

Cascading Styles Sheets Intro

Cascading Style Sheets (CSS) – is a technology (collection of formatting rules) that allows greater formatting control of HTML documents. Formatting can be placed within the HTML or can be called remotely from an external style sheet.

CSS Rules

All CSS rules have the following three parts:

- **Selectors** – html tag, class or ID
- **Properties** – identify what is defined. Each property is responsible for an aspect of the element's behavior
- **Values** – assigned to a property to define behavior. A value can be expressed as keyword, such as "yes" or "no", a number, a percentage, or a file name (with background image). Property and value refer as a **definition**.

Example: **body {background-color:yellow}**

body – is a selector

{background-color:yellow} – is a definition

background-color – is a property

yellow – is a value

You can use multiple definitions in one rule. In this case, you must separate each definition with a semicolon. Example:

```
h1 {  
color:blue;  
font-style:italic;  
background-color:yellow  
}
```

Using CSS

There are three ways how you can use CSS:

External style sheets are created on a separate page of your web site; you write all of your style rules on that page, then save it as a text-only file with the extension .css, and link it to the pages where it is applied by inserting the following line of code in the **head** section of your HTML document:

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

In the tag, **rel** attribute stands for relationship, defining what kind of document you are linking to your HTML page, and **href** stands for hypertext reference and specifies the file name and location of your style sheet.

The external style sheet is usually applied to all the pages that have the **link** tag in the head section.

Adding CSS to a web page or to the entire Web site – is the main use for CSS. External style sheets allow you to control all the formatting on a page and changing the styles from one place. External styles provide consistent formatting to all the pages. CSS technology separates presentation from content, which leads to many other benefits of CSS model, such as reduced page download time and greater site accessibility.

Embedded (Internal) style sheets – are placed in the **head** section of your page using the following syntax:

```
<style>
  body { background-color:yellow }
</style>
```

The CSS rules are placed between **<style>** opening and **</style>** closing tags, and control only the page on which they are placed.

Embedded styles have precedence over external (linked) styles which means that in a case of the rules conflict embedded styles will override the external styles.

NOTE: in XHTML you must specify the **type** attribute as **text/css**. For example, for external stylesheet:

```
<link rel="stylesheet" type="text/css" href="file_name.css"/>
or for embedded styles:
<style type="text/css">
```

In-line Styles

In-line styles are added to HTML tag or content within the body of the document to affect a single element or part of the content:

Example:

```
<p style="text-align:center">this text is center-aligned</p>
```

Or

```
<span style="color:red">The text displayed in red color</span>
```

Inline CSS has the highest priority out of external, internal, and inline CSS. This means that you can override styles that are defined in external or embedded (internal) by using inline CSS.

However, inline CSS detracts from the true purpose of CSS, so use it sparingly.

Inheritance

The concept of inheritance is essential to Cascading Style Sheets. In fact, the word "cascading" refers to inheritance. The style you define will flow, or cascade, throughout the document, unless another style defined inside of a page specifically overrides it.

Cascading order

Within the same web page the style sheets may be declared as a combination of linked, embedded or even inline.

What if some of the definitions are conflicting? Which one comes out on top?

The more specific rule is the highest in its cascade priority. The inline styles will take precedence over embedded (internal) styles. Embedded styles take precedence over external (linked) styles.

CSS comments

You can add comments to your style sheet code, by placing any entry in between the `/*` and `*/` characters

Example:

```
body {  
    /* background-color:tan; */  
    font-size:18pt  
}
```