

THE LANGUAGE OF WEB: HTML

HTML (Hyper Text Markup Language)

- HTML was developed to allow common formatting of text documents for exchange of scientific/research information.
- HTML is simply a way of marking up the content of a page to show **what** the content is—a header, a paragraph, a list, a link, etc. HTML is used to markup the **structure** of the document.

} THE "WHAT"

CSS

- **Cascading Style Sheets (CSS)** is a separate markup language.
- CSS shows **how** the HTML content should be **displayed**—whether the header should be displayed green and large or red and small, whether the links are displayed pink or highlighted or underlined, whether the paragraphs are displayed in the top left or the bottom right, etc.

} THE "HOW"

The separation of content and appearance into HTML and CSS is referred to as **Standards-Based Design**.

The World Wide Web Consortium (W3C) is the governing body that controls and sets the standards/rules of HTML and CSS.

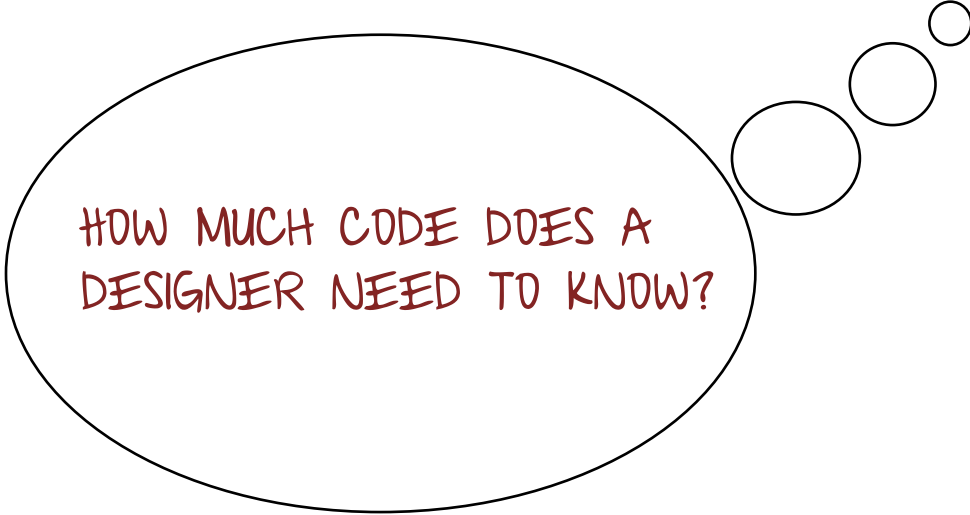
HTML + CSS = STANDARDS-BASED
DESIGN



structure/
content



appearance/
presentation



It Depends...

Graphic Designer at a big wealthy ad agency

In-House Graphic Designer

OR

Designer at a small agency or Non-Profit

OR

Freelance Web Designer

Might not code at all, but still needs to know how code affects design and what the developers will need

Codes the most. (Especially in a bad economy.) A freelancer usually needs to have the most coding skills of all.

EDITOR'S MARKUP

Indent for paragraph	The injured were taken to MeritCare Hospital,
Begin new paragraph	where they were treated. According to Sheriff
Eliminate paragraph	Larry Costello, none were seriously hurt.
Transpose (letters, words)	The driver of the southbound vehicle the spokesperson MeritCare said
Use figures (or words)	about seventeen workers attended 7 sessions
Spell out (or abbrev)	the delegate from N.D. came to Moorhead, Minn.
Uppercase	majored in english literature at Msum
Lowercase	Bachelor's Degree in Mass Communications
Remove space	extra effort will be required
Insert space	according to sources close to the president
Retain original	will be completed in early January
Delete	the very exciting climax of the film
Insert word	the exciting climax of the winning film

HYPER TEXT MARKUP LANGUAGE (HTML)

A series of labels defining structure of the content

HTML

Element = Opening Tag + Content + Closing Tag

Tags dissected...

Okay, you've seen a bit of markup, so let's zoom in and take a look at how tags really work...



You usually put tags around some piece of **content**. Here we're using tags to tell the browser that our content, "Starbuzz Coffee Beverages", is a top level heading (that is, heading level one).

Here's the **opening tag** that begins the heading.

This is the **closing tag** that ends the heading; in this case the `</h1>` tag is ending an `<h1>` tag. You know it's a closing tag because it comes after the content, and it's got a "/" before the "h1". All closing tags have a "/" in them.

Tags consist of the tag name surrounded by angle brackets; that is, the `<` and `>` characters.

The whole shebang is called an **element**. In this case we can call it the `<h1>` element. An element consists of the enclosing tags and the content in between.

We call an opening tag and its closing tag **matching tags**.

To tell the browser about the structure of your page, use pairs of tags around your content.

TWO MAIN TAGS:

- An HTML document is divided into two main tags—the head and the body.
- The head is invisible in the browser.
- The body contains all the content.

First, surround your HTML with `<html>` & `</html>` tags. This tells the browser the content of the file is HTML.

Next add `<head>` and `</head>` tags. The head contains information about your Web page, like its title. For now, think about it this way: the head allows you to tell the browser things about the Web page.

Go ahead and put a title inside the head. The title usually appears at the top of the browser window.

```
<html>
  <head>
    <title>Starbuzz Coffee</title>
  </head>
  <body>
    <h1>Starbuzz Coffee Beverages</h1>
    <h2>House Blend, $1.49</h2>
    <p>A smooth, mild blend of coffees from Mexico,
      Bolivia and Guatemala.</p>
    <h2>Mocha Cafe Latte, $2.35</h2>
    <p>Espresso, steamed milk and chocolate syrup.</p>
    <h2>Cappuccino, $1.89</h2>
    <p>A mixture of espresso, steamed milk and foam.</p>
    <h2>Chai Tea, $1.85</h2>
    <p>A spicy drink made with black tea, spices,
      milk and honey.</p>
  </body>
</html>
```

The head consists of the `<head>` & `</head>` tags and everything in between.

