as bold for text marked up with the strong element. You don't have to stick with the browser styling, however, because in all cases you can augment or override the defaults by using your own styles. You get into this topic big-time in Chapter 4.



►Example

Conline: wdpg.io/2-4-1

This example uses the tag to mark an important passage of the text as bold.

PAGE WEB I That's because, according to the linguist Victoria Neufeldt (writing in her book A Civil But Untrammelled Tongue), most word invention goes on as a matter of course

Text marked with the tag

That's because, according to the linguist Victoria Neufeldt (writing in her book A Civil But Untrammelled Tongue), most word invention goes on as a matter of course

Text marked as important with the 'tag

Lesson 2.5: Formatting Keywords

Covers: The b element

PLAY

To learn more about the strong element, try the exercises on the Web Design Playground. Online: wdpg.io/2-4-2

USE IT

Other candidates for web page keywords include the name of a person (such as the infamous "boldface names" that appear in *celebrity gossip columns)* and the first few words or the opening sentence of an article.

PLAY

How would you mark up an article so that its lede sentence appears in bold?

☐ Online: wdpg.io/2-5-2

Conline: wdpq.io/2-5-0

In some cases, you want to draw attention to a word or phrase not because it's important per se, but because the text in question plays a role that makes it different from regular text. That text could be a product name, a company name, or an interface element such as the text associated with a check box or command button. Again, the text you're working with isn't crucial—it's different in some way—so you want it to look different from the regular page text.

Each of these items indicates a keyword (or keyphrase) that has meaning beyond the regular page text, and in HTML5, this type of semantic item is marked up with the b element:

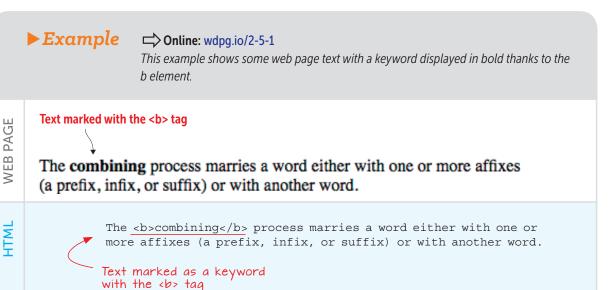
keyword

Web browsers render the text between the and tags in a bold font. At this point, I imagine you scratching your head and wondering what the difference is between the strong element and the b element, because both render as bold text. That's a fair point, and I'll admit that the difference is a subtle one. I should say that it's a semantic one because HTML5 uses these two separate elements to differentiate between important text and keywords. In the future, I hope, screen readers and similar assistive technologies for disabled readers will use this semantic difference to alert the visitor in some way that this text is important and that text is a keyword.

Learning the Most Common Text Elements



The following example shows some web page text with a keyword displayed in bold and the HTML markup used with the text.



Lesson 2.6: Emphasizing Text

Covers: The em element

□ Online: wdpg.io/2-6-0

It's often important to add emphasis to certain words or phrases in a page. This emphasis tells the reader to read or say this text with added stress. Consider the following sentence:

Verdana is a sans-serif typeface.

Now read the same sentence with emphasis (expressed in italics) added to the word sans:

Verdana is a sans-serif typeface.

The meaning of the sentence and how you read the sentence change with the addition of the emphasis (in this case, to stress the fact that Verdana isn't a serif typeface).

In HTML5, this type of semantic item is marked up with the em (for emphasis) element:

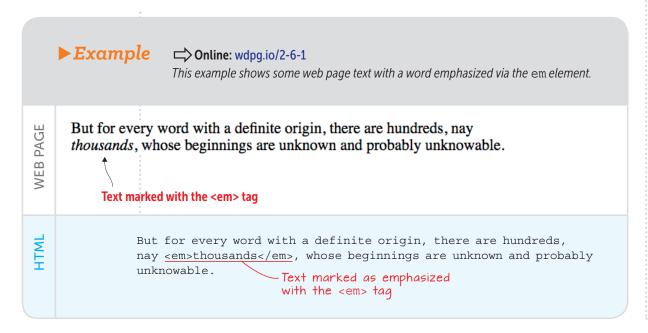
text

FAQ

What's the difference between the strong element and the em element? You use strong when the text in question is inherently crucial for the reader; you use em when the text in question requires an enhanced stress to get a point across.



