

Web Design and Development

ACS-1809

Chapter 4

Cascading Style Sheet

Cascading Style Sheets

- 📄 A *style* defines the appearance of a document
- 📄 A *style sheet* - a file that describes the layout and appearance of a document
 - 🖱 uses a common language and syntax

Cascading Style Sheets

- 🖥️ CSS - style sheet language
 - 🔗 maintained by World Wide Web Consortium (W3C)
 - 🔗 today's standard
 - 🔗 is a whole new way of formatting web pages
 - 🔗 provides several tools not available with standard HTML
 - 🔗 used as a design tool
 - 🔗 makes website more flexible
 - 🔗 easier to maintain and modify
 - 🔗 more aesthetically interesting
 - 🔗 consistent look
 - 🔗 ***separates the document's style from its content***

Style Sheets

- ▣ The purpose of *cascading style sheets* (abbreviated CSS) is to separate the *style* of a web page from its *content*
- ▣ The current HTML “rules” dictate that we only use HTML to identify the content of a page, and then use a style sheet to specify the presentation of that content
- ▣ This not only makes web pages **more accessible** and **usable** to all users, but also to search engines and other types of software

Define the Style

- ❏ To define a basic formatting style, you first must identify which tag you want to affect. This tag is then called a *selector* in CSS
 - ✓ Level 2 headlines (<h2>) → Selector: h2
 - ✓ The selector is essentially the tag without the brackets

Define the Style – Cont'

- ❏ Once you have a selector, you can define its properties
- ❏ Similar to how attributes work in HTML, CSS *properties* alter specific attributes of a selector
 - ☞ Font-family, font-style, font-size, color : properties
- ❏ When you specify values for properties, you are creating a *declaration* for that selector
- ❏ The declaration and selector together are then referred to as a set of *rules*, or *ruleset*

Example

h2 ← Selector

font-family ← Property

Calibri ← Value

{font-family : Calibri;} ← Declaration

All together:

```
h2 {font-family : Calibri;}
```

```
h2 {font-family : Calibri;
```

```
    font-size : 14pt;
```

```
    color : blue;
```

```
    font-style : italic; }
```

Value

- ❏ Values are not placed between quotation marks
- ❏ Most values can be specified in terms of color, keyword, length, percentage, or URL
- ❏ Table 3-1 in the textbook shows the types of CSS values

Structure

- 🖥️ CSS offers 3 types of style sheets:
 - 🖱️ **Inline**: Styles are embedded right within the HTML elements they affect
 - 🖱️ **Internal**: Styles are placed within the header information of the web page, and then affect all corresponding tags *on this single page it resides in*
 - 🖱️ **External**: Styles are coded in a separate document, referenced from within the header of the actual web page

Inline

- ❏ Inline styles are created right within the HTML elements of the page
- ❏ Inline declarations are enclosed in straight quotes using the *style* attribute of tag.

```
<p style="font-family:verdana;">
```


- ❏ You can separate multiple rules by semicolons, but the entire declaration should be included within the quotes

```
<p style ="font-family:verdana; color:red;">
```

Internal

Internal or embedded style sheets

 Instead of adding the style attribute to a tag, use the ***style tag*** to contain all the information for the page

 *style tag*: in the head element of the page, in between the opening and closing *head* tags

Example

```
<head>  
  <title>CSS Example</title>  
  <style type="text/css">  
    h2 {font-family: verdana; color: blue;}  
    h3 {font-family: Calibri; color: red;}  
  </style>  
</head>
```

```
h2  
{font-family: verdana;  
color: blue;}
```

The entire ruleset can be on a single line or broken up into multiple lines.

```
h3 {font-family: Calibri;  
color: blue;}
```

 **The selector is placed before the declaration.**

 Declaration in curly brackets.

```
h2 {font: verdana 12pt;}
```

External

- 🖥️ *An external* style sheet essentially holds the same information as an internal one.
 - 🖱️ With exception: the information is contained in its own text file(.css) and then referenced from within the web page
 - 🖱️ External style sheets don't use *style* tag or attribute
 - 🖱️ They simply list the rulesets as instructions for browser

Example

```
<head>  
  <title>Using an external style sheet</title>  
  <link rel="stylesheet" href="styles.css" >  
</head>
```

In file "styles.css" :

```
h1 { font: georgia 14pt bold;  
      color: #0000FF}  
h2 { font: georgia 12pt bold;  
      color: #0066FF}  
h3 { font: georgia 11pt bold;  
      color: #6666FF}
```




↑
This is where the
name of your style
sheet is placed.

Understand the Cascade

Cascade


 In some sense can be understood as “combined”

 When multiple style declarations can be applied to one block of content in an html file

-  The web browser essentially combines all the style declarations into one single declaration
-  This can be analyzed using a very complex scale point system
-  But for now to simplify the analysis we would just say: Inline > Internal > External

!Important

 It is used to declare a a style more important

 An !important declaration ultimately takes precedence over a normal style sheet declaration.

 The keyword must be prefaced by an exclamation mark in order to be properly interpreted by the browser

```
P {color: blue !important;}
```