

HTML and Style Sheets

A style sheet is used to define overall formatting information - formatting that can apply to each web page in web site that you are constructing

Advantages:

- saves time -
 imagine setting font for a heading that occurs 20 times
- easy to change -
 imagine going back to change font size and color for 20 paragraphs
- uniformity through out document or web site -
 imagine keeping track of formatting for each paragraph
- styles offer formatting options not covered by tags
- styles can be used with Java script for dynamic effects

Formatting instructions of a style sheet may occur as

- an *external style sheet* = a separate document linked to a page by instructions in the `<head> .....</head>` portion of the page
- an *internal style sheet* = global formatting instructions for particular page also in the `<head> ..... </head>` portion of the page

External style sheets may be applied to each page of a web site.

Internal style sheets apply only to the page in which they occur.

Conventions:

Contemporary web pages pay homage to evolving [standards](#) coming from *world wide web consortium* , [w3c](#)

The not fully realized standard called XHTML -

- an extension of HTML
- more fussy less forgiving
- fully implements ideas of *cascading style sheets*
- gives designer great flexibility
- more stable

There are 2 transitional sets of standards - one more html - the other more xhtml

Browser determines which from an initial comment

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/html4.01/loose.dtd">
```

OR

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

In example code we will use the xhtml comment

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"
```

In following example of an internal style,
the style declaration section will be

```
<STYLE>  
h1 { font-family:"arial"; text-align: left; background: green;letter-spacing: .2em; font-size:16 pt; }  
  
p {font-size:12 pt; color:red;font-family: "arial"}  
</STYLE>
```

Observe:

- A given style type such as the heading *h1* style or paragraph *p* appear with formatting information in brackets { }
- All formatting declarations are inclosed in

```
<STYLE> ..... </STYLE>
```

Internal style sheet

Example code

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<HTML>
<HEAD>
<TITLE>
Creating an internal style sheet
</TITLE>
<STYLE>
h1 { font-family:"arial"; text-align: left; background: green;letter-spacing: .2em; font-size:16 pt; }

p {font-size:12 pt; color:red;font-family: "arial"}
</STYLE>
</HEAD>

<BODY>
<h1 <font face= garamond"> This is the heading formatted in the style sheet - but specification
of font face seems fussy but works with this <i> local tag </i></h1>
<p> This is some text: Pretium, rhoncus tempor placerat, enim integer ad vestibulum volutpat.
Nisl rhoncus turpis est, vel elit, congue wisi enim nunc ultricies sit,
magna tincidunt. </p>
<h1> Here we put in another heading of the same style above</h1>
<p> Here we revert to the global paragraph style
<img src = "snow_small.jpg" width =350 height = 467 align = center border =1>
Here I show how to enlarge a picture and it in the center.
</p>
</BODY>
</HTML>
```

Using this as guide make your own page and experiment with the formatting conventions shown

Local Style Declarations

Local in-line - style definitions are possible

Following example defines local formatting within the paragraph tag.

It uses new formatting options: *text-transform*, *border*, and *font-weight*.

Experiment by changing the parameters

Example code

```
<html>
<head>
<title> Applying local styles </title>
</head>
```

```
<body>
<h1> Below is the result of declaring a local style for the paragraph tag.</h1>
<p style="background: yellow; color:red; text-transform: capitalize; border: double medium green;
font-weight: 900">
```

This is an example of local style formatting within the paragraph tag. Such formatting overrides any internal or external style sheet formatting. Notice the various formatting elements: text-transform, border, and font-weight. In particular note that the first letter of every word is capitalized. Experiment by altering the parameters

```
</body>
</html>
```

To use an External Style Sheet

- Create a text document with the content we had between `<style> ..... </style>`
- Save the file with a name of your choosing but extension for example *styles.css*
- For every html page for which the styles should apply type in the Head portion

