



CSS

# History

- `<i>`
- `<b>`
- `<u>`
- `<font size=,,...“>`
- All these HTML tags now are deprecated

# What is CSS?

- 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**
- Multiple style definitions will **cascade** into one

# Examples

- CSS Zen Garden
- <http://www.csszengarden.com/>
- <http://www.mezzoblue.com/zengarden/alldesigns/>

# Examples

CSS contents

```
p.right {text-align: right}
```

HTML contents

```
<p class="center">
```

This paragraph will be center-aligned.

```
</p>
```

# CSS inserting

<b>External</b> Style Sheet	<pre>&lt;head&gt;   &lt;link rel="stylesheet" type="text/css" href="mystyle.css" /&gt; &lt;/head&gt;</pre>
<b>Internal</b> Style Sheet	<pre>&lt;head&gt;   &lt;style type="text/css"&gt;     hr {color: sienna}     p {margin-left: 20px}     body {background-image: url("images/back40.gif")}   &lt;/style&gt; &lt;/head&gt;</pre>
<b>Inline</b> Styles	<pre>&lt;p style="color: sienna; margin-left: 20px"&gt; This is a paragraph &lt;/p&gt;</pre>

# Cascading Order

- Browser default
  - Inherited Style
    - External Style Sheet
      - Internal Style Sheet (inside the <head> tag)
        - Inline Style (inside HTML element)

# CSS syntax

- The CSS syntax is made up of three parts:
  - selector
  - property
  - value

**selector {property: value [;...]}**

```
body { color: black; }
```

```
p {  
  text-align: center;  
  color: black;  
  font-family: arial;  
}
```



# Grouping & Class

- Grouping

```
h1,h2,h3,h4,h5,h6 { color: green }
```

- Class selector

```
p.right { text-align: right }  
.center { text-align: center }
```

```
<p class="center">
```

This paragraph will be center-aligned.

```
</p>
```

# Grouping & Class (2)

- Using multiple classes

```
p.right {text-align: right; color: red;}  
p.green1 {color: green;}
```

```
<p class="green1 right">  
  This paragraph will be ...  
</p>
```

# Grouping & Class (2)

- Using multiple classes

```
p.right {text-align: right; color: red;}  
p.green1 {color: green;}
```

```
p.green1 { color:blue; }
```

```
<p class="green1 right">  
  This paragraph will be ...  
</p>
```

# Class essence

- Helps to structure CSS by semantic meaning:
  - Title
  - Contents
  - Menu
  - Header, footer
  - ...
- Reuses same styles if structure has a model
  - Example: title-content block

# ID selector

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

```
#right { text-align: right; }
```

```
<p id="para1">
```

This paragraph will be center-aligned.

```
</p>
```

# Comments

```
/* This is a comment */
```

# Pseudo-Class

- It is possible to use pseudo-classes in CSS

**selector:pseudo-class {property: value}**

```
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 */
```

# Pseudo-Class combined

- pseudo-class with class

**selector: class.pseudo-class {property: value}**

a.red:visited {color: #FF0000}

<a class="red" href="..."> CSS Syntax </a>



# Pseudo-element

- Pseudo-element

```
p:first-letter { color: #FF0000 }
```

```
p:first-line   { color: #00FF00 }
```

# Media types

Media Type	Description
all	<b>all</b> media type devices
aural	<b>speech</b> and <b>sound</b> synthesizers
braille	<b>braille</b> tactile <b>feedback devices</b>
embossed	paged <b>braille printers</b>
handheld	<b>small</b> or <b>handheld devices</b>
print	<b>printers</b>
projection	projected presentations, like <b>slides</b>
screen	computer <b>screens</b>
tty	media using a fixed-pitch character grid, like <b>teletypes</b> and <b>terminals</b>
tv	<b>television</b> -type devices

# Combining

```
div p { text-indent:25px }
```

```
<div>
```

```
<p>
```

This paragraph will be indented.

```
</p>
```

```
<p>
```

This paragraph will be indented

```
</p>
```

```
</div>
```

# CSS Attribute Selectors

```
[onclick]
{
    color: blue;
}
```

```
<p onclick="...">
    This paragraph is blue.
</p>
```

# Problems

- Browsers has different default CSS
- Browsers interpret CSS differently

# Hints

- Always force refresh if style sheet is in .css file
- CSS Debuggers
  - Firebug (Firefox add-in)
  - IE developer toolbar

# Browser support of CSS

- [http://www.w3schools.com/cssref/css3\\_browsersupport.asp](http://www.w3schools.com/cssref/css3_browsersupport.asp)
- Not all browsers supports the same CSS properties

# CSS frameworks

- Why to use them?
- What do they do?



# References

- Lecture slides prepared using tutorials from <http://www.w3schools.com>