

Scripting for Multimedia

LECTURE 5: INTRODUCING CSS3

CSS introduction

- CSS Level 1 --> CSS Level 2 --> CSS Level 3 (in modules)
 - More than 50 modules are published
- Cascading style sheets (CSS) defines how HTML elements are displayed
 - background, background colors, margins, fonts, borders, position, etc
 - A *style sheet* is a set of style rules
 - You can create a style and apply it to many elements based on a selector --> reusability
 - **Cascading** of CSS

Defining and applying a style

- A **style rule**, or style, is composed by:
 - the **selector**
 - the **declaration block**
- Multiple declarations are separated with a semicolon
- A declaration comprises
 - a CSS property
 - a colon
 - a value

Defining and applying a style

- Example

```
body {  
    background-color: white;  
    color: gray;  
}
```

Adding comments within a style sheet

- Add comments within a style sheet using `/*` (start) and `*/` (end) characters

- Example

```
/* This is the style
   for the body element */
body {
  background-color: white; /* The rgb value is #ffffff */
  color: gray; /* This is the font color */
}
```

Creating an inline style

- Inline style

- elements having a global style attribute
- selector is omitted

- Example

```
<body style='background-color: white; color: gray;'>  
</body>
```

- Inline style should be avoided

- It violates reusability
- Advantage: it overrides styles defined elsewhere

Creating an embedded style

- You can use `<style>` element to create an embedded style sheet

- Example

```
<!DOCTYPE html>
<html xmlns='http://www.w3.org/1999/xhtml'>
<head>
  <title></title>
  <style>
    body {
      background-color: white;
      color: gray;
    }
  </style>
</head>
<body></body>
</html>
```

Creating an external style sheet

- Use `<link>` element to reference an external style sheet file

- Example

```
<!DOCTYPE html>
<html xmlns='http://www.w3.org/1999/xhtml' >
<head>
  <title></title>
  <link rel='stylesheet' type='text/css'
href='Content/default.css' />
</head>
<body></body>
</html>
```

```
body {
  background-color: white; /* The rgb value is
#ffffff */
  color: gray; /* This is the font color */
}
```


Creating an external style sheet

- Using media to specify the target device

- <link> element has a **media** attribute

- all
 - braille
 - embossed
 - handheld
 - print
 - screen
 - speech
 - tty
 - tv

- Example

```
<!DOCTYPE html>
<html xmlns='http://www.w3.org/1999/xhtml'>
<head>
  <title></title>
  <link rel='stylesheet' type='text/css' href='Content/screen.css'
media='screen' />
  <link rel='stylesheet' type='text/css' href='Content/print.css'
media='print' />
</head> <body></body> </html>
```

Creating an external style sheet

- Using media to specify the target device

Creating an external style sheet

- Specifying the character encoding of the style sheet using **@charset**

- Example

```
@charset 'UTF-8';  
body {  
    background-color: white;  
    color: gray;  
}
```

Creating an external style sheet

- **<meta>** element in HTML doc will override @charset in CSS file

- Example

```
<html xmlns='http://www.w3.org/1999/xhtml' >
<head>
  <title></title>
  <meta http-equiv='text/html; charset=UTF-8' >
  <link rel='stylesheet' type='text/css'
href='Content/default.css' />
</head>
<body>
</body>
</html>
```

Creating an external style sheet

- Imported style sheets from other style sheets using `@import`
 - `@import` must be at the top of a style sheet before any other content except `@charset`

- Example

```
@charset 'UTF-8';
@import url('/Content/header.css');
@import url('/Content/menu.css');
@import url('/Content/sidebar.css');
@import url('/Content/mainContent.css');
@import url('/Content/footer.css');
body {
    background-color: white;
    color: gray;
}
```

Creating an external style sheet

- Imported style sheets from other style sheets using @import

- You can also specify the media type for each @import

- Example

```
@charset 'UTF-8';
@import url('/Content/header.css'); screen
@import url('/Content/menu.css'); screen
@import url('/Content/sidebar.css'); screen
@import url('/Content/mainContent.css'); /*default is all */
@import url('/Content/footer.css'); print
body {
    background-color: white;
    color: gray;
}
```

Creating an external style sheet

- Using @font-face rule to import fonts

- Example

```
@font-face {  
    font-family: myFont;  
    src: url('Fancy_Light.ttf'),  
         url('Fancy_Light.eot'); /* IE9 */  
}
```

NOTE FONT LICENSING

Fonts are intellectual property, just like software, music, and video. Be sure to have the proper license to use any font with the @font-face rule.