Web browsers render the text between the and tags in italics. The following example shows a web page with emphasized text displayed in italics, as well as the HTML markup that creates the effect.



Lesson 2.7: Formatting Alternative Text

Covers: The i element

PLAY

You can nest text-level elements within other text-level elements for extra effect. You can mark up a sentence as important by using the strong element, and within that sentence, you can mark up a word with emphasis by using the em element.

Online: wdpg.io/2-6-3

USE IT

Other examples of alternative text include publication names, technical terms, foreign words and phrases, and a person's thoughts.

Conline: wdpg.io/2-7-0

It's common in prose to need markup for a word or phrase to indicate that it has a voice, mood, or role that's different from that of the regular text. Common examples of alternative text are book and movie titles. In HTML5, this type of semantic text is marked up with the i (for italics) element:

<i>text</i>

Web browsers render such text in italics. The i element may seem to be precisely the same as the em element, but there's a significant semantic difference: em adds stress to enhance the emphatic nature of the affected text, whereas i tells the reader that the text is to be interpreted in an alternative way to the regular text. Again, this subtle difference is potentially useful in terms of accessibility; a screen reader would (at least in theory) emphasize em text and let the user know about alternative text marked up with the i element.

Learning the Most Common Text Elements



The following example shows a web page with alternative text displayed in italics, as well as the HTML markup that does the job.

► Example

Conline: wdpg.io/2-7-1

This example shows some web page text with a book title formatted as alternative text using the i element.

PAGE WEB That's because, according to the linguist Victoria Neufeldt (writing in her book A Civil But Untrammelled Tongue), most word invention goes on as a matter of course:

Text marked with the <i> tag

That's because, according to the linguist Victoria Neufeldt (writing in her book <i>A Civil But Untrammelled Tongue</i>), most word invention goes on as a matter of course:

Text marked as alternative with the <i> tag

Lesson 2.8: Quoting Text

Covers: The q and blockquote elements

□ Online: wdpg.io/2-8-0

Many web pages include quotes from other works, which could be web pages, people, books, magazines, or any written source. To ensure that your readers don't think that the quoted material is your own (which could lead to charges of plagiarism), you should mark up the text as a quotation. How you do this depends on the length of the quotation.

A short quotation should appear inline with your regular page text. You mark up this text as a quotation by using the q element:

<q cite="url">quotation</q>

Most web browsers display text marked up with the q element the same way as the regular page text but surrounded by double quotation marks. If your quotation comes from another web page, you can include the optional cite attribute and set its value to the URL of the web page.

A longer quotation should appear on its own for readability. You mark up a longer quotation by using the blockquote element:

<blookquote> Long quotation </blockquote>

PLAY

To get familiar with the i element, try the exercises on the Web Design Playground.

□ Online: wdpg.io/2-7-2



PLAY

To get familiar with the q and blockquote elements, try the exercises on the Web Design Playground.

Online: wdpq.io/2-8-2

The web browser displays text marked up with the blockquote element in a separate paragraph that's indented slightly from the left and right margins of the containing element.

The following example shows some web page text that includes a short quotation inline with the regular text and a longer quotation separated from the regular text, as well as the HTML markup.

► Example

Conline: wdpg.io/2-8-1

This example shows some web page text with both a short quotation inline with the regular text and a longer quotation separated from the regular text.

WEB PAGE

That's because, according to the linguist Victoria Neufeldt (writing in her book A Civil But Untrammelled Tongue), most word invention goes on as a matter of course:

Longer, separated quotation marked with the <blockquote> tag Neology, far from being a separable linguistic phenomenon that manifests itself periodically or sporadically in response to social stimuli, in fact rises out of ordinary linguistic competence, what might be called the linguistic collective unconscious of the speech community.

This "ordinary linguistic competence" manifests as various mechanisms that people use to forge new words:

Shorter, inline quotation marked with the <q> tag

T T T That's because, according to the linguist Victoria Neufeldt (writing in her book <i>A Civil But Untrammelled Tongue</i>), most word invention goes on as a matter of course:

<blookquote>

Neology, far from being a separable linguistic phenomenon that manifests itself periodically or sporadically in response to social stimuli, in fact rises out of ordinary linguistic competence, what might be called the linguistic collective unconscious of the speech community.

