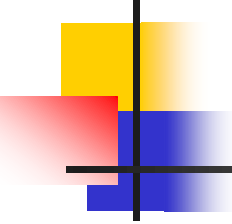


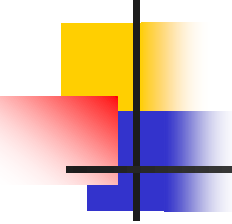


Instructor: Wei Ding



What is XHTML?

- XHTML stands for **EX**tensible **H**yperText **M**arkup **L**anguage
- XHTML is aimed to **replace** HTML
- XHTML is almost **identical** to HTML 4.01
- XHTML is a **stricter and cleaner** version of HTML
- XHTML is HTML defined as an **XML application**
- XHTML is a **Web Standard**: XHTML 1.0 became an official W3C Recommendation January 26, 2000.



Why XHTML?

- XHTML is a **combination** of HTML and XML.
- XHTML consists of all the elements in **HTML 4.01** combined with the syntax of **XML**.
- XHTML results in “**well-formed**” documents, which work in all browsers and are backward browser compatible.
- XHTML pages can be read by all **XML enabled device**.
- XHTML is a language that is useful **now** and in the **future**.

Differences Between XHTML and HTML

- XHTML elements must be **properly nested**

- ~~<i>bad: This text is bold and italic</i>~~
- <i>good: This text is bold and italic</i>

- XHTML documents must be **well-formed**

- All XHTML elements must be nested within the <html> root element. All other elements can have sub (children) elements. Sub elements must be in pairs and correctly nested within their parent element.

<html>

<head> ... </head>

<body> ... </body></html>

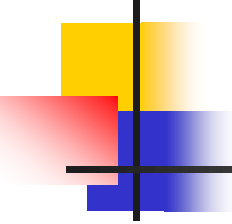
- Tag names must be in **lowercase**

- All XHTML elements must be **closed**

- Empty Elements Must also Be Closed:
, <hr />,

An extra space before /





XHTML Syntax

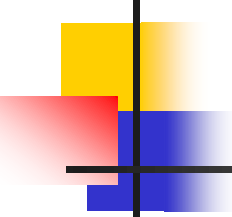
- Writing XHTML demands a clean HTML syntax.
- Attribute names must be in **lower case**
- Attribute values must be **quoted**
- Attribute minimization is **forbidden**:
 - ~~<option selected>~~
 - <option selected="selected">
- The id attribute **replaces** the name attribute
 - HTML 4.01 defines a name attribute for the elements a, applet, frame, iframe, img, and map. In XHTML the name attribute is deprecated. Use id instead.

XHTML Syntax: The Lang Attribute

- The lang attribute applies to almost every XHTML element. It specifies the language of the content within an element.
- If you use the lang attribute in an element, you must add the xml:lang attribute, like this:

```
<div lang="no" xml:lang="no">Heia  
Norge!</div>
```

NORWAY



XHTML Syntax

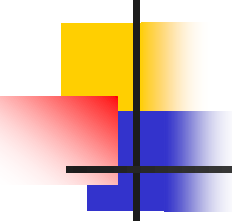
- The XHTML DTD defines **mandatory** elements
- The XHTML standard defines three Document Type Definitions: Strict, Transitional, and Frameset.
 - The most common is the XHTML **Transitional**.
- The **DOCTYPE** declaration should always be the **first** line in an XHTML document. The basic document structure is:

```
<!DOCTYPE ...>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head><title>... </title></head>
```

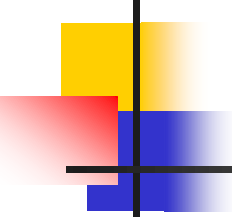
```
<body> ... </body></html>
```



XHTML 1.0 Strict

- Use this when you want really clean markup, free of presentational clutter. Use this together with Cascading Style Sheets.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Conforming XHTML 1.0 Strict Template</title>
</head>
<body>
</body>
</html>
```



XHTML 1.0 Transitional

- Use this when you need to take advantage of HTML's presentational features and when you want to support browsers that don't understand Cascading Style Sheets.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Conforming XHTML 1.0 Transitional Template</title>
</head>
<body>
</body>
</html>
```



XHTML 1.0 Frameset

- Use this when you want to use HTML Frames to partition the browser window into two or more frames.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Conforming XHTML 1.0 Frameset Template with accessibility</title>
</head>
<frameset>
<noframes>
<body>
<!-- place alternative information for accessibility purposes here -->
</body>
</noframes>
</frameset>
</html>
```



XHTML Validation

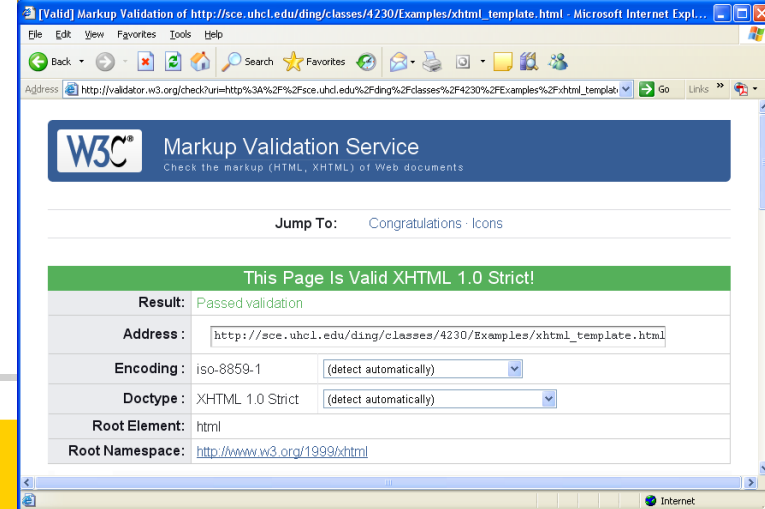
- An XHTML document is validated against a Document Type Definition (DTD). Before an XHTML file can be properly validated, a correct DTD must be added as the first line of the file.
- The **Strict DTD** includes elements and attributes that have not been deprecated or do not appear in framesets:

```
!DOCTYPE html PUBLIC  
"-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd"
```
- The **Transitional DTD** includes everything in the strict DTD plus deprecated elements and attributes:

```
!DOCTYPE html PUBLIC  
"-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"
```
- The **Frameset DTD** includes everything in the transitional DTD plus frames as well:

```
!DOCTYPE html PUBLIC  
"-//W3C//DTD XHTML 1.0 Frameset//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd"
```

XHTML 1.0 Strict Validation



```
<!DOCTYPE html
PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>XHTML 1.0 Validation Template</title>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />
</head>
<body>
<p>
<a href="http://validator.w3.org/check/referer">
</a>
</p>
</body>
</html>
```