```
<LINK REL=stylesheet TYPE= "text/css" href = "styles.css" >
```

- You can mix: local in-line style formulations, an internal style sheet, and an external style sheet.
- Local overrides internal which overrides external

Lets try this

External Style Sheet

Example code

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="test.css" />
</head>
<body>
<h1>
Heading 1 format with external style sheet - the font style seems to be fixed </h1>

<p> This is some text in Latin: Pretium, rhoncus tempor placerat, enim integer ad vestibulum volutpat.
Nisl rhoncus turpis est, vel elit, congue wisi enim nunc ultricies sit,
magna tincidunt. </p>
<h1> <font face="arial" > Here we put in another heading of the same style above but forcing arial with the
      local font tag</font> </h1>
<p> Here we revert to the global paragraph style

<h3> This is the h3 header in times roman </h3>

</body>
</html>
```

Classes and Styles

Html formatting commands such as : <p>, <h1>, , <a> are called *elements*

You may wish various instances of a tag to have certain characteristics.

Example

- Among various paragraphs you may wish some to have some unique common formatting such as a distinctive font face
- These paragraphs may be identified as a *class*.
- Specific formatting for the class is done in an internal or external style sheet.

Example:

- given paragraphs that you wish to display in a distinctive fashion - special font, indentation, and background - identify this class of paragraphs with the name *display*
- indicate display style paragraphs with

```
<p class=display> .....text .....
```

- formatting definitions for display paragraphs occurs in the style sheet in the usual way with the name of the class being *p.display*
- for an internal style sheet

```
<style>
.
.
p.display {background:yellow; font-family:"arial"}
.
.
<\style>
```

Code for a paragraph display class

Example code

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<HTML><HEAD>
<TITLE>
Creating an internal style sheet
</TITLE>
<STYLE>
body{ background-color: #eef;}
h1 { font-family:"arial"; text-align: left; background: #bfb2d3;letter-spacing: .1em; font-size:16 pt; }
p.display {background: silver; font-family = "garamond"}
p {font-size:12 pt; color:red;font-family: "arial"}
a:link{ font-weight:bold; color blue}
a:visited{font-weight:normal; color yellow}
a:hover{font-weight "bold; color red}
</STYLE>
</HEAD>
<BODY>
<h1 <font face= garamond"> This is the heading formatted in the style sheet but specification
of font face seems fussy but works with the <i>local font tag </i></h1>
<p class=display> In the style section it is also possible to set formatting for how a link should
look. A link can have three different colors: one color if it has not been visited, another
if it has been visited, and a third if you are hovering waiting to make up your mind. This does not
seem to be supported here.
<h1> Here we put in another heading in the H1 style above</h1>
<p> Here we revert to the global paragraph style.</p>
<br>And here is a link to the ITEC 1000 home page in the default style <br>
<a href = "http://www.yorku.ca/itec1000/index.html"> ITEC home page </a>
<img src = "snow_small.jpg" width =350 height = 467 align = center border =3 >
<p class=display>
Here we are back in the display paragraph style
</BODY>
</HTML>
```

Classes using an external style

The results are the same - but the example different

The style sheet

```
body{ background-color: #eef;}
p.display{background: silver; font-family = "times roman"}
p { color: red; font-family: "arial"}
h3{ color: #6ec6f1; font-family: "times roman"}
h1 { color:maroon; font-family:"arial"; text-align: left; background: #bfb2d3;letter-spacing: .05em; font-size:20 pt;}
```

Example code

```
<html><head>
<link rel="stylesheet" type="text/css" href="styles.css" />
</head>
<body>
<h1>
```

Heading 1 format with external style sheet - the font style seems to be fixed </h1>

<p class=display>This is some text in the display style taken from the external style sheet.
This text is not in times roman as specified but in arial which is the font of the global paragraph style

<h1> Here we put in another heading of the same style above but forcing arial with the local font tag </h1>

<p> Here we revert to the global paragraph style

<h3> This is the h3 header </h3>

<p class=display> Once more in the display paragraph style

</body>

</html>