

COMPSCI 111 / 111G

*Mastering Cyberspace:
An introduction to practical computing*

XHTML and CSS

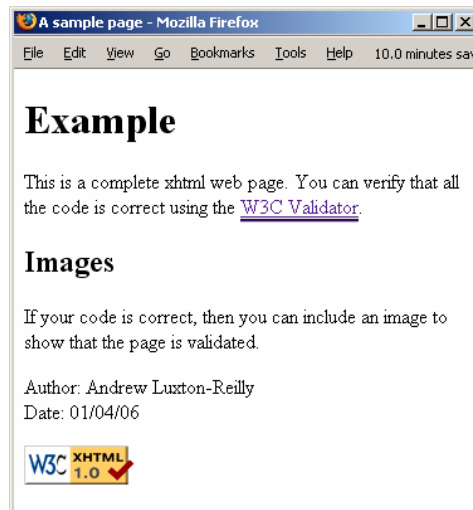
Example

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC
"-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<html>
<head>
<title>A sample page</title>
</head>
<body>
<h1>Example</h1>
<p>This is a complete xhtml web page. You can verify that all the code is
correct using the <a href="http://validator.w3.org">W3C Validator</a>.</p>
<h2>Images</h2>
<p>If your code is correct, then you can include an image to show that the
page is validated.</p>

<p>
Author: Andrew Luxton-Reilly<br></br>
Date: 01/04/06<br></br>
</p>
<p></img></p>
</body>
</html>
```

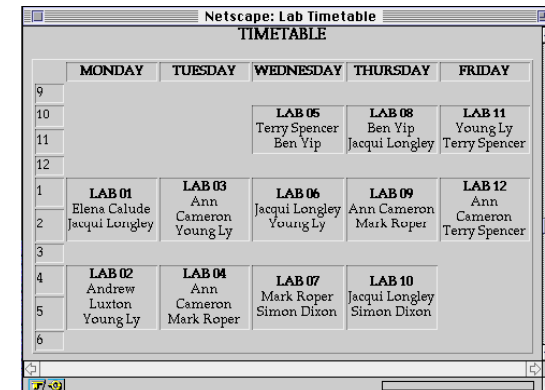
Example page



Tables

<table>

- Used to format tables of information
- By default, there are no borders shown

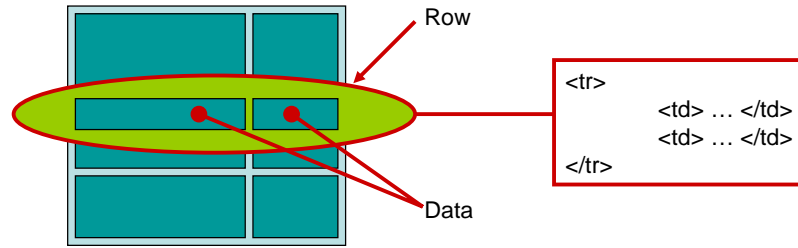


	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9					
10					
11			LAB 05 Terry Spencer Ben Yip	LAB 08 Ben Yip Jacqui Longley	LAB 11 Young Ly Terry Spencer
12					
1	LAB 01 Elena Calude Jacqui Longley	LAB 03 Ann Cameron Young Ly	LAB 06 Jacqui Longley Young Ly	LAB 09 Ann Cameron Mark Roper	LAB 12 Ann Cameron Terry Spencer
2					
3					
4	LAB 02 Andrew Luxton Young Ly	LAB 04 Ann Cameron Mark Roper	LAB 07 Mark Roper Simon Dixon	LAB 10 Jacqui Longley Simon Dixon	
5					
6					

Tags required to format Tables

Tags

- `<table> ... </table>` Surrounds the entire table
- `<tr> ... </tr>` Identifies a row in the table
- `<td> ... </td>` Each element of data in the row



A simple table example

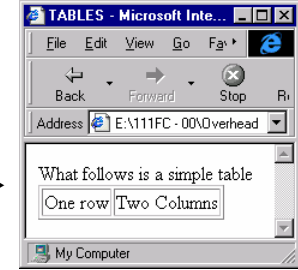
```

