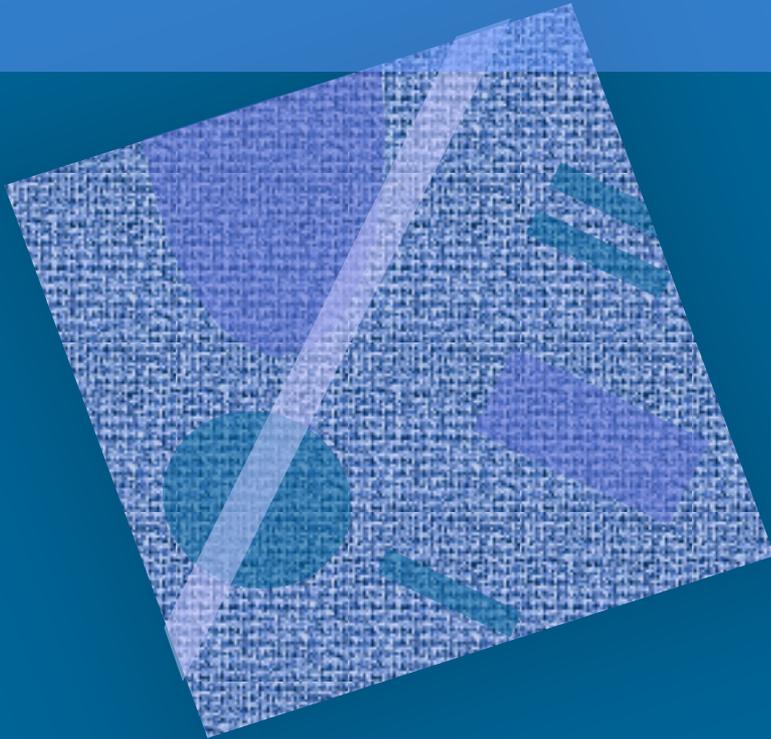


COMS 359: Interactive Media

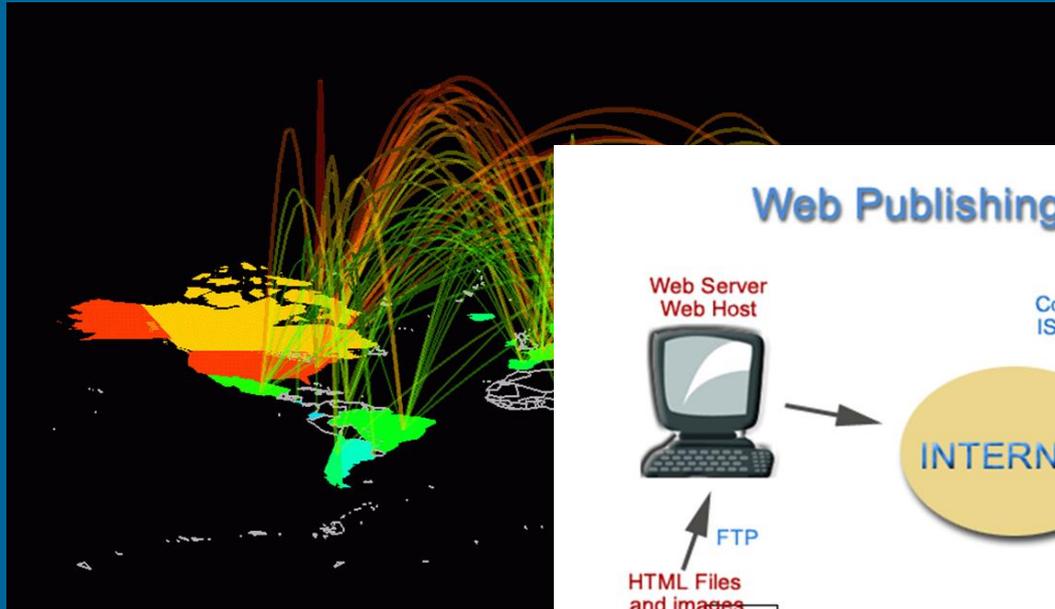


Agenda

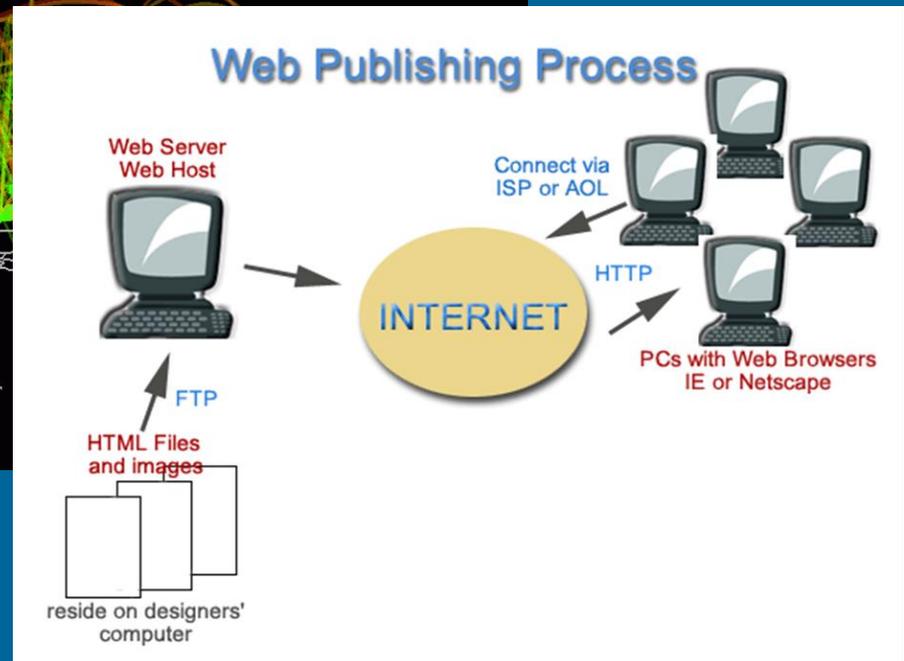
- Review
- Text
- Lists
- Preview

Review

- Introduction



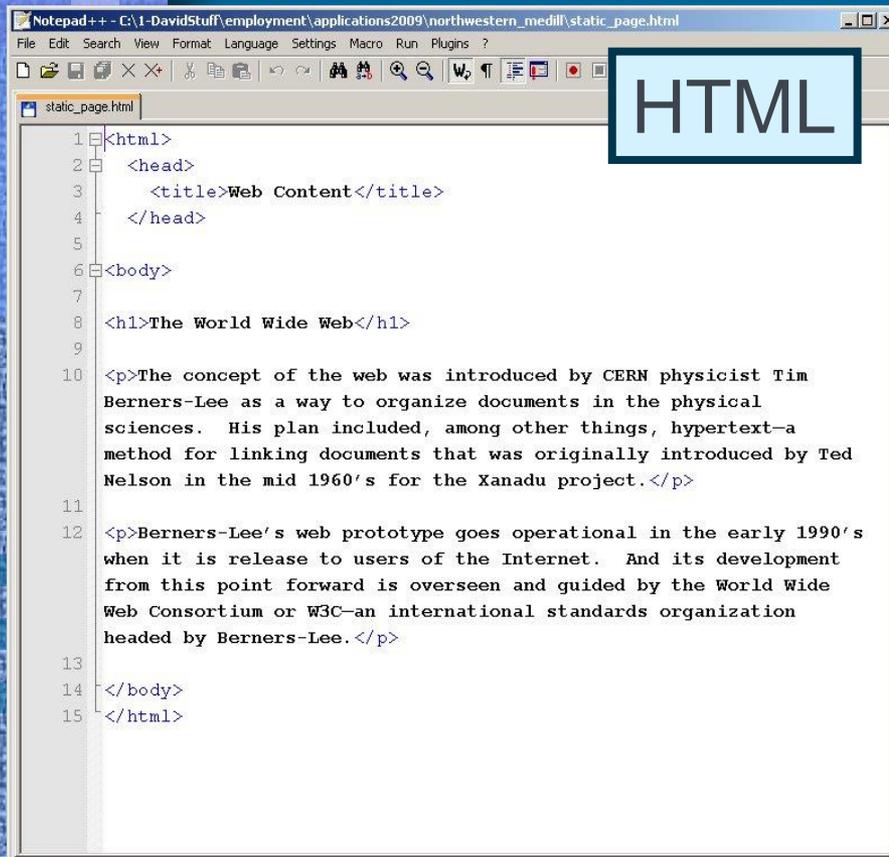
Internet



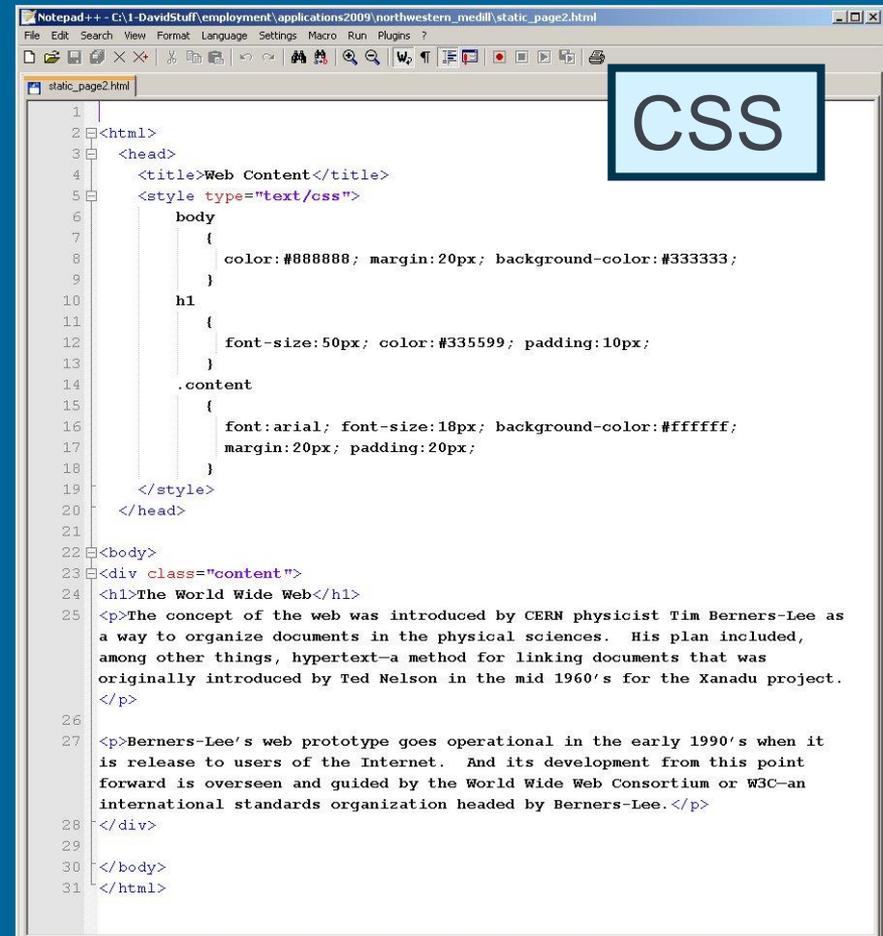
World Wide Web

Review

- Introduction



```
1 <html>
2 <head>
3 <title>Web Content</title>
4 </head>
5
6 <body>
7
8 <h1>The World Wide Web</h1>
9
10 <p>The concept of the web was introduced by CERN physicist Tim
11 Berners-Lee as a way to organize documents in the physical
12 sciences. His plan included, among other things, hypertext—a
13 method for linking documents that was originally introduced by Ted
14 Nelson in the mid 1960's for the Xanadu project.</p>
15
16 <p>Berners-Lee's web prototype goes operational in the early 1990's
17 when it is release to users of the Internet. And its development
18 from this point forward is overseen and guided by the World Wide
19 Web Consortium or W3C—an international standards organization
20 headed by Berners-Lee.</p>
21
22 </body>
23 </html>
```



```
1 <html>
2 <head>
3 <title>Web Content</title>
4 <style type="text/css">
5
6     body
7     {
8         color:#888888; margin:20px; background-color:#333333;
9     }
10
11     h1
12     {
13         font-size:50px; color:#335599; padding:10px;
14     }
15
16     .content
17     {
18         font:arial; font-size:18px; background-color:#ffffff;
19         margin:20px; padding:20px;
20     }
21 </style>
22 </head>
23 <body>
24 <div class="content">
25 <h1>The World Wide Web</h1>
26 <p>The concept of the web was introduced by CERN physicist Tim Berners-Lee as
27 a way to organize documents in the physical sciences. His plan included,
28 among other things, hypertext—a method for linking documents that was
29 originally introduced by Ted Nelson in the mid 1960's for the Xanadu project.
30 </p>
31
32 <p>Berners-Lee's web prototype goes operational in the early 1990's when it
33 is release to users of the Internet. And its development from this point
34 forward is overseen and guided by the World Wide Web Consortium or W3C—an
35 international standards organization headed by Berners-Lee.</p>
36 </div>
37 </body>
38 </html>
```

Review

- Introduction

The Evolution of HTML

HTML

HTML2

HTML3.2

HTML4

XHTML1

HTML5/XHTML5

2001

2011

CSS1

CSS2

CSS2.1

CSS3

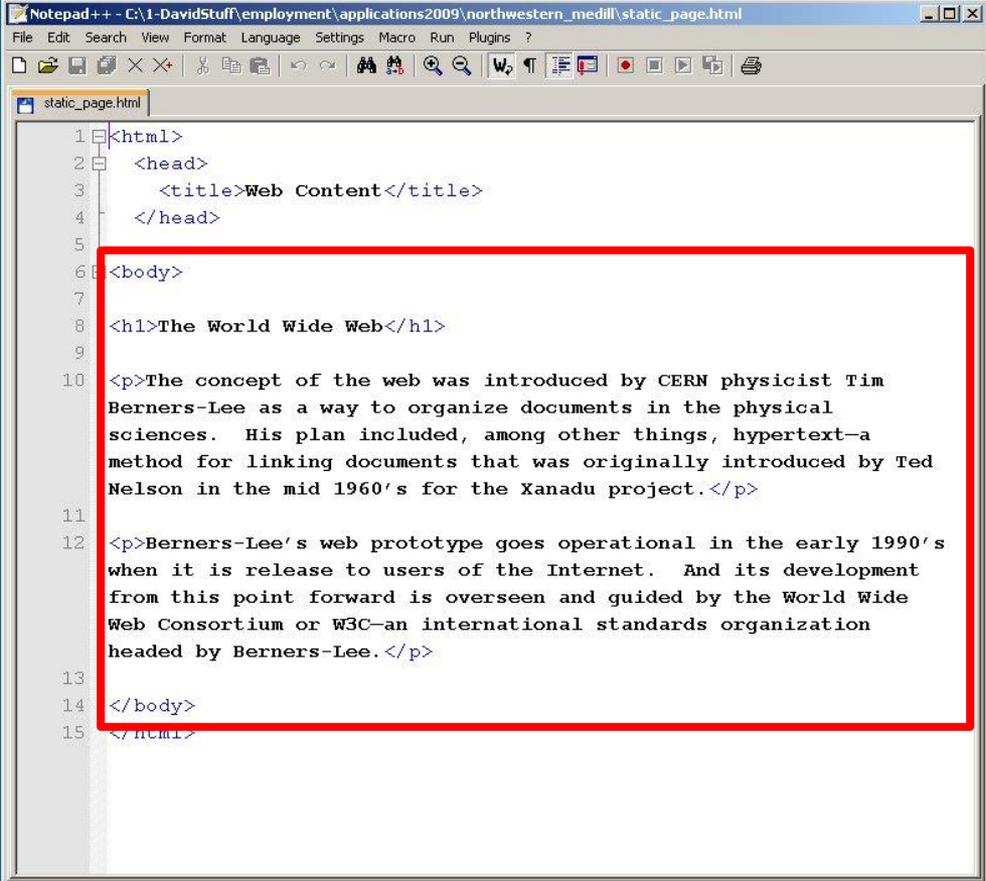