The body consists of the `<body>` & `</body>` tags and everything in between.

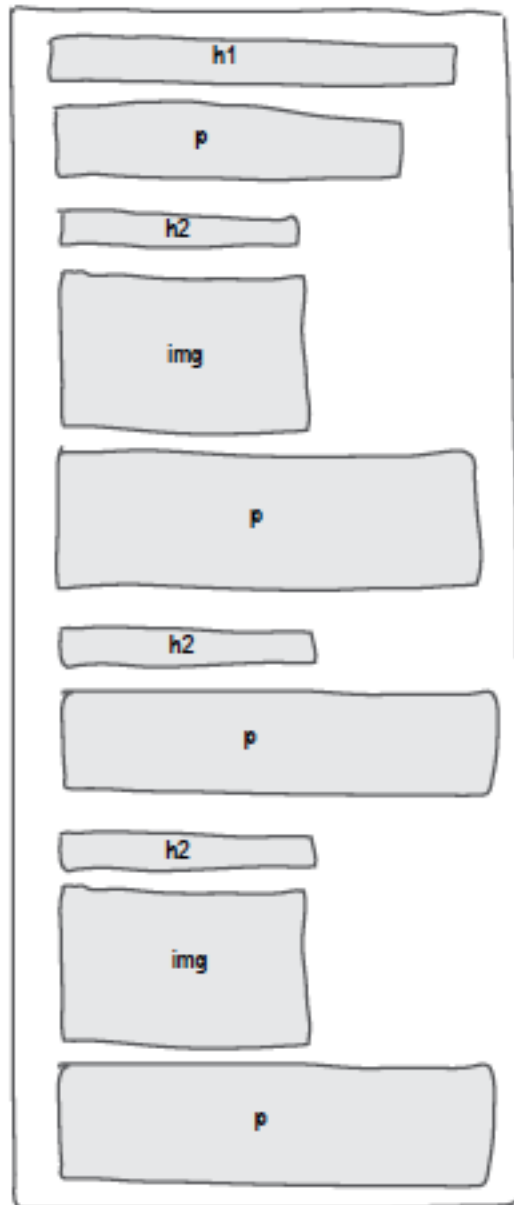
Keep your head and body separate when writing HTML.

The body contains all the content and structure of your Web page – the parts of the Web page that you see in your browser.



Think of HTML Elements as Building Blocks

Notice that they are displayed from top to bottom, in the order in which you put them in the code.



Common Tags:

```
<h1>My Main Heading</h1>
```

```
<h2>The Secondary Heading</h2>
```

```
<h3>The Tertiary Heading</h3>
```

```
<p>This is the paragraph.</p>
```

```
<span>a little section</span>
```

```
<strong>Important</strong>
```

```
<em>This one</em>
```

```
<blockquote>"A pull-out quote."</blockquote>
```

```
<ul>
```

```
  <li>Apples</li>
```

```
  <li>Bananas</li>
```

```
  <li>Oranges</li>
```

```
</ul>
```

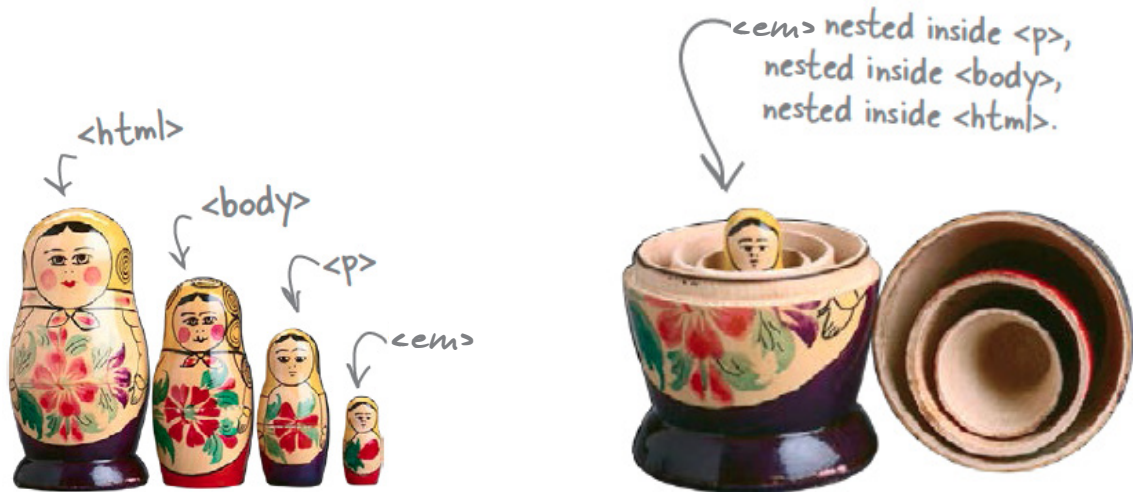
An Exception: Self-closing tags

```
<hr>
```

```
<br>
```

```
<img>
```

Nesting:



`<p>`Paragraph with an ``emphasized`` word.`</p>`

`<h1>`The ``Special`` Title`</h1>`

CSS

- CSS rules select HTML code or attributes to affect and are written using a different syntax.
- One CSS file will affect the whole site (several HTML pages).
- Each rule is made up of the selector and the declaration.
- The declaration contains a series of properties and values separated by a colon.



← CSS Rule
(the whole thing)