

CREATING A SIMPLE XHTML FILE WITH THE NETBEANS IDE*

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Based on *Web Programming Quick Start: XHTML – Creating an Initial XHTML File*[†] by
Ronald Sawey

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Abstract

This module discusses the creation of an initial XHTML file. The basic structure of any XHTML file is discussed and the `<html>`, `<head>`, `<title>`, `<body>`, `<p>`, `` and `` tags are discussed. The Netbeans IDE is used.

1 Module Map

- Introduction (Section 2: Introduction)
- Netbeans IDE (Section 3: Netbeans)
- Absolutely necessary XHTML tags (Section 4: Absolutely necessary XHTML Tags)
- The `` and `` Tags (Section 5: The `` and `` Tags)
- Summary (Section 6: Summary)
- Notes (Section 7: Notes)

2 Introduction

In this module you are shown how to create a simple XHTML5 file using the **Netbeans** development environment.

3 Netbeans

Although the work discussed here can be done with any text editor, and there are also many X/HTML generators, we will use the Netbeans IDE for generating our XHTML.

Once you have started Netbeans, click on: File/New on the menu bar. Figure 1 shows the resulting dialog box.

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[†]<http://cnx.org/content/m14049/1.8/>

[‡]<http://creativecommons.org/licenses/by/3.0/>

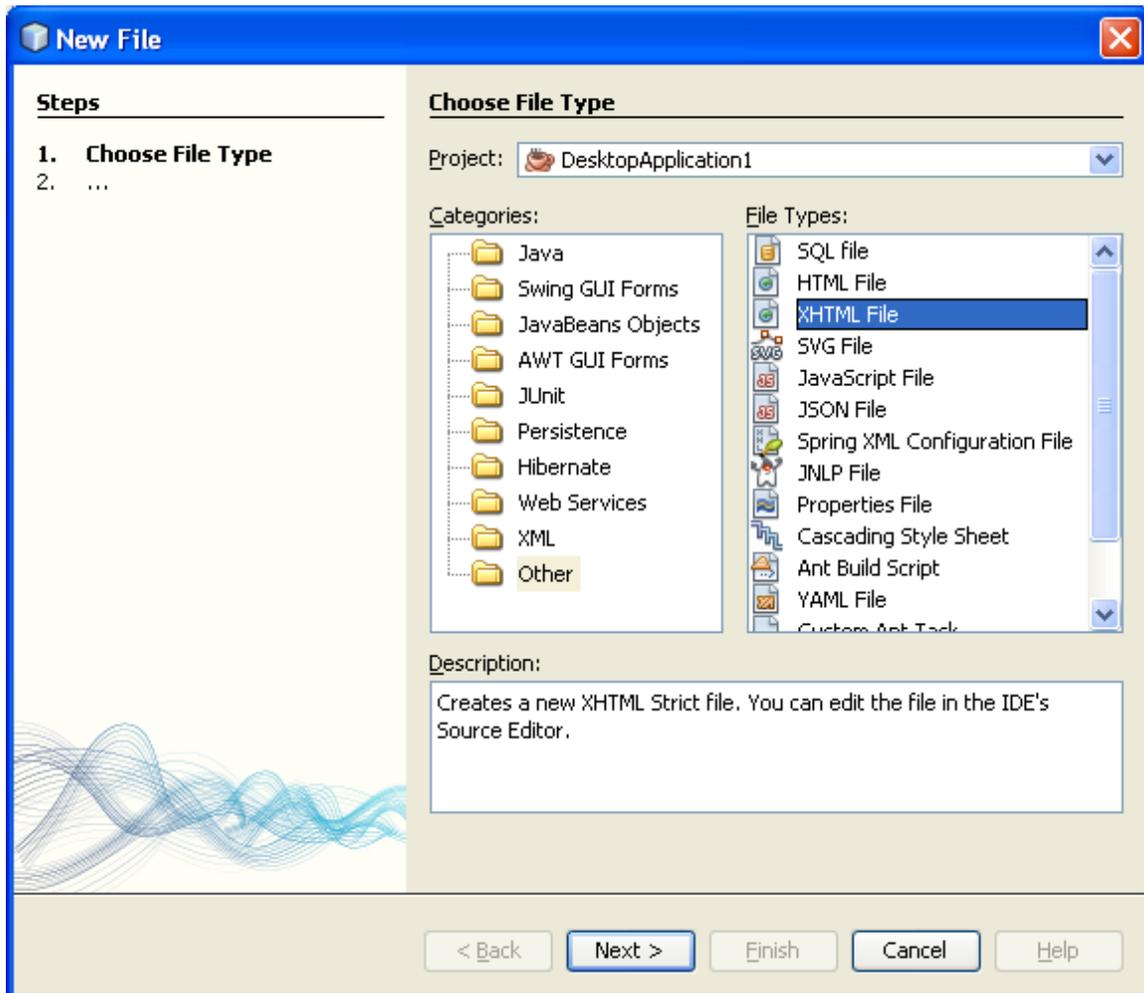


Figure 1: Netbeans's New Document Dialog Box

Choose "Other" from the Category column and "XHTML" from the 'File types' column, and click on 'Next'.

The following figure shows the Netbeans working environment. A minimal XHTML file has been created to be changed and extended.