The screenshot shows the W3C website in a Mozilla Firefox browser window. The page title is "HTML & CSS". The main content area includes a navigation menu with "STANDARDS", "PARTICIPATE", "MEMBERSHIP", and "ABOUT W3C". Below the menu, there is a search bar and a "Skip" button. The main heading is "HTML & CSS". The text below the heading reads: "On this page → what is html (and xhtml) · what is css · examples · more info · recent press releases · current status of specifications and groups". The main content area is titled "HTML & CSS" and contains the following text: "HTML (the Hypertext Markup Language) and CSS (Cascading Style Sheets) are two of the core technologies for building Web pages. HTML provides the 'structure' of the page. CSS is a powerful language for describing the (visual and aural) display of pages, for a variety of devices. Along with graphics and scripting, HTML and CSS are the basics of building Web pages and Web Applications. Learn more below about: What is HTML? HTML is the language for describing the structure of Web pages. HTML gives authors the means to:

- Publish online documents with headings, text, tables, lists, photos, etc.
- Retrieve online information via hypertext links, at the click of a button.
- Design forms for conducting transactions with remote services, for use in searching for information, making reservations, ordering products, etc.
- Include spread-sheets, video clips, sound clips, and other applications directly in their documents.

With HTML, authors describe the structure of pages using "markup." The "elements" of the language label pieces of content such as "paragraphs," "lists," "tables," and so on. What is XHTML? XHTML is a variant of HTML that uses the syntax of XML, the Extensible Markup Language. XHTML has all the same elements (for paragraphs, etc.) as the HTML variant, but the syntax is slightly different. Because XHTML is an XML application, you can use other XML tools with it (such as XSLT, a language for transforming XML content).

Review

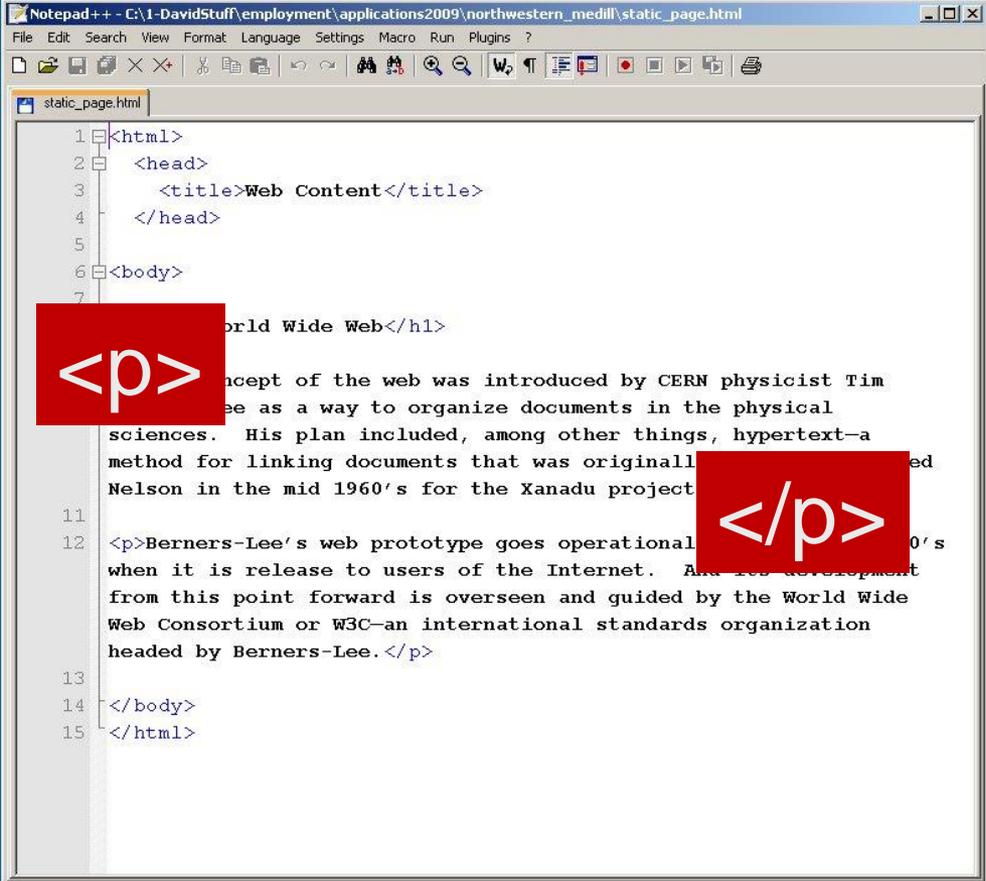
- Introduction
- Structure
 - Elements



```
1 <html>
2   <head>
3     <title>Web Content</title>
4   </head>
5
6   <body>
7
8     <h1>The World Wide Web</h1>
9
10    <p>The concept of the web was introduced by CERN physicist Tim
11    Berners-Lee as a way to organize documents in the physical
12    sciences. His plan included, among other things, hypertext—a
13    method for linking documents that was originally introduced by Ted
14    Nelson in the mid 1960's for the Xanadu project.</p>
15
16    <p>Berners-Lee's web prototype goes operational in the early 1990's
17    when it is release to users of the Internet. And its development
18    from this point forward is overseen and guided by the World Wide
19    Web Consortium or W3C—an international standards organization
20    headed by Berners-Lee.</p>
21
22  </body>
23 </html>
```