<html>
  <head>
    <title>TABLES</title>
  </head>
  <body>
    <p>What follows is a simple table</p>

    <table>
      <tr>
        <td>One row</td><td>Two Columns</td>
      </tr>
    </table>

  </body>
</html>

```



Styles

A style changes the way the HTML code is displayed

- Same page displayed using different styles

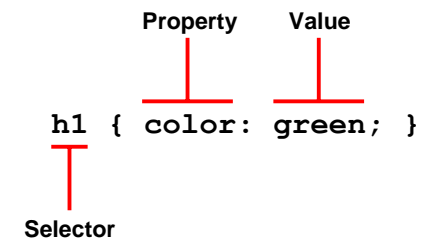


<http://csszengarden.com>

Defining a style

Styles are defined using rules

- Selector – determines what the rule applies to
- Property – the thing that will be changed
- Value – the value that will be used



Grouping rules

Multiple tags that use the same rule

- `h1 { font-weight: bold }`
- `h2 { font-weight: bold }`

Same style defined for multiple selectors

- `h1, h2 { font-weight: bold }`

Grouping rules

Same tag using multiple rules

- `h1 { color: green }`
- `h1 { text-align: center }`

Apply multiple properties to the same selector

- `h1 {`
- `color: green;`
- `text-align: center;`
- `}`

Class selectors

Sometimes want to apply a style to specified tags

- Most paragraphs are normal
- Some paragraphs are quotes

Define a style that can be applied to a group of tags

- Class selector

```
.className { property: value; }
```

In XHTML source code

- Assign the tag to the class
- Use an attribute

```
<tag class="className"> ... </tag>
```

Example – class selector

Style defined as follows:

```
.quote  
{  
    text-align: center;  
    font-style: italic;  
}
```

Xhtml source code uses the style as follows:

```
<p class="quote">  
Let's face it, the average computer user has  
the brain of a Spider Monkey --- Bill Gates  
</p>
```

Id selectors

Sometimes want to apply a style to a single tag

- E.g. Defining a special heading

Define a style that can be applied to a single tag

- Id selector

```
#idName { property: value; }
```

In XHTML source code

- Use an attribute to specify the id used for the tag

```
<tag id="idName"> ... </tag>
```

Example – id selector

Style defined as follows:

```
#footer
{
    text-align: center;
    font-style: italic;
}
```

Xhtml source code uses the style as follows:

```
<p id="footer">
Copyright 2006
</p>
```

Location of the styles

Three possible locations

- External
- Internal
- Inline

External Style Sheet

Styles are defined in a file

- Used when styles apply to more than one web page
- Entire site has a consistent visual theme

```
.quote { text-align: center; }
h1 { color: green; }
```

← Saved in a file called theme.css

Web page must be told where to find the style sheet

- Use the following code

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

Internal Style Sheet

Styles are defined in the head of the page

- Used when styles apply to only the one web page
- Keeps all the visual formatting located in the same place

<style>

- Used in the head of the document to contain styles

```
<head>
<title>Example</title>

<style>
.quote { text-align: center; }

h1 { color: green; }
</style>

</head>
```

Inline styles

Styles are defined in the tag

- Used when style is applied only to that tag
- Can be required to override styles
- Rarely used

