



INTERNET & WEB APPLICATION DEVELOPMENT SWE 444

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Module 2 (VI): CSS [Part 3]

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Objectives/Outline

• Objectives

- Learn to control the background effects for different elements
- Learn to control list and table styles
- Learn about other selectors

• Outline

- Background
- List Styles
- Table Styles
- Class Selector
- Id Selector
- Pseudo Selector

CSS Background

- The CSS background properties
 - define the background effects of an element
- CSS background properties
 - background-color
 - background-image
 - background-repeat
 - background-attachment
 - background-position
 - background

The background-color property

- Sets the background color of an element
- Can be applied not just to body, but also to almost any block level HTML element on web page
- Attribute values
 - Color rgb, e.g. background-color: rgb(200,30, 150)
 - Color hex, e.g. background-color: #0BFFC0
 - Color name, e.g. background-color: silver
 - background-color: transparent

Example

```
<html>
<head>

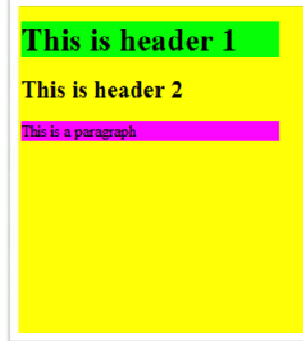
<style type="text/css">
body {background-color: yellow}
h1 {background-color: #00ff00}
h2 {background-color: transparent}
p {background-color: rgb(250,0,255)}
</style>

</head>

<body>

<h1>This is header 1</h1>
<h2>This is header 2</h2>
<p>This is a paragraph</p>

</body>
</html>
```



The background-image property

- Sets an image as the background
- Can be applied to almost any element on a page
- If applied to an element it fills the space for that element only
- Syntax:
 - background-image: url(image)
- Example:

```
b {background-image: url(../images/Scribble.gif)}
```

 - All bold text will show this background image

Example

```
<html>
<head>

<style type="text/css">
body
{
background-image:
url('bgdesert.jpg')
}
</style>

</head>

<body>
</body>

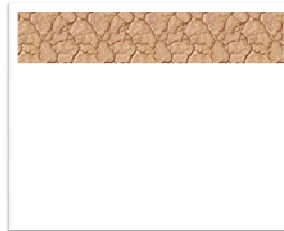
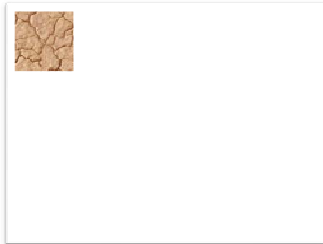
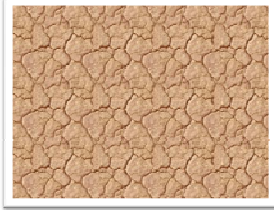
</html>
```



The background-repeat property

- Controls how a background image is to be tiled (repeated)
- Attribute values:
 - repeat /* fill entire background */
 - repeat-x /* tile horizontally for width of element */
 - repeat-y /* tile vertically for width of element */
 - no-repeat /* show only once */

Examples



The background-position property

- Sets the starting position of a background image

Value	Description
top left top center top right center left center center center right bottom left bottom center bottom right	If you only specify one keyword, the second value will be "center". Default value: 0% 0%
x% y%	horizontal and vertical positions; top left corner is 0% 0%; right bottom corner is 100% 100%; specifying one value makes the other value to be 50%
xpos ypos	Absolute horizontal and vertical positions; top left corner is 0 0; Units can be pixels (0px 0px) or any other CSS units. specifying one value makes the other one to be 50%. You can mix % and positions.

Example

```
<html>
<head>
<style type="text/css">
body
{
background-image: url('smiley.gif');
background-repeat: no-repeat;
background-attachment: fixed;
background-position: 50px 100px;
}
</style>
</head>

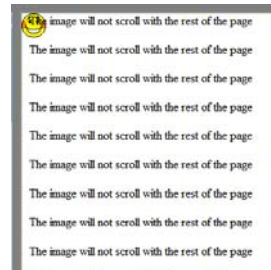
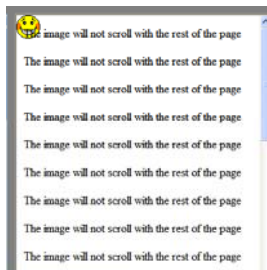
<body>
<p><b>Note:</b> For this to work in Mozilla,
the background-attachment property must be
set to "fixed".</p>
</body>
</html>
```

Note: For this to work in Mozilla, the background-attachment property must be set to "fixed".