Review

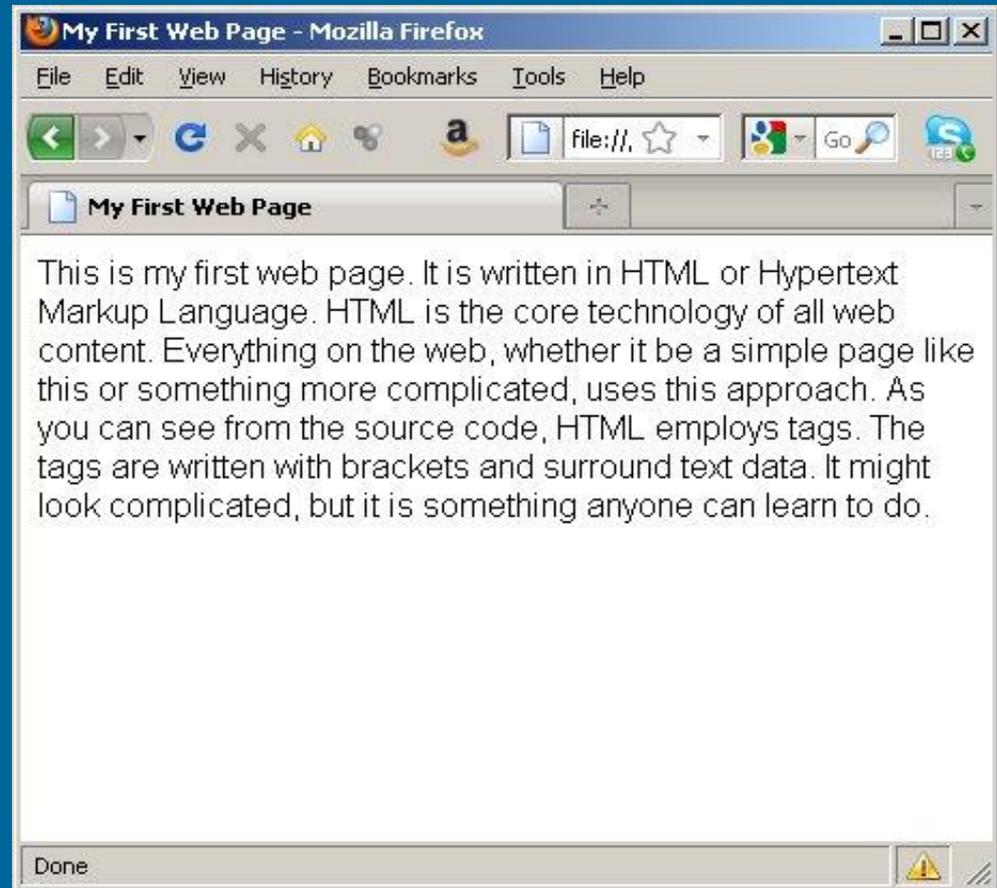
- Introduction
- Structure
 - Elements
 - Tags



```
1 <html>
2   <head>
3     <title>Web Content</title>
4   </head>
5
6   <body>
7     <h1>World Wide Web</h1>
8
9     <p>The concept of the web was introduced by CERN physicist Tim
10    Berners-Lee as a way to organize documents in the physical
11    sciences. His plan included, among other things, hypertext—a
12    method for linking documents that was originally developed by
13    Nelson in the mid 1960's for the Xanadu project.
14
15    <p>Berners-Lee's web prototype goes operational in 1990, and its development
16    when it is release to users of the Internet. And its development
17    from this point forward is overseen and guided by the World Wide
18    Web Consortium or W3C—an international standards organization
19    headed by Berners-Lee.</p>
20
21  </body>
22 </html>
```

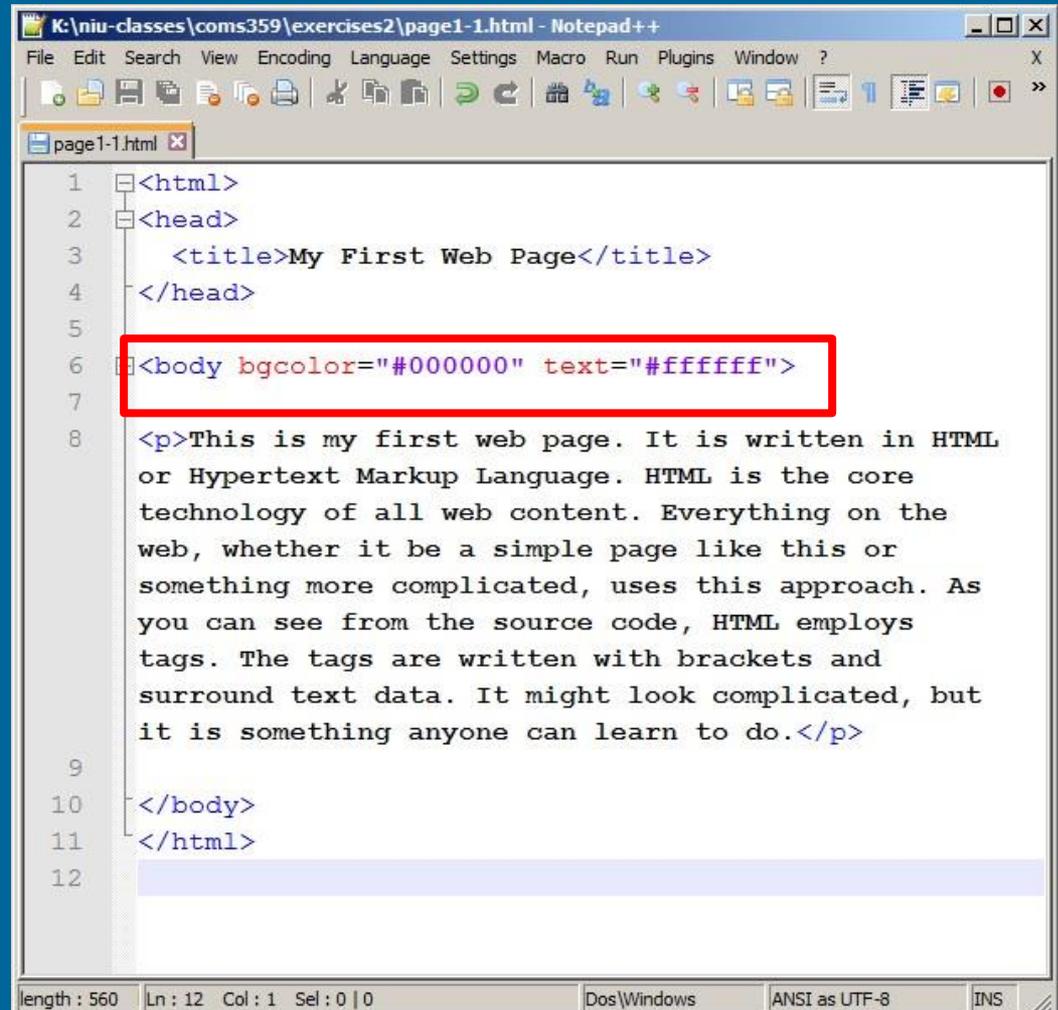
Review

- Introduction
- Structure
 - Elements
 - Tags
 - Basic Page



Review

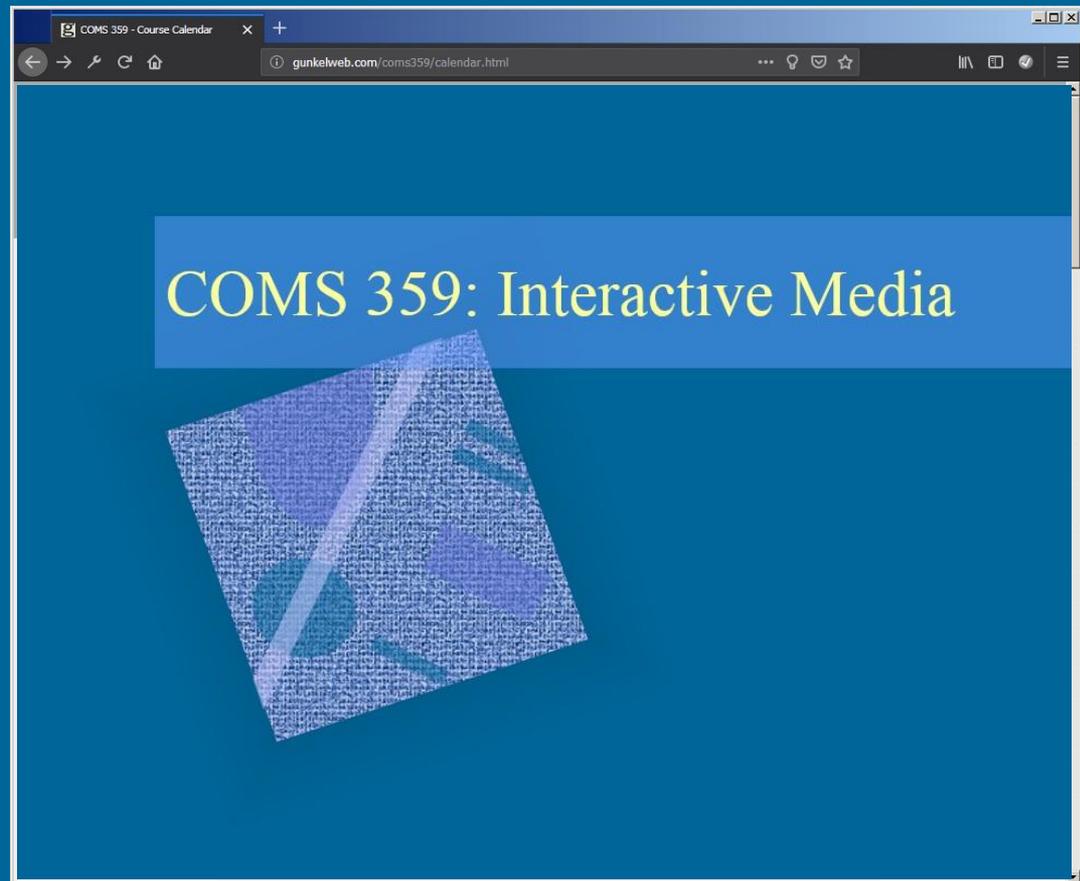
- Introduction
- Structure
 - Elements
 - Tags
 - Basic Page
 - Attributes



```
K:\niu-classes\coms359\exercises2\page1-1.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
page1-1.html
1 <html>
2 <head>
3   <title>My First Web Page</title>
4 </head>
5
6 <body bgcolor="#000000" text="#ffffff">
7
8   <p>This is my first web page. It is written in HTML
   or Hypertext Markup Language. HTML is the core
   technology of all web content. Everything on the
   web, whether it be a simple page like this or
   something more complicated, uses this approach. As
   you can see from the source code, HTML employs
   tags. The tags are written with brackets and
   surround text data. It might look complicated, but
   it is something anyone can learn to do.</p>
9
10 </body>
11 </html>
12
length : 560 Ln : 12 Col : 1 Sel : 0 | 0 Dos\Windows ANSI as UTF-8 INS
```

Review

- Lecture Slides Online





Text

Text

- Introduction

Structural Markup

Elements that describe page formatting features, e.g. headings and paragraphs.

