

Cascading Style Sheets (CSS)

Styles define how to display HTML elements (e.g. font, color and size of text). These style definitions can be written either within an HTML page or externally, in a separate file (ending in .css). External style sheets can save you a lot of work: imagine you have just designed two hundred pages for the web site of a client (or maybe for yourself), but at the last minute your client (or you) decide that the font is a little too small or the font face should be Verdana instead of Arial? If you had the style definitions within each HTML document, or even used the old-style “font” tag instead of using styles, you would have to change every single document. But if you had decided to write the site with CSS from the beginning, all you would have to do is replace one single line of code in a master file, and your entire site would be rendered immediately in your new style.

To start off our understanding of cascading style sheets, we are going to show how to define styles **within** your HTML page. As an example, we will specify that all text in paragraphs should be printed in Verdana, or Arial if Verdana is not installed. Furthermore, all headings of type “h1” (the largest type) shall be displayed in red and italics, and three times larger than usual text.

Here's the CSS code:

```
<head>
...
<style type="text/css">
  /* Comments on styles: Should be placed within the
  <head> Tag */
  p { font-family: Verdana, Arial; }
  h1 { color:red; font-size:300%; font-style:italic; }
</style>
...
</head>
```

As you can deduce from the above example, the general syntax of css statements is the following:

```
selector { property: value; }
```

where “selector” denotes the HTML element (tag) whose properties you want to define, and “property” is a number of possible properties that you can set for this element.

Here is another example. HTML hyperlinks are usually underlined. You can remove this effect with the following css specification:

```
<style type="text/css">
  a {text-decoration:none;}
</style>
```

To set the background color of your document to some color (here a slight yellow) and print all text in blue, do the following:

```
<style type="text/css">
  body {background-color:#FFFFCC;}
  * {color:blue;}
</style>
```

Now we will show you how to store a style sheet externally, so that you can re-use it for various documents. The external CSS file should end in .css and just contain style specifications in the usual format ("selector {property: value;}". For example, it could look similar to the following:

```
/* Here you can place comments about the file, e.g.: */
/* Style Sheet for Henschel Schauspiel Theaterverlag Berlin */
/* Version 1.0 (14.08.2004) */
/* Jennifer Merkel (jenny@hpmerkel.de) */
/* */
/* Now, the real stuff begins: */

td, body, a {
  font-family: Arial, Helvetica, Verdana;
  font-size: 10pt;
  text-decoration: none;
}

input, textarea, select {
  font-family: Arial, Helvetica, Verdana;
  font-size: 10pt;
  border: 1px solid #cccccc;
  color: #000000;
  background-color: #ffffff;
}

li {
  list-style-type: square;
}

...
Filename: styles.css
```

To use this style sheet in a HTML document, the header has to be modified to link the style sheet to the document:

```
<head>  
...  
<link rel=stylesheet type="text/css" href="styles.css">  
...  
</head>
```

Simply write this line in the header of each document of your web site, and you are able to change the whole layout by changing only one document (styles.css).