The background-attachment property

- Sets whether a background image is fixed or scrolls with the rest of the page.
- Attribute values:
 - scroll: image scrolls as text scrolls
 - fixed: keeps image in place even as text scrolls



The background property

- Works like font and is used to specify a variety of background attributes at once
- Syntax (attribute values are positional):
 - background: background-color background-image background-repeat background-attachment background-position
- Example:
 - `body{background: white url(squiggles.gif) no-repeat fixed center center}`

List Styles

- Expand the possibilities for how the ``, `` and `` tag should be rendered
- Attributes and their values
 - list-style-type: disc|circle|square|decimal|decimal-leading-zero|lower-roman|upper-roman|lower-alpha|upper-alpha
 - Sets the type of the list-item marker
 - list-style-image: url(image)
 - Sets an image as the list-item marker
 - list-style-position: inside|outside
 - Sets where the list-item marker is placed in the list
 - list-style
 - Combines all the attributes for list styles into one attribute
 - list-style: list-style-type list-style-image list-style-position

Example

```
<style type="text/css">
ol.decimal {list-style-type: decimal}
ol.Iroman {list-style-type: lower-roman}
</style>
```

```
<ol class="decimal">
<li>Coffee</li>
<li>Tea</li>
<li>Coca Cola</li>
</ol>
```

```
<ol class="Iroman">
<li>Coffee</li>
<li>Tea</li>
<li>Coca Cola</li>
</ol>
```

1. Coffee
2. Tea
3. Coca Cola

- i. Coffee
- ii. Tea
- iii. Coca Cola

Table Styles

- The CSS table properties allow you to set the layout of a table

Property	Description	Values	IE	F	N	W3C
border-collapse	Sets whether the table borders are collapsed into a single border or detached as in standard HTML	collapse separate	5	1	7	2
border-spacing	Sets the distance that separates cell borders (only for the "separated borders" model)	length length	5M	1	6	2
caption-side	Sets the position of the table caption	top bottom left right	5M	1	6	2
empty-cells	Sets whether or not to show empty cells in a table (only for the "separated borders" model)	show hide	5M	1	6	2
table-layout	Sets the algorithm used to display the table cells, rows, and columns	auto fixed	5	1	6	2

Example

```
<style type="text/css">
table.coll
{
border-collapse: collapse
}
table.sep
{
border-collapse: separate
}
</style>
```

```
<table class="coll" border="1">
```

Peter	Griffin
Lois	Griffin

```
<table class="sep" border="1">
```

Peter	Griffin
Lois	Griffin

The class Selector

- With the class selector you can define different styles for the same type of HTML element

- Example:

- you may want to have two types of paragraphs in your document: right-aligned paragraphs, and center-aligned paragraphs

- Declare the styles

```
<style>
  p.right {text-align: right}
  p.center {text-align: center}
</style>
```

Some browsers don't allow a class name to start with a number

- Apply the styles using the class attribute

```
<p class="right"> right-aligned </p>
<p class="center"> center-aligned</p>
```

The class Selector (cont.)

➤ You can apply more than one class to a given element

◦ Example

```
<p class="center bold"> This is a centered and  
bold paragraph </p>
```

➤ You can omit the tag name in the selector to define a class that can be used by multiple HTML elements

◦ Example

```
/* declare the class in the style sheet */  
.center {text-align: center}  
  
/* then apply the style */  
<h1 class="center"> centered heading </h1>  
<p class="center"> centered paragraph</p>
```

Pseudo-classes

➤ Some tags like the <a> tag allow style sheet to be applied conditionally

➤ Examples:

- Visited Links (style is applied if the link has been visited)
- Hover Links (transform text while mouse is over a link)

➤ In .css or in <style> tag:

- a:visited {style definitions}
 - styles to apply to visited links
- a:link {style definitions}
 - styles to apply to unvisited links
- a:active {style definitions}
 - styles to apply when link is being clicked
- a:hover {style definitions}
 - styles to apply when mouse hovering on link

Example

```
<style>
  a:link {color: #FF0000} /* unvisited link */
  a:visited {color: #00FF00} /* visited link */
  a:hover {color: #FF00FF} /* mouse over link */
  a:active {color: #0000FF} /* selected link */
</style>
```

- Styles are applied automatically as links are displayed or manipulated

The id Selector

- Allows style declaration for HTML elements that has a matched id attribute
- The id selector starts with # followed by the id value
- Example

```
<style>
#sale {color: red; font-weight: 800}
</style>
```

```
<h1 id="sale">Sale Items</h1>
```

- Similar to the class selector except that
 - Can only be used once in a specification
 - Can not be applied to more than one tag
- To avoid incompatibility with some browsers, do not start id value with a number

Q & A



References

- Some useful links with examples and other resources:
 - *Internet and World Wide Web How to Program*, 4/e, H. M. Deitel, P. J. Deitel, and A. B. Goldberg, Pearson Education Inc., 2008. Chapter 5.
 - *Web Development and Design Foundations with XHTML*, 4/e, Pearson Education Inc. 2009. Chapters 3-6
 - W3C
 - Cascading Style Sheets: <http://www.w3.org/Style/CSS/>
 - CSS2 Specification: <http://www.w3.org/TR/CSS2/>
 - CSS resources <http://www.w3.org/Style/CSS/learning>
 - W3 Schools CSS Tutorial: <http://www.w3schools.com/css/default.asp>
 - CSS Editors
 - Best CSS stand alone editor is Topstyle Pro – <http://www.bradsoft.com>
 - CSS Validators
 - <http://jigsaw.w3.org/css-validator/>
 - Index DOT CSS (The Advanced CSS Reference)
 - <http://www.blooberry.com/indexdot/css/index.html>
 - Coder Tools
 - http://www.codertools.com/css_help_guide/css_block_elements.aspx