

GDES 308

WHAT IS CSS?

HTML was not created with complex design in mind, creating the need for hacks and table-based design as the web increased in popularity. Cascading Style Sheets (CSS) were created to give designers much more control over things such as typography, positioning, and colors, without having to resort to illogical use of HTML to create the desired effect.

CSS can take bland, properly coded HTML and add very rich and complicated visuals.

HOW CSS WORKS:

A Cascading Style Sheet is a separate file, much like an HTML file. In this .css file you describe different styles, and how you want various HTML elements to look. When you attach the CSS file to an HTML file, the styles change the way the web page looks in a browser.

INHERITANCE:

Whenever a tag is inside another tag, the inner-most tag is called a *child* and the containing tag is called a *parent*. In the following example, the `` is a child of `<body>` but a parent of ``.

```
<body>
```

```
<ul>  
<li>one</li>  
<li>two</li>  
</ul>
```

```
</body>
```

CSS uses inheritance between these elements to make styling a little bit easier. Many styles applied to `<body>` will also affect anything contained within `<body>` through inheritance. Not all styles are inherited, but many are.

SELECTORS:

TAGS:

The simplest way of styling HTML using CSS is by calling tags. Any tag, within and including `<body>`, can be directly styled using CSS. To do this, we simply describe the tag we want to affect, and then apply styling to it. For instance, if we want to make all `<h1>` text blue, we would create a CSS style as follows:

```
h1 {color: blue}
```

If we also wanted to make `<h1>` text a specific size, we could change the style to:

```
h1 {color:blue; font-size: 10px}
```

GDES 308

CONTEXTUAL SELECTORS:

You can also specify HTML tags to style based on the context in which they appear. For instance, if I wanted to style all `` tags within `<h1>` tags, I could use the following style description:

```
h1 em {color: green}
```

This reads as “All `` tags within `<h1>` tags are colored green”.

CLASS AND ID SELECTORS:

Sometimes you will want to style only one or more HTML elements without styling all of them the same way. For instance, you might want to make one paragraph appear a certain way while giving the rest of them the same style. In these cases, you can make a class or id style.

CLASS SELECTORS:

You can apply a class style to as many elements as you want to. Unlike tag selectors, you must choose what you want to apply a style to by modifying your HTML.

There are two ways you can apply a class to HTML elements. First, you can give a class attribute to a tag:

```
<h1 class="pageheader">Welcome</h1>
```

or

```
<p class="opening">Blah Blah Blah</p>
```

You can also make only a small section of text a class by using a `` tag. `` tags don't have any style of their own, and are used in a way very similar to link tags:

```
<p>This is the first paragraph of my <span class="label">Brand New Site!</span></p>
```

Class styles always start with a period followed by the name of the class:

```
.header  
.contactinfo
```

ID SELECTORS:

Unlike a classes, an id can only be assigned to one unique item per HTML document. Otherwise, they work in almost the same way. You can have as many paragraphs with the class “caption” as you want, but only one paragraph can have the id “intro”. IDs can not be applied to a ``, but they are applied to HTML tags in the same way as classes:

```
<h1 id="header">Welcome to my page</h1>
```

It makes the most sense to use id styles in instances where you want something on a page to have its own, one-of-a-kind style.

GDES 308

id styles start with #:

```
#header  
#intro
```

DIVS

There may be times when you would like to apply a style to a large section of an HTML document at once, but not the whole thing. The `<div>` tag is a generic element that doesn't have any styling of its own, but allows you to group sections of HTML into unique segments that you can then apply a class or id to and style. `<div>` tags work just like any tag. You place the opening tag `<div>` before the HTML you want to enclose, and the closing tag `</div>` after the HTML you want to enclose.

```
<div id="header">  
  
<h1>Welcome to My Page</h1>  
  
<p>Blah Blah Blah</p>  
  
<a href="mailto:person@place.org">Contact Me</a>  
  
</div>
```

TYPE-RELATED CSS PROPERTIES

font-family

You can use the `font-family` property to assign any font to a style, but fonts appear correctly in a user's browser unless they have the font installed on their computer. Therefore, it is almost always advised to stick with the font families that appear in your programs selection menu. The five possible generic font families are as follows:

- Serif (e.g. Times)
- Sans-serif (e.g. Helvetica or Arial)
- Monospaced (e.g. Courier)
- Cursive (e.g. Zapf-Chancery)
- Fantasy (e.g. Western, Impact, or another display typeface)

font-style

Allows you to style type as either normal (default), italic, or oblique.

font-weight

Lets you specify varying levels of boldness. Many levels of boldness will not work in various browsers or with certain fonts, so it is advisable to stick with normal and bold.

font-size

Lets you specify the size of type. There many different ways of specifying type size. Pixels work the most consistently across browsers, but have come under attack lately because they don't allow users to resize text as easily as other methods. I still recommend that beginning web designers start with specifying type in pixels.

color

Specifies the color of styled type.

GDES 308

line-height

Sets the distance between baselines of text, very similar to leading in the print world.

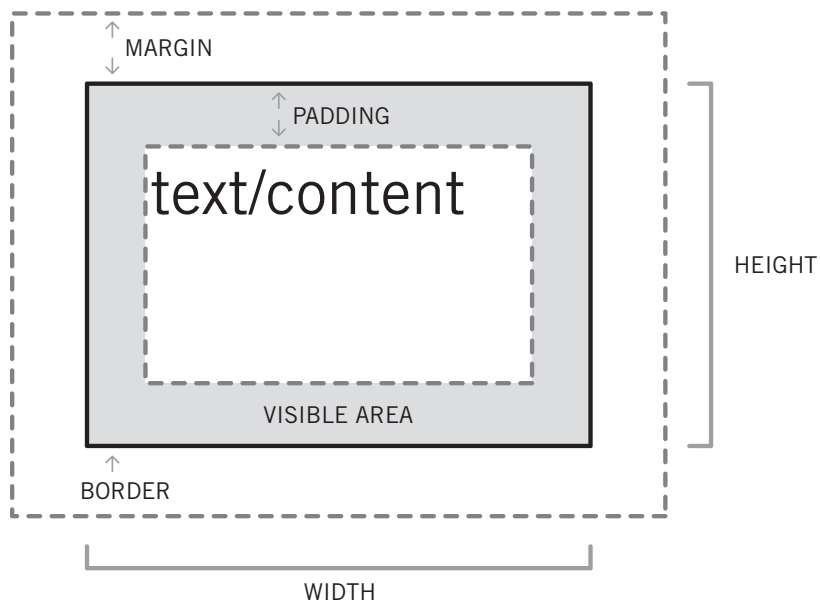
text-indent

Specifies an amount of indentation (from the left margin) for the first line of type in an element.

THE CSS BOX MODEL

All HTML elements exist in an invisible box with several layers. The way this box system works with CSS is called the “Box Model”.

The CSS styling properties that use the box model are width, height, padding, border and margin. By adjusting these properties you can style elements very specifically.



When specifying margin, padding or borders, do so clockwise beginning with the top.