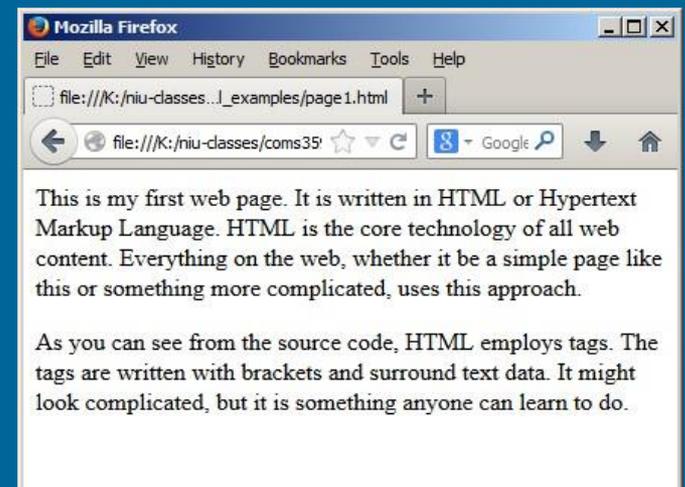
Semantic Markup

Elements that describe the meaning of page content, e.g. emphasis, quotation, definition.

Text

- Structural Markup
 - `<p>` Paragraph `</p>`
 - Common Attribute
 - align
 - left, right & center

```
1
2
3 <p>This is my first web page. It is
  written in HTML or Hypertext Markup
  Language. HTML is the core technology
  of all web content. Everything on the
  web, whether it be a simple page like
  this or something more complicated,
  uses this approach.</p>
4
5 <p>As you can see from the source code,
  HTML employs tags. The tags are written
  with brackets and surround text data.
  It might look complicated, but it is
  something anyone can learn to do.</p>
6
7
```



Text

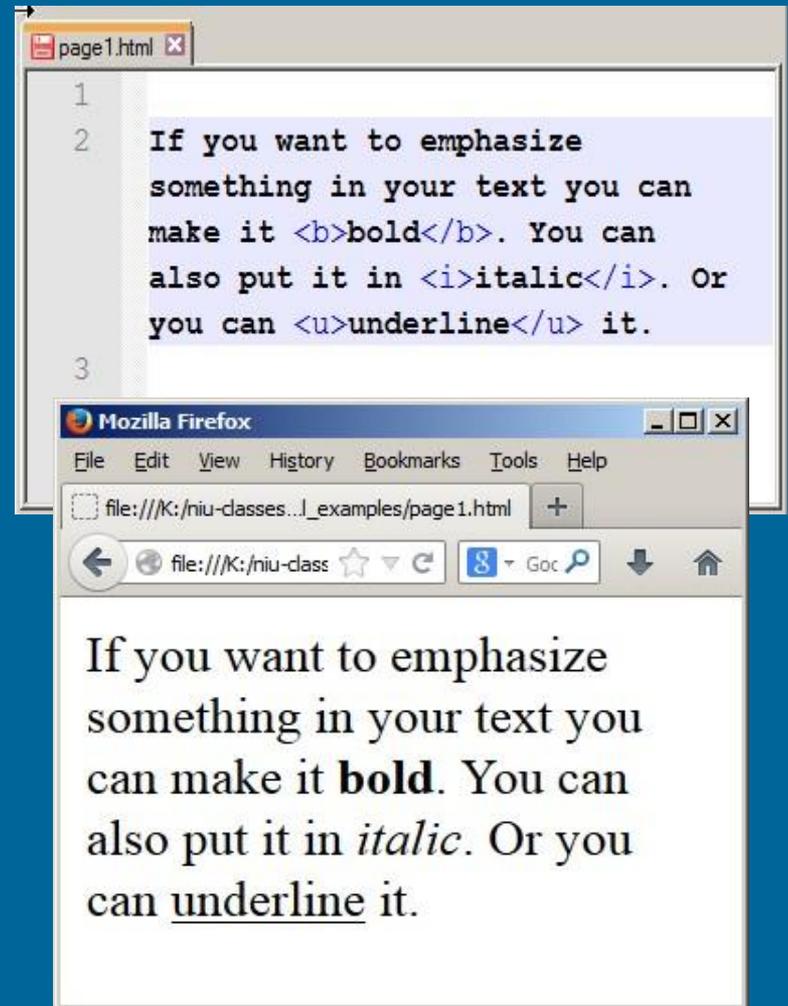
- Structural Markup
 - `<h1>` Headings `</h1>`
 - Six Levels
 - Common Attribute
 - align
 - left, right & center

```
page1.html x
1
2 <h1>This is Heading One</h1>
3 <h2>This is Heading One</h2>
4 <h3>This is Heading One</h3>
5 <h4>This is Heading One</h4>
6 <h5>This is Heading One</h5>
7 <h6>This is Heading One</h6>
8
9
10
```



Text

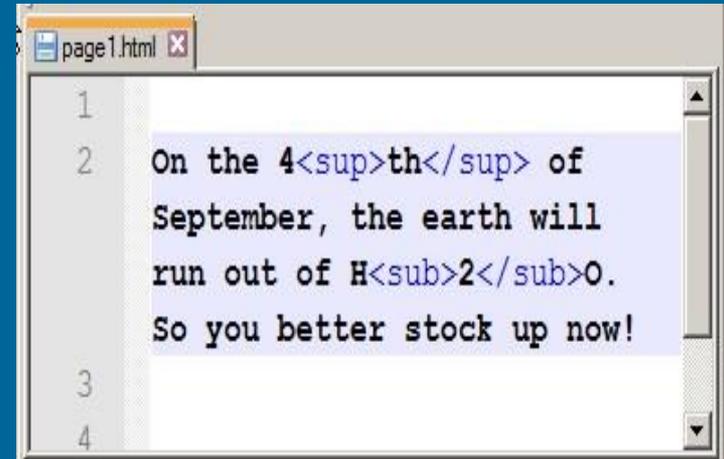
- Structural Markup
 - ` bold `
 - `<i> italic </i>`
 - `<u> underline </u>`



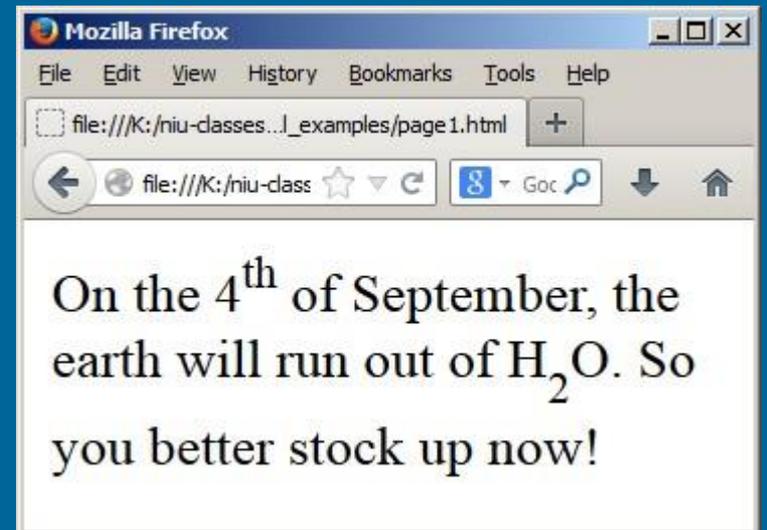
The image shows a code editor window titled 'page1.html' with three lines of code. Line 1 is empty. Line 2 contains the text: 'If you want to emphasize something in your text you can make it `bold`. You can also put it in `<i>italic</i>`. Or you can `<u>underline</u>` it.' Line 3 is empty. Below the code editor is a Mozilla Firefox browser window displaying the rendered HTML. The browser's address bar shows 'file:///K:/niu-classes.../examples/page1.html'. The rendered text in the browser is: 'If you want to emphasize something in your text you can make it **bold**. You can also put it in *italic*. Or you can underline it.'

Text

- Structural Markup
 - `^{` ^{superscript} `}`
 - `_{` _{subscript} `}`

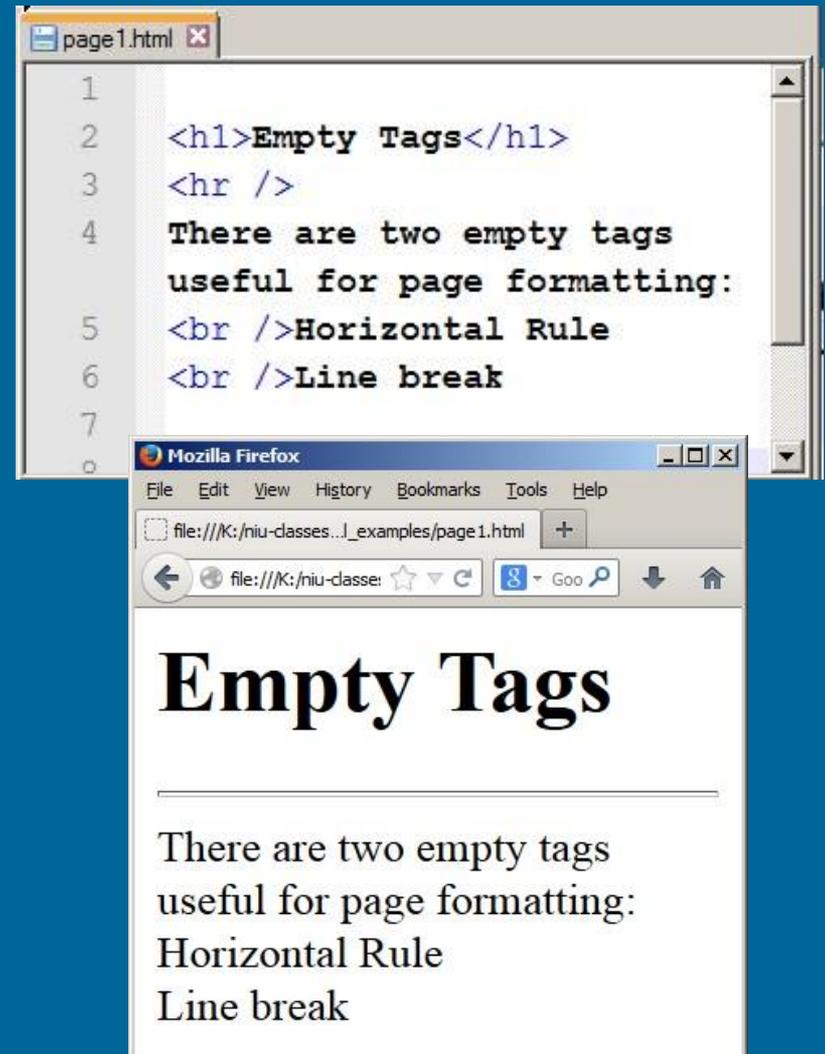


```
1  
2 On the 4<sup>th</sup> of  
September, the earth will  
run out of H<sub>2</sub>O.  
So you better stock up now!  
3  
4
```



