

CHAPTER 17

Cascading Style Sheets (CSS)

Cascading Style Sheets (CSS) allow you to specify the visual style and presentation your web application. CSS allows you to separate the style from the structure. This means you are looking through less code when working with your page. The separation of style from structure and content also increases maintainability. Cascading Style Sheets are a set of programmable rules to define how your web pages display content. The styles described by CSS include the colors, fonts, layout, and other presentation aspects of a document, including variations in display for different devices and screen sizes. A single CSS file can describe a common style applicable to many documents.

Typically, an element in an HTML file has a “cascade” of CSS style rules that can be applied to it. The styles cascade based on the location of the definition. If you define a style in multiple locations, then the last definition is applied. You can place your CSS between the `<head> . . . </head>` tags of a document, in an external style sheet (on your server or on another server), or as a style attribute of an element on your page.

An external style sheet is generally recommended. To link an external style sheet to your document, add a link to the style sheet between the `<head> . . . </head>` tags of the document. Keeping the style definitions separate from your HTML content minimizes duplication and makes your site easier to maintain.

When you create a style sheet, you create a rule for each element by name, class, or ID. These values are set as attributes of the element. The browser will apply the CSS rule when the page is rendered. Each rule has two parts: a selector and a group of one or more declarations surrounded by braces. Each declaration consists of a property name and value pair. There can be several declarations in one rule. See Listing 17-1, which shows an example CSS rule to be applied to all span tags for a document. This rule can be placed in the head section of your web page between `<style>...</style>` tags or in a separate file.

Listing 17-1. Example CSS Rule

```
span {  
font-weight: bold;  
color: yellow;  
background-color: black;  
}
```

If you wish to include your CSS rules in a separate file, just add a link to that file in the head section of your web page. See Listing 17-2.

Listing 17-2. Example Link to a Style Sheet

```
<link href="styles/bullhorn.css" rel="stylesheet">
```

Span and Div Tags

Span and div are container tags that define parts of your document. Use span and div to apply styles to a section of a JSP or HTML page. Your page is more organized when you divide it into parts such as header, body, and footer.

The `<div>` tag is used to divide your HTML page into sections and therefore encapsulates various elements. The `` tag is used to group inline elements in a document. The `<div>` and `` tags provide no visual change on their own. These tags provide a way to control the style of part of your document when each tag includes a style, class, or ID attribute. The difference between an ID and a class is that an ID can be used to identify one element while a class can be used to identify multiple elements. When you wish to apply a style to multiple elements, specify the style as a class, since only one element can have an ID attribute with a particular value, but many elements can share the same value in their class attribute. The `` and `<div>` tags have no *required* attributes. The most common attributes used are:

- **style** specifies a style that applies to all content and elements up to the corresponding end tag.
- **class** specifies a CSS class that applies to all content and elements up to the end tag. The value of the class attribute is a CSS class specified in the style sheet file. In the style sheet, the class name is preceded by a period.
- **id** identifies the tag so you can select it with jQuery or JavaScript. The id attribute for any element must be unique. In the style sheet, the ID name is preceded by a # hash character.

Listing 17-3. Example HTML Code to Which Styles from Your Style Sheet Will Be Applied

```
<span class="highlight">  
<p>This text will be highlighted</p>  
</span>  
<p name="intro">This text will be red</p>
```

Listing 17-4. Example style sheet that can be placed either between `<style>` tags in the head section of your JSP page or in a separate file with the link placed within the head section

```
.highlight {  
    background-color: yellow;  
}  
#intro {  
    color: red;  
}
```