</blockquote>

This <q>ordinary linguistic competence</q> manifests as various mechanisms that people use to forge new words:

Text marked as a longer quotation with the
blockquote> tag

Text marked as a short quotation with the <q> tag



Lesson 2.9: Working with Headings

Covers: The h1 through h6 elements

Conline: wdpg.io/2-9-0

A heading is a word or phrase that appears immediately before a section of text and is used to name or briefly describe the contents of that text. Almost all web pages have a main heading at or near the top of the page that serves as the title of the content. (Don't confuse this heading with the text between the <title> and </title> tags in the page's <head> section. The main heading appears in the page itself, whereas the text within the title element appears only on the browser tab.)

Besides the title heading, many web page contents are divided into several sections, each of which has its own heading. These sections may be further divided into subsections with, again, each subsection having a heading, and so on. Taken together, the title, section headings, and subsection headings form an outline that neatly summarizes the structure and hierarchy of the web page.

Well-written, thoughtful headings interspersed in the text act as an informal outline or table of contents for a page. —Steve Krug

In HTML, you mark up your page's heading text by using the various heading elements, which run from h1 for the highest level of your page hierarchy (usually, the page's main title) to h2 for the section headings, h3 for the subsection headings, and all the way down to h6 for the lowest-level headings. The web browser displays each heading in its own block, formats the text as bold, and (as you see in the example that follows) adjusts the text size depending on the element used: h1 is the largest; h6 is the smallest.





Although HTML5 offers other ways to create semantic page divisions (see Chapter 11), using heading elements is an easy, common way to tell the browser and the reader how your web page text is organized, as shown in the following example, which includes the heading from the web page you saw earlier.





Lesson 2.10: Crafting Links

Covers: The a element

Conline: wdpq.io/2-10-0

I mentioned in Chapter 1 that one of the defining characteristics of HTML (in fact, the H in HTML) is hypertext: links to pages on your own site or to sites anywhere on the web. In fact, it's a rare page that doesn't include at least a few links, so you need to know how to craft hypertext by using HTML.

The HTML tags that you use to create a link are <a> and its corresponding closing tag. The a element is a little different from most of the other elements you've seen in this chapter, because you don't use it by itself. Instead, you insert the address—often called the URL (short for Uniform Resource Locator)—of your link into it. Figure 2.3 shows how this element works:

The href

attribute

The text

link text

The link

address

the user clicks

The closing tag

The <a> tag takes the href attribute, which stands for hypertext reference. Set this attribute equal to the URL of the web page you want to use for the link, enclosed in double (or single) quotation marks. Most link addresses are one of the following:

Figure 2.3 The syntax to use for • Local—A link to another page on your website. To keep things the <a> tag simple, I'm going to assume that all your website's page files reside in the same directory. (For

the slightly more complex case of having page files in multiple directories, see Chapter 16.) In that case, the <a> tag's href attribute value is the name of the page file you're linking to. Here's an example:

-
- Remote—A link to a page on another website. In that case, the <a> tag's href attribute value is the full URL of the page on the other site. Here's an example:
 -

Next, you replace link text with the descriptive link text that you want the user to click, and then finish everything with the closing tag. By default, most web browsers display the link in blue underlined text, as shown in the following example.

PLAY

You're given a document with a title, main sections (Section 1, Section 2, and so on), subsections (Section 1.1, Section 1.2, and so on), and sub-subsections (Section 1.1a, Section 1.1b, and so on). Work up a heading scheme for this wdpg.io/2-9-3

BEWARE

Using uppercase versus lowercase letters can be crucial in entering a URL. On most (but not all) websites, if you enter even a single letter of a directory or filename in the wrong case, you likely won't get where you want to go (that is, you'll get a 404 Not Found error).

FAQ

Does the a in the <a> tag stand for anything? The a is short for anchor, which comes from the fact that you can create special links called anchors that send your readers to other parts of the same page instead of sending them to a different page. You learn how this feature works in Chapter 16.





Summary

- In the basic HTML page structure, the header is defined by the <head> and </head> tags, and it includes the page title (between the <title> and </title> tags) and the page CSS (between the <style> and </style> tags).
- In the basic page structure, you type your HTML tags and text between the <body> and </body> tags.
- Use for important text and for keywords.
- Use to emphasize text and <i> to format alternative text.
- You can create a strong visual hierarchy in your page by taking advantage of the heading tags: <h1> through <h6>.
- You set up a link by surrounding text with the <a> and tags. In the <a> tag, use the href attribute to specify the name of a local file or the URL of a remote file.