Text

- Structural Markup
 - Empty Tags
 - `
`
 - `<hr />`



The image shows two overlapping windows. The top window is a code editor titled 'page1.html' with a line number column on the left. The code is as follows:

```
1
2 <h1>Empty Tags</h1>
3 <hr />
4 There are two empty tags
5 useful for page formatting:
6 <br />Horizontal Rule
7 <br />Line break
8
```

The bottom window is a Mozilla Firefox browser displaying the rendered HTML. The address bar shows the file path: `file:///K:/niu-classes.../examples/page1.html`. The page content is:

Empty Tags

There are two empty tags
useful for page formatting:
Horizontal Rule
Line break

Text

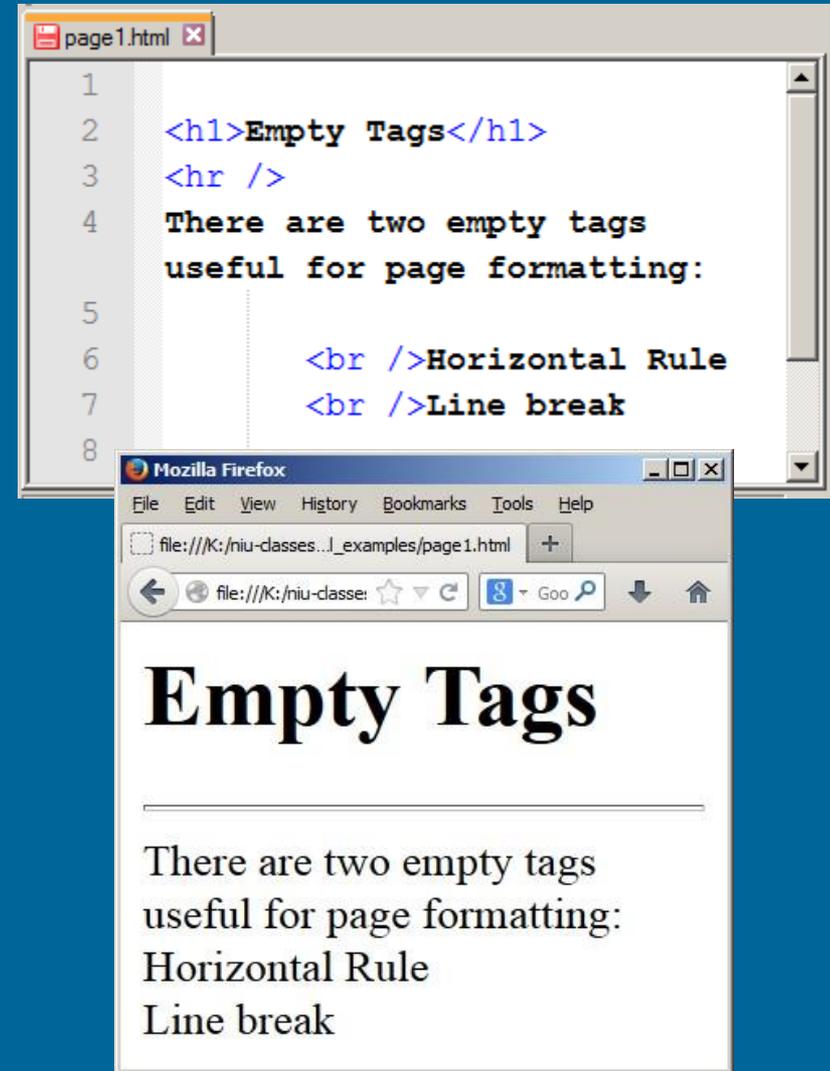
- Structural Markup
 - `<hr />`
 - Attributes
 - **align** = left | right | center
 - **noshade** - turns off shading
 - **size** - line thickness in pixels
 - **width** - determines the length of the line expressed in pixels or percentage of page width

```
1
2 <h1>Empty Tags</h1>
3 <hr align="center" noshade size="10" width="50%"/>
4 There are two empty tags useful for page
5 formatting:
6 <br />Horizontal Rule
7 <br />Line break
8
```



Text

- Structural Markup
 - White Space
 - Browser collapses extra page returns
 - Browser collapses extra spaces



The image shows two overlapping windows. The top window is an HTML editor titled 'page1.html' with a line-numbered text area containing the following code:

```
1
2 <h1>Empty Tags</h1>
3 <hr />
4 There are two empty tags
5 useful for page formatting:
6
7     <br />Horizontal Rule
8     <br />Line break
```

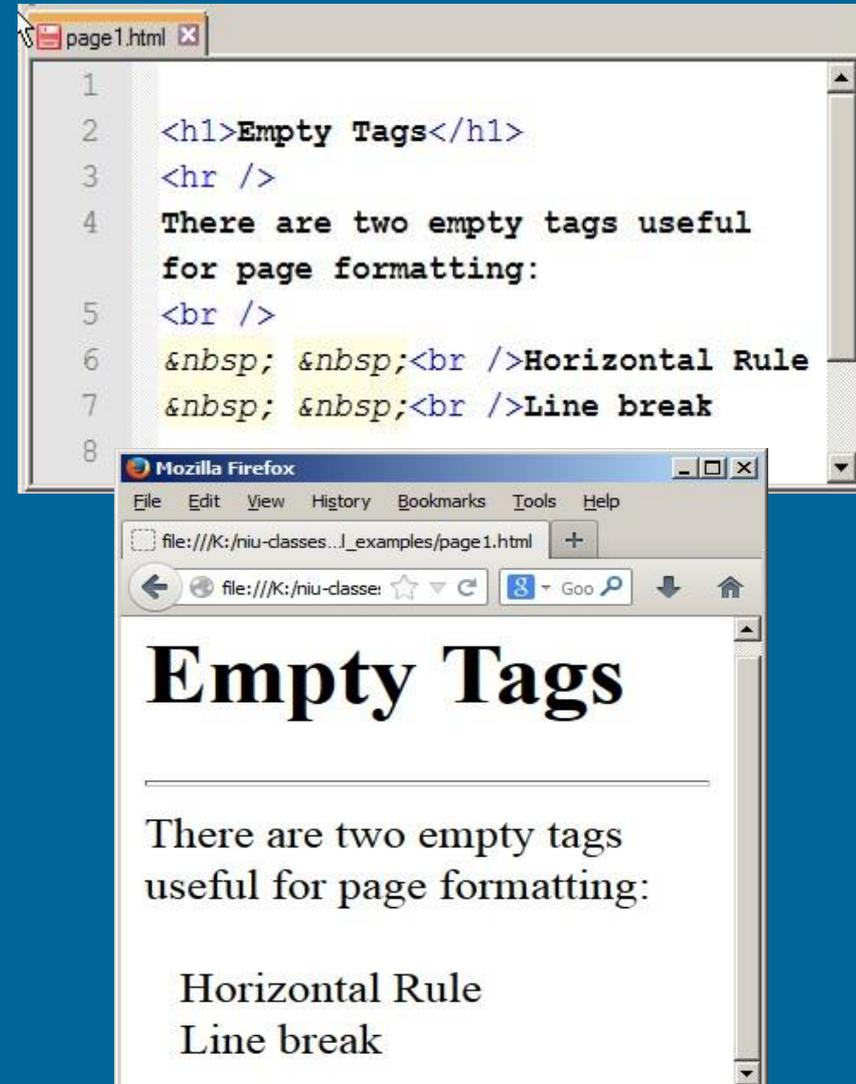
The bottom window is a Mozilla Firefox browser displaying the rendered HTML. The title bar says 'Mozilla Firefox'. The address bar shows 'file:///K:/niu-classes.../examples/page1.html'. The page content is as follows:

Empty Tags

There are two empty tags
useful for page formatting:
Horizontal Rule
Line break

Text

- Structural Markup
 - White Space
 - Browser collapses extra page returns
 - Browser collapses extra spaces
 - Fix in HTML
 - `
` or `<p>`
 - ` `



The image shows two windows. The top window is a code editor titled 'page1.html' with the following content:

```
1
2 <h1>Empty Tags</h1>
3 <hr />
4 There are two empty tags useful
5 for page formatting:
6 <br />
7 &nbsp; &nbsp;<br />Horizontal Rule
8 &nbsp; &nbsp;<br />Line break
```

The bottom window is Mozilla Firefox displaying the rendered HTML. The title is 'Empty Tags'. The content is:

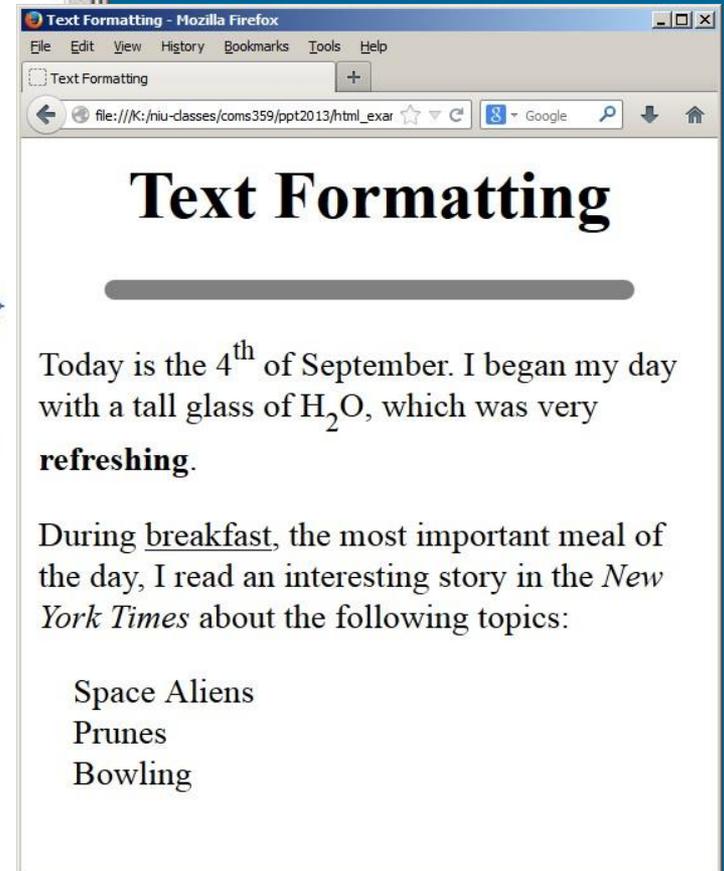
Empty Tags

There are two empty tags useful for page formatting:

Horizontal Rule

Line break

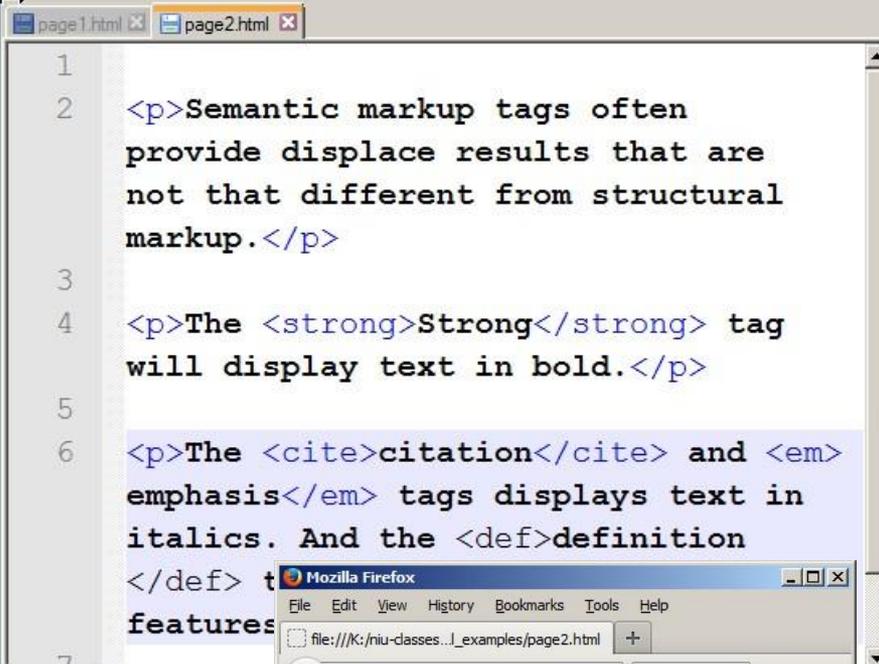
```
K:\niu-classes\coms359\ppt2013\html_examples\page1.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
page1.html x
1 <html>
2 <head>
3   <title>Text Formatting</title>
4 </head>
5
6 <body>
7   <h1 align="center">Text Formatting</h1>
8   <hr align="center" noshade size="10" width="80%"/>
9
10  <p>Today is the 4<sup>th</sup> of September. I
    began my day with a tall glass of H<sub>2</sub>O,
    which was very <b>refreshing</b>.</p>
11
12  <p>During <u>breakfast</u>, the most important
    meal of the day, I read an interesting story in
    the <i>New York Times</i> about the following
    topics:</p>
13
14   &nbsp; &nbsp; &nbsp; Space Aliens
15   <br />&nbsp; &nbsp; &nbsp; Prunes
16   <br />&nbsp; &nbsp; &nbsp; Bowling
17
18 </body>
19 </html>
20
length : 571 lin Ln : 22 Col : 1 Sel : 0 | 0
Dos\Windows ANSI as UTF-8 INS
```



page2-1.html

Text

- Semantic Markup
 - ``
 - ``
 - `<cite>`
 - `<def>`



```
1
2 <p>Semantic markup tags often
  provide displace results that are
  not that different from structural
  markup.</p>
3
4 <p>The <strong>Strong</strong> tag
  will display text in bold.</p>
5
6 <p>The <cite>citation</cite> and <em>
  emphasis</em> tags displays text in
  italics. And the <def>definition
  </def> t
  features
```

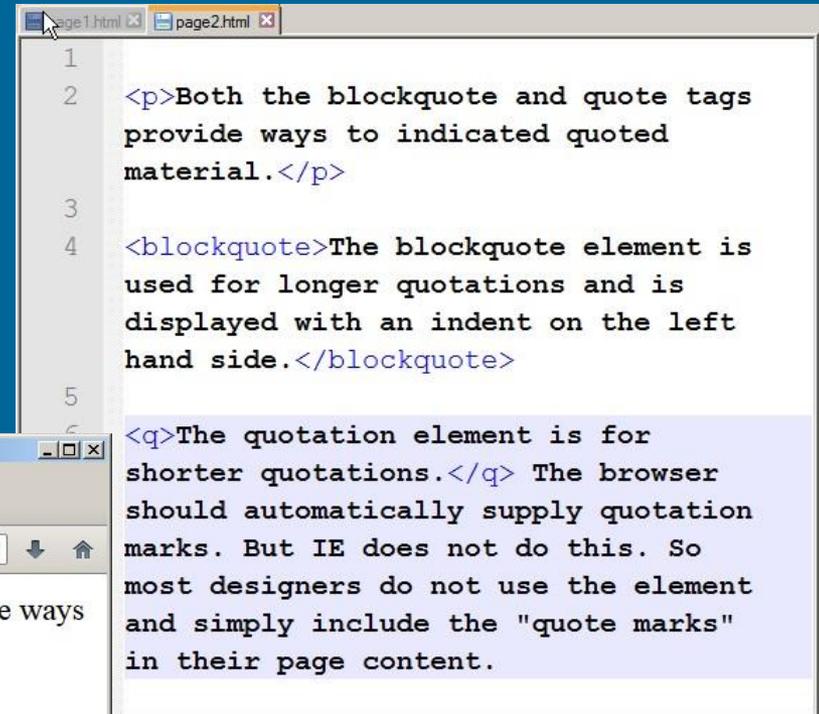
Semantic markup tags often provide displace results that are not that different from structural markup.

The **Strong** tag will display text in bold.

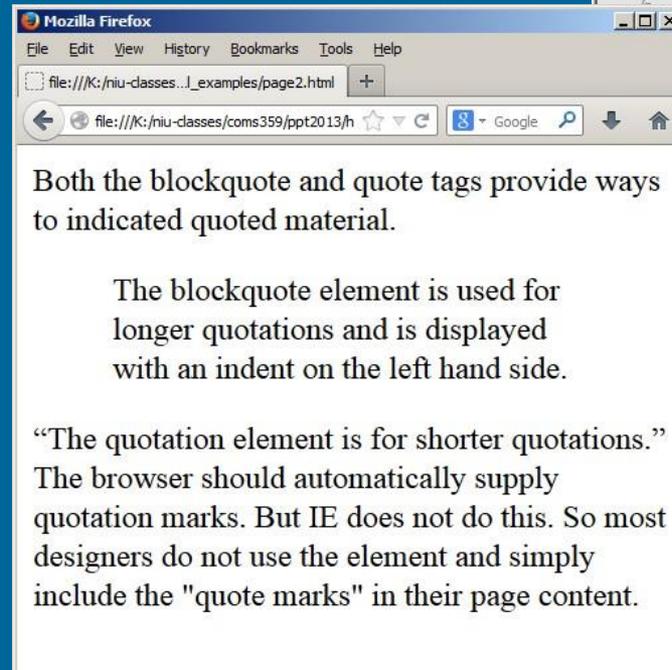
The *citation* and *emphasis* tags displays text in italics. And the definition tag has no special display features.

Text

- Semantic Markup
 - `<blockquote>`
 - `<q> quote </q>`

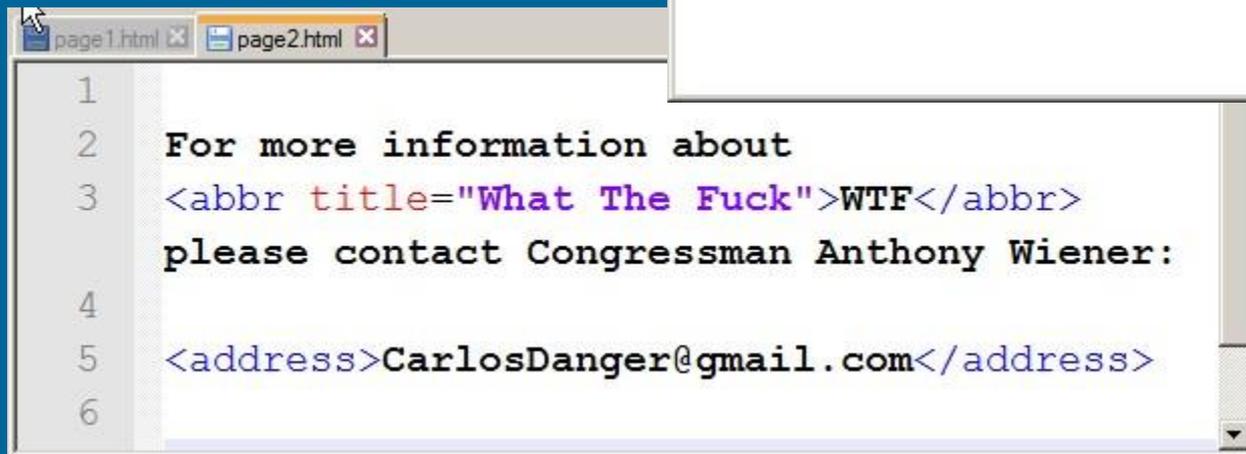


```
1
2 <p>Both the blockquote and quote tags
  provide ways to indicated quoted
  material.</p>
3
4 <blockquote>The blockquote element is
  used for longer quotations and is
  displayed with an indent on the left
  hand side.</blockquote>
5
6 <q>The quotation element is for
  shorter quotations.</q> The browser
  should automatically supply quotation
  marks. But IE does not do this. So
  most designers do not use the element
  and simply include the "quote marks"
  in their page content.
```



Text

- Semantic Markup
 - `<abbr>`
 - `<address>`



Text

- Semantic Markup
 - ``
 - `<ins>`
 - `<s>`

The image shows a code editor window with two tabs: 'page1.html' and 'page2.html'. The code editor displays the following HTML code:

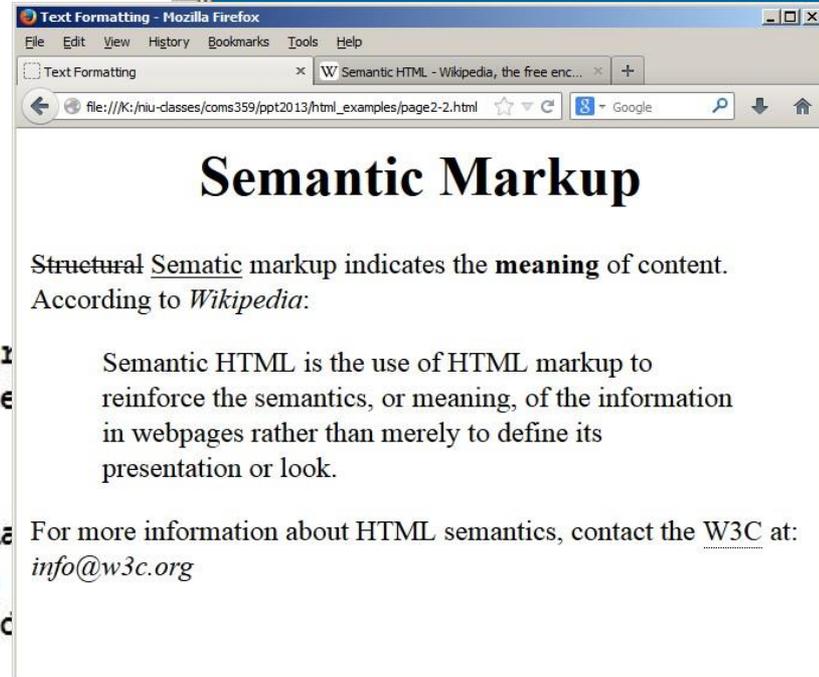
```
1  
2 <p>The delete tag  
   displays a strike through, while  
   the insert tag displays  
   with an underline.</p>  
3  
4 <p>You can get similar display  
   results using the strike  
   tag.</p>  
5  
6
```

Below the code editor is a Mozilla Firefox browser window. The address bar shows the file path: `file:///K:/niu-classes.../examples/page2.html`. The browser displays the rendered output of the HTML code above:

The ~~delete tag~~ displays a strike through, while the insert tag displays with an underline.