```
<p style="text-align: center;">
This paragraph will be centred using
an inline style.
</p>
```

Cascading Style Sheets

CSS 1.0 / 2.0

- Support different properties
- No browser is currently CSS 2.0 compliant
- Internet Explorer is currently the least compliant browser

Order to apply styles

1. Browser Default
2. External Style
3. Internal Style
4. Inline Style



Increasing priority

http://en.wikipedia.org/wiki/Cascading_Style_Sheets

<div> and

Two additional tags used with CSS

- Allow a style to be applied to arbitrary group of elements

<div>

- Block-level tag
- May contain other block-level tags
- Invisible in XHTML, but can have styles applied

- Inline tag
- May contain other inline tags
- Invisible in XHTML, but can have styles applied

Examples

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

<html>
<head>
<title>A sample page</title>
<link rel="stylesheet" href="theme.css" type="text/css"></link>
</head>

<body>
<h1>Example</h1>
<p>This is a complete xhtml web page. You can verify that all the code is
correct using the <a href="http://validator.w3.org">W3C Validator</a>.</p>
<h2>Images</h2>
<p>If your code is correct, then you can include an image to show that the
page is validated.</p>

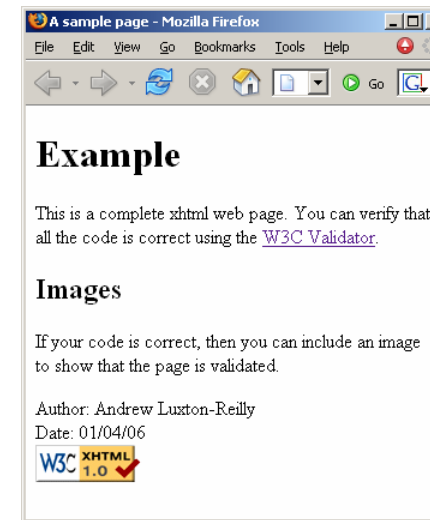
<p class="footer">
<span class="catName">Author:</span> Andrew Luxton-Reilly<br></br>
<span class="catName">Date:</span> 01/04/06<br></br>
</img>
</p>
</body>
</html>
```

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No CSS



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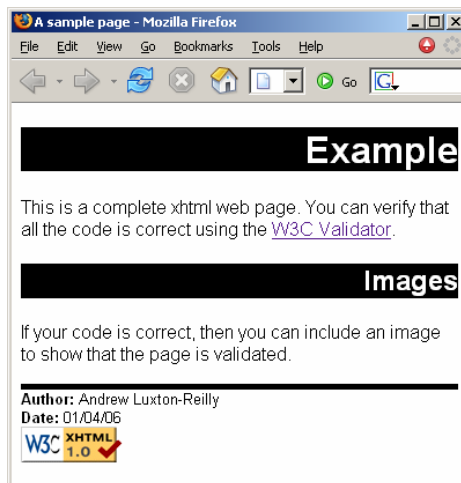
Same page with a style sheet

```
body
{
font-family: sans-serif;
}

h1, h2
{
text-align: right;
background-color: black;
color: white;
}

.footer
{
border-top-width: thick;
border-top-style: solid;
font-size: small;
}

.catName
{
font-weight: bold;
}
```



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Same page, different style sheet

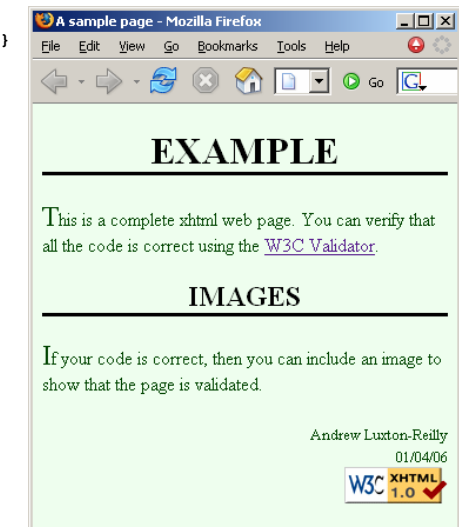
```
body { background-color: #eeffee; }

h1, h2
{
text-align: center;
border-bottom-color: black;
border-bottom-style: solid;
color: black;
text-transform: uppercase;
}

p:first-letter
{
font-size: x-large;
}

.footer
{
text-align: right;
font-size: small;
}

.catName { visibility: hidden; }
```



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