

# SGI – Session 2: CSS & CSS3

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# CSS

- Introduction
  - Syntax
  - Inserting a CSS
  - Styling
  - Box Model
- 
- CSS3: <http://slides.html5rocks.com>

# CSS - Introduction

- **CSS** stands for **C**ascading **S**tyle **S**heets
- Styles define **how to display** HTML elements
- Styles were added to HTML 4.0 **to solve a problem**
  - > In HTML 4.0, all formatting could be removed from the HTML document, and stored in a separate CSS file
- **External Style Sheets** can save a lot of work
- External Style Sheets are stored in **CSS files**

# CSS Syntax

- A CSS rule has two main parts: a selector, and one or more declarations:

Selector

Declaration

Declaration

Ex:    h1                    {color: blue;                font-size: 12px;}

- The selector is normally the HTML element you want to style.
- Each declaration consists of a property (style attribute) and a value.
- `/*This is a comment*/`

# CSS Id

- The id selector is used to specify a style for a single, unique element.
- The id selector uses the id attribute of the HTML element, and is defined with a "#".
- The style rule below will be applied to the element with id="para1":
- **Example**

```
#para1
{
text-align:center;
color:red;
}
```

# CSS class

- The class selector is used to specify a style for a group of elements. It is most often used on several elements.
- This allows you to set a particular style for many HTML elements with the same class.
- The class selector uses the HTML class attribute, and is defined with a “.”
- **Example:** `.center {text-align:center;}`

# CSS class

- You can also specify that only specific HTML elements should be affected by a class.
- In the example below, all p elements with class="center" will be center-aligned:
- Example: `p.center {text-align:center;}`

# How to insert a CSS

- External style sheet
- Internal style sheet
- Inline style



# External style sheet

- When the style is applied to many pages.
- Each page must link to the style sheet using the `<link>` tag. The `<link>` tag goes inside the head section:
- Should not contain any html tags.

```
/* mystyle.css */  
hr {color:sienna;}  
p {margin-left:20px;}  
body {background-image:url("images/back40.gif");}
```

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

# Internal Style Sheet

- Used when a single document has a unique style.
- You define internal styles in the head section of an HTML page, by using the <style> tag, like this:

```
<head>  
<style type="text/css">  
hr {color:sienna;}  
p {margin-left:20px;}  
body {background-image:url("images/back40.gif");}  
</style>  
</head>
```

# Inline Style Sheet

- An inline style loses many of the advantages of style sheets by mixing content with presentation. Use this method sparingly!
- To use inline styles you use the style attribute in the relevant tag. The style attribute can contain any CSS property.
- Example:

```
<p style="color:sienna;margin-left:20px">This is a paragraph.</p>
```

# CSS Background

- CSS properties used for background effects:
  - > background-color:
    - HEX value - like "#ff0000"
    - RGB value - like "rgb(255,0,0)"
    - color name - like "red"
  - > background-image
  - > background-repeat
  - > background-position

```
body
{
background-image:url('paper.gif');
background-repeat:repeat-x;
}
```

# CSS text

- Text properties:
  - > Color
  - > Alignment (center, left, right, justify)
  - > Decoration (none, overline, line-through, underline, blink)
  - > Transformation (uppercase, lowercase, capitalize)
  - > Indentation
- Example

# CSS Font

- Families:

Generic family	Font family	Description
Serif	Times New Roman Georgia	Serif fonts have small lines at the ends on some characters.
Sans-serif	Arial Verdana	"Sans" means without - these fonts do not have the lines at the ends of characters.
Monospace	Courier New Lucida Console	All monospace characters have the same width.

- Example: `p{font-family:"Times New Roman", Times, serif;}`

# CSS Font

- Style: (normal, italic, oblique)

- Size

  - > (absolute, relative)

  - > Pixels or em:

```
h1 {font-size:40px;}  
h2 {font-size:30px;}  
p {font-size:14px;}
```

```
h1 {font-size:2.5em;} /* 40px/16=2.5em */  
h2 {font-size:1.875em;} /* 30px/16=1.875em */  
p {font-size:0.875em;} /* 14px/16=0.875em */
```

  - > percentage+em

# CSS links

- The four links states are:
  - > a:link - a normal, unvisited link
  - > a:visited - a link the user has visited
  - > a:hover - a link when the user mouses over it
  - > a:active - a link the moment it is clicked

```
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 */
```

- > Font, color, background, decoration



# CSS lists

- Two types of lists:
  - > unordered lists - the list items are marked with bullets
  - > ordered lists - the list items are marked with numbers or letters
- Images can be used as the list item marker.
- Example:

# CSS Tables

- Borders
- Width and height
- Text Alignment
- Padding (space between border and content)
- Color

# CSS border

- **Margin** - Clears an area around the border. It does not have a background color, it is completely transparent.
- **Border** - goes around the padding and content. The border is affected by the background color of the box.
- **Padding** - clears an area around the content. It is affected by the background color of the box.
- **Content** - where text and images appear.
- Example

# Grouping & nesting selectors

- When having several elements with the same style we can group them (separated by comas):

```
h1,h2,p
{
color:green;
}
```

- Nesting

```
p
{
color:blue;
text-align:center;
}
.marked {background-color:red;}
.marked p {color:white;}
```

# Want to know more...

- <http://www.w3schools.com/css/>
- <http://www.w3schools.com/css3/>
- <http://slides.html5rocks.com/#css3-title>