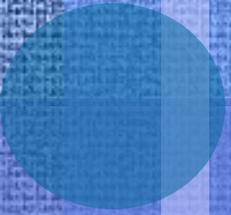
You can get similar display results using the ~~strike~~ tag.

```
K:\niu-classes\coms359\ppt2013\html_examples\page2-2.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
page2-2.html page2.html
1 <html>
2 <head>
3   <title>Text Formatting</title>
4 </head>
5
6 <body>
7   <h1 align="center">Semantic Markup</h1>
8
9   <p><del>Structural</del> <ins>Sematic</ins> markup
10  indicates the <strong>meaning</strong> of content.
11  According to <cite>Wikipedia</cite>:
12
13  <blockquote>Semantic HTML is the use of HTML markup
14  to reinforce the semantics, or meaning, of the
15  information in webpages rather than merely to define its
16  presentation or look.</blockquote>
17
18  For more information about HTML semantics, contact
19  the <abbr title="World Wide Web Consortium">W3C
20  </abbr> at: <address>info@w3c.org</address> </p>
21
22 </body>
23 </html>
```



page2-2.html

Lists

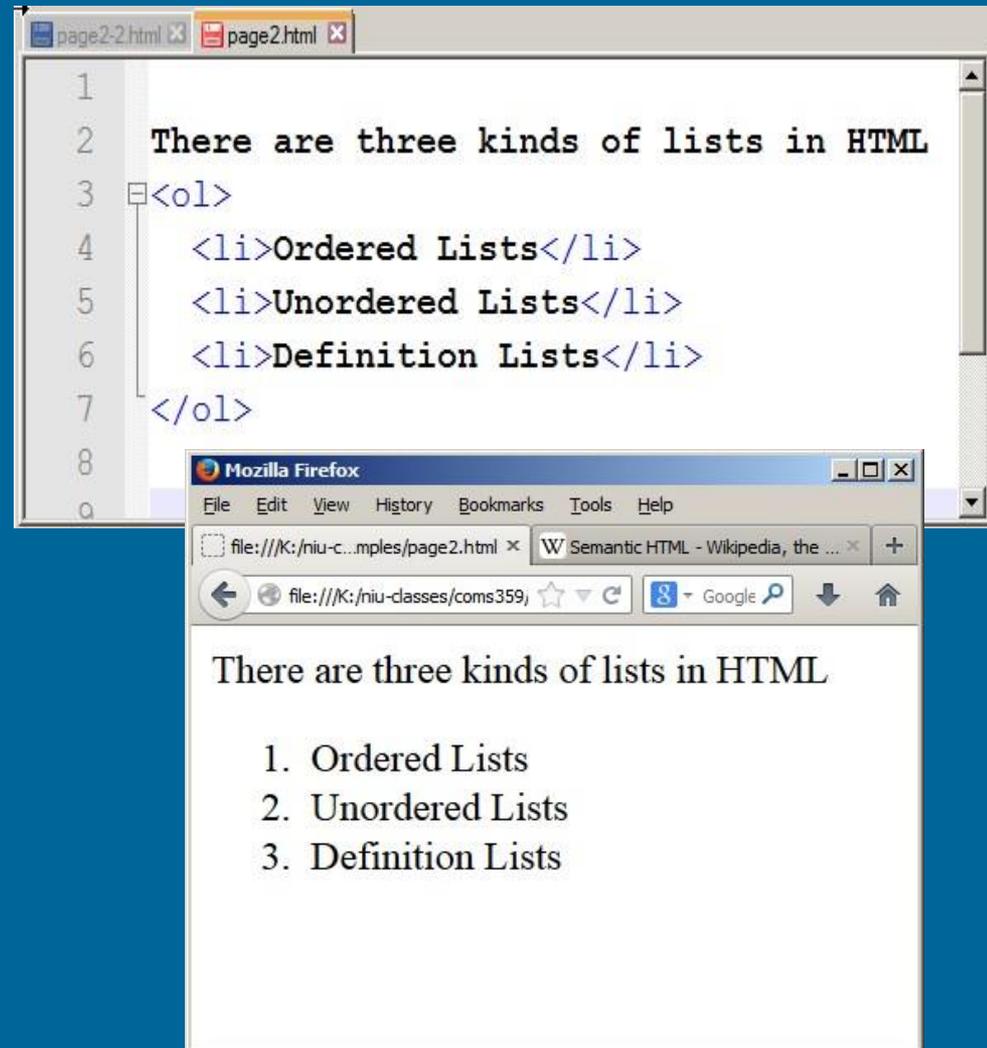


Lists

- Three kinds of Lists in HTML
 - Ordered List ``
 - Unordered List ``
 - Definition List `<dl>`

Lists

- Ordered List
 - ``
 - `` “list item”



The image shows a code editor window with the following HTML code:

```
1  
2 There are three kinds of lists in HTML  
3 <ol>  
4   <li>Ordered Lists</li>  
5   <li>Unordered Lists</li>  
6   <li>Definition Lists</li>  
7 </ol>  
8  
9  
0
```

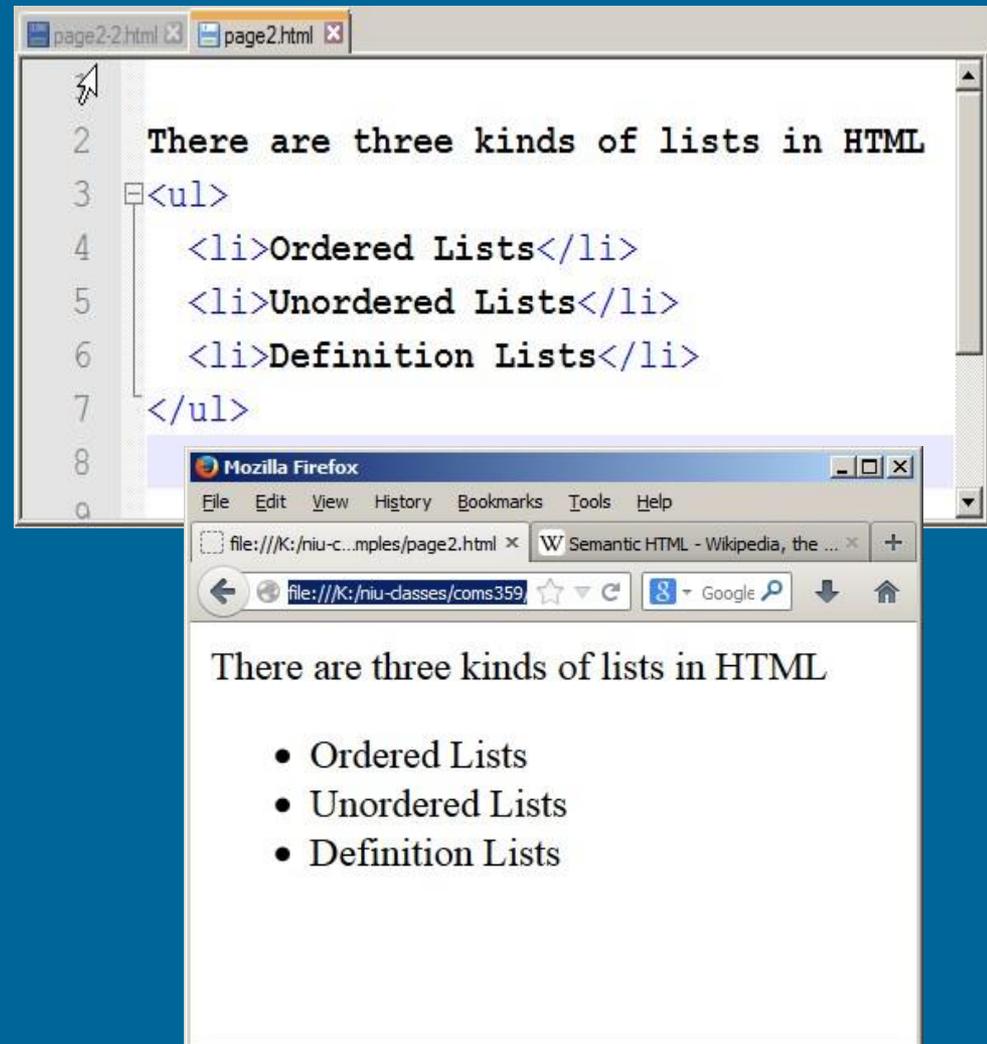
Below the code editor is a Mozilla Firefox browser window displaying the rendered HTML. The browser's address bar shows the file path: `file:///K:/niu-classes/coms359/...`. The rendered page content is:

There are three kinds of lists in HTML

1. Ordered Lists
2. Unordered Lists
3. Definition Lists

Lists

- Unordered List
 - ``
 - `` “list item”



The image shows a code editor window with the following HTML code:

```
1  
2 There are three kinds of lists in HTML  
3 <ul>  
4   <li>Ordered Lists</li>  
5   <li>Unordered Lists</li>  
6   <li>Definition Lists</li>  
7 </ul>  
8  
9
```

Below the code editor is a Mozilla Firefox browser window displaying the rendered HTML. The browser's address bar shows the file path: `file:///K:/niu-classes/coms359/...`. The rendered output is:

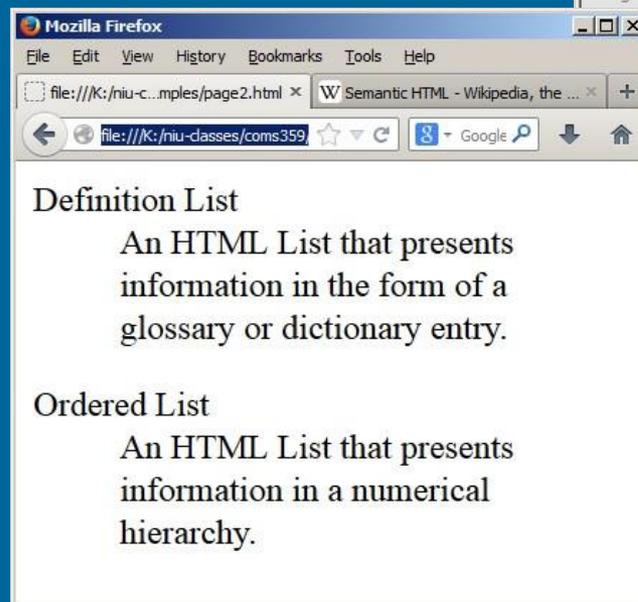
There are three kinds of lists in HTML

- Ordered Lists
- Unordered Lists
- Definition Lists

Lists

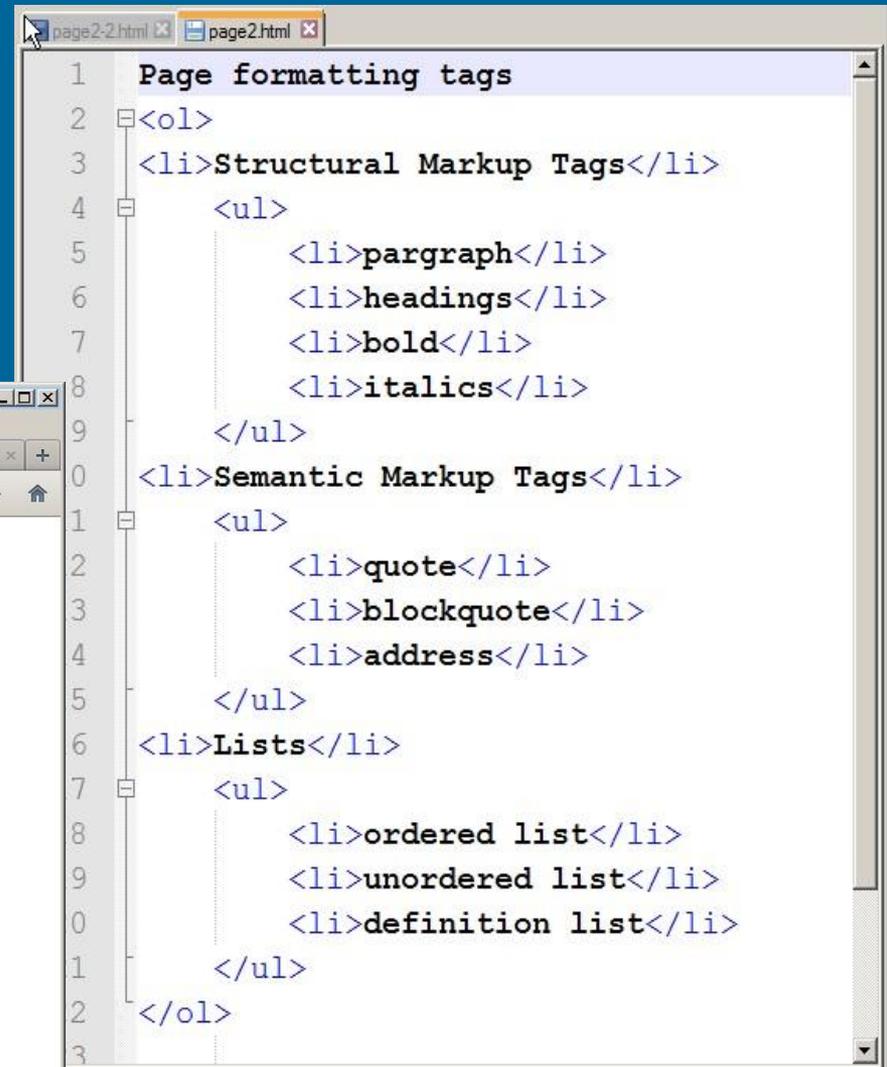
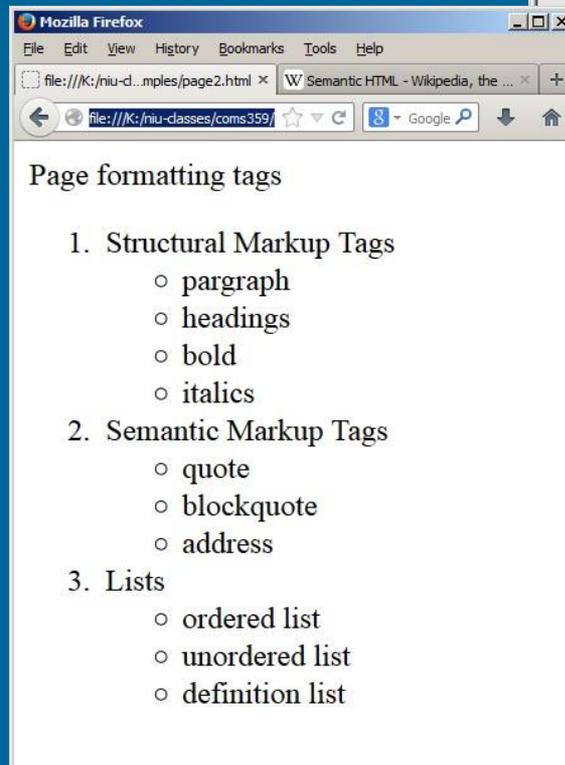
- Definition List
 - `<dl>` “definition list”
 - `<dt>` “definition term”
 - `<dd>` “definition definition”

```
1
2 <dl>
3   <dt>Definition List</dt>
4   <dd>An HTML List that presents
   information in the form of a
   glossary or dictionary entry.</dd>
5 </dl>
6
7 <dl>
8   <dt>Ordered List</dt>
9   <dd>An HTML List that presents
   information in a numerical
   hierarchy.</dd>
</dl>
```

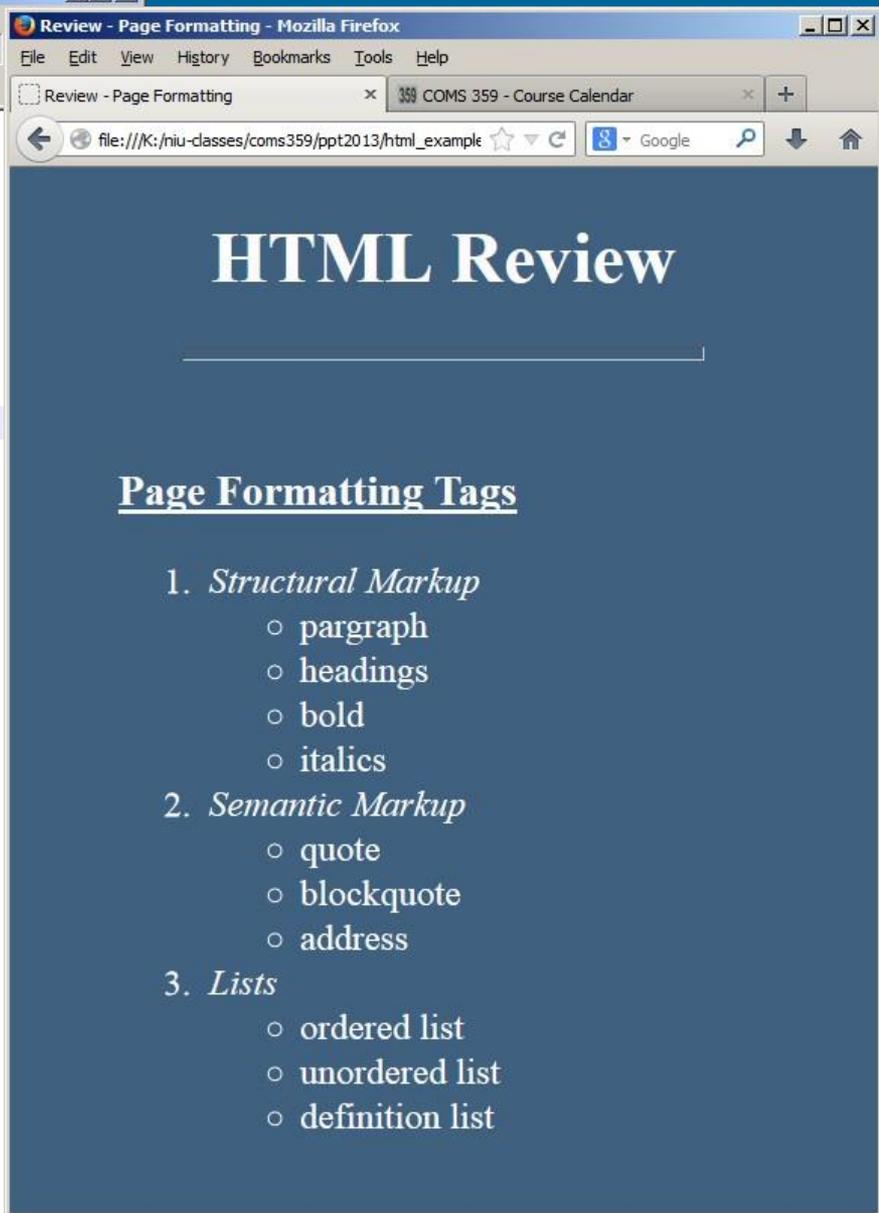


Lists

- Nested Lists
 - List inside a list
 - No limit to nesting



```
K:\niu-classes\coms359\ppt2013\html_examples\page2.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
page2:2.html page2.html
1 <html>
2 <head>
3   <title>Review - Page Formatting</title>
4 </head>
5
6 <body bgcolor="#406080" text="#fdfdfd">
7 <blockquote>
8   <h1 align="center">HTML Review</h1>
9   <hr align="center" size="6" width="80%" />
10  <br />
11  <h3><u>Page Formatting Tags</u></h3>
12  <ol>
13    <li><i>Structural Markup</i></li>
14    <ul>
15      <li>pargraph</li>
16      <li>headings</li>
17      <li>bold</li>
18      <li>italics</li>
19    </ul>
20    <li><i>Semantic Markup</i></li>
21    <ul>
22      <li>quote</li>
23      <li>blockquote</li>
24      <li>address</li>
25    </ul>
26    <li><i>Lists</i></li>
27    <ul>
28      <li>ordered list</li>
29      <li>unordered list</li>
30      <li>definition list</li>
31    </ul>
32  </ol>
33 </blockquote>
34 </body>
35 </html>
36
37
length: 677 lines Ln: 10 Col: 7 Sel: 0 | 0 Dos\Windows ANSI as UTF-8 INS
```



page2-3.html

Preview

- Topics
 - Duckett - ch. 4: Links (pp. 74-92)
 - Duckett - ch. 5: Images (pp. 94-124)