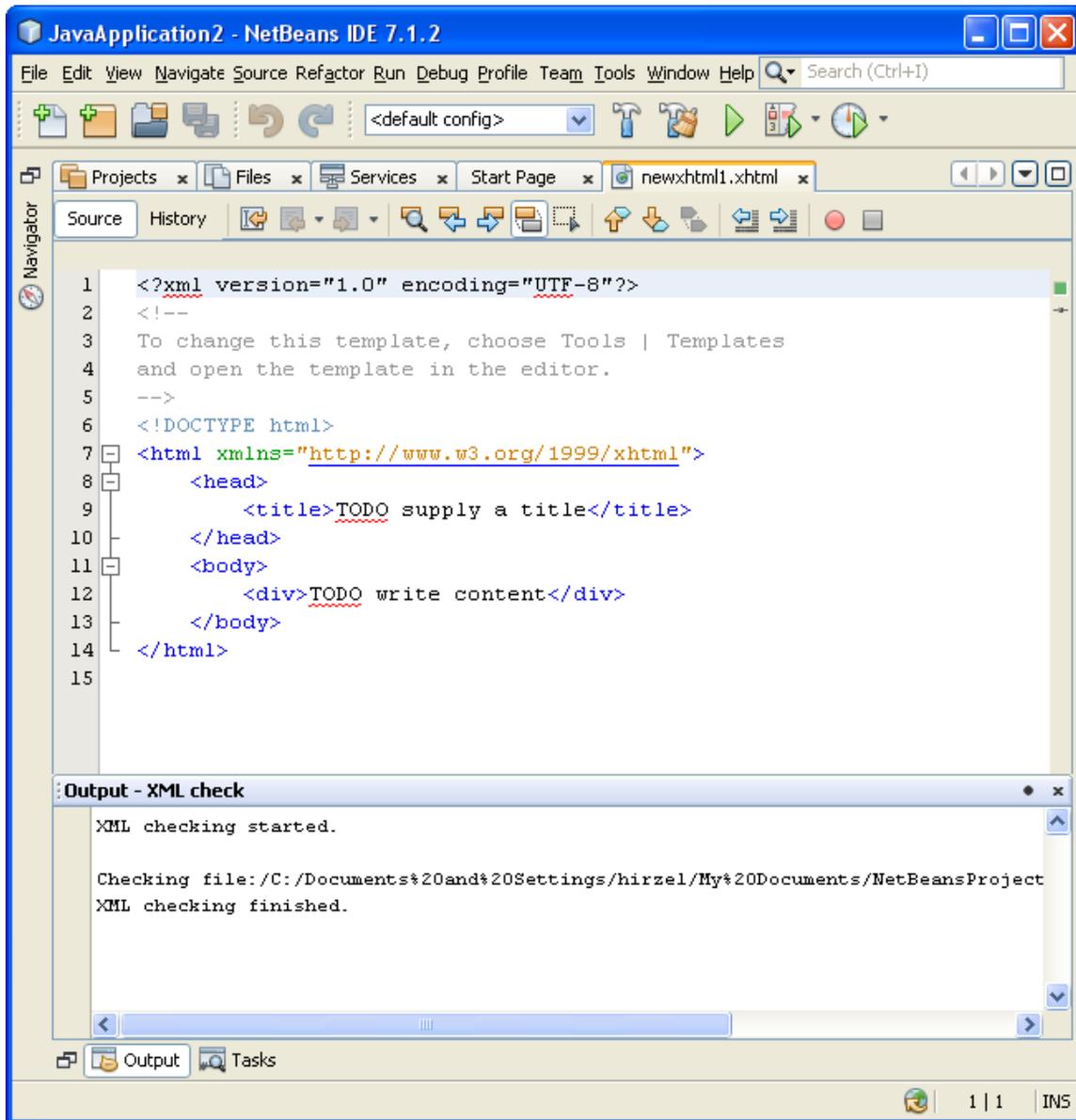


Figure 2: Netbeans's Working Environment

4 Absolutely necessary XHTML Tags

We now discuss each line of the XHTML code shown in Figure 2. Although there are comments associated with lines 2, 3, 4 and 5, they are not the primary focus here.

The "<" and ">" angle brackets, along with the text contained between them are called "tags," e.g. <body> .

- Line 6: `<!DOCTYPE html>` tells the browser what kind of file follows. We will omit a detailed discussion at this point.
- Line 8: `<html>` The `<html` part begins the XHTML "tags," and the remainder of the line, provides information to the browser concerning the "XML Namespace" associated. As with Line 2, namespace discussion is beyond the scope of our work, and both lines 1 and 2 should be taken as "boilerplate."
- Line 9: `<head>`This begins the "head" section of the web document. This section contains material that does not appear in document window of a browser, but generally contains information used by the browser.
- Line 10: `<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />` As with lines 6 and 8, we take this as "boilerplate," generated by Netbeans to make the code XHTML compliant.
- Line 11: `<title>Untitled Document</title>` Text contained between `<title>` and `</title>` tags appears in the title bar of the browser. Our next step will be to change this to something more "meaningful."
- Line 12: `</head>` This ends the head section of the document
- Line 13: `<body>` This begins the "body" section. This is where the material appearing in the browser window is specified.
- Line 17: `</body>` Closing of the body of the document. Since there is nothing between the beginning and the end of the body tags, the browser will show a blank document
- Line 18: `</html>` This final tag closes the XHTML document, as well as closing the `<html>` tag opened in line 8.

NOTE: After Line 1, each tag discussed has an opening, `< ... >`, and a closing `</...>` tag. This is true of all XHTML tags that contain text between their opening and closing, i.e. "non-empty" tags.

The minimal file without the comments

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
    <title>TODO supply a title</title>
  </head>
  <body>
    <p>
      TODO write content
    </p>
  </body>
</html>
```

The minimal file without the comments ready for copy/paste into a plain-text editor.

Figure 3:

Let's now put two paragraphs in the body of our document and change the text between the title tags. As soon as you start typing an "`<`" and then a "`p`" the pop-up window shown in figure Figure 4 shows up. Note that the explanation there actually applies to an HTML file, for an XHTML file the paragraph tag must have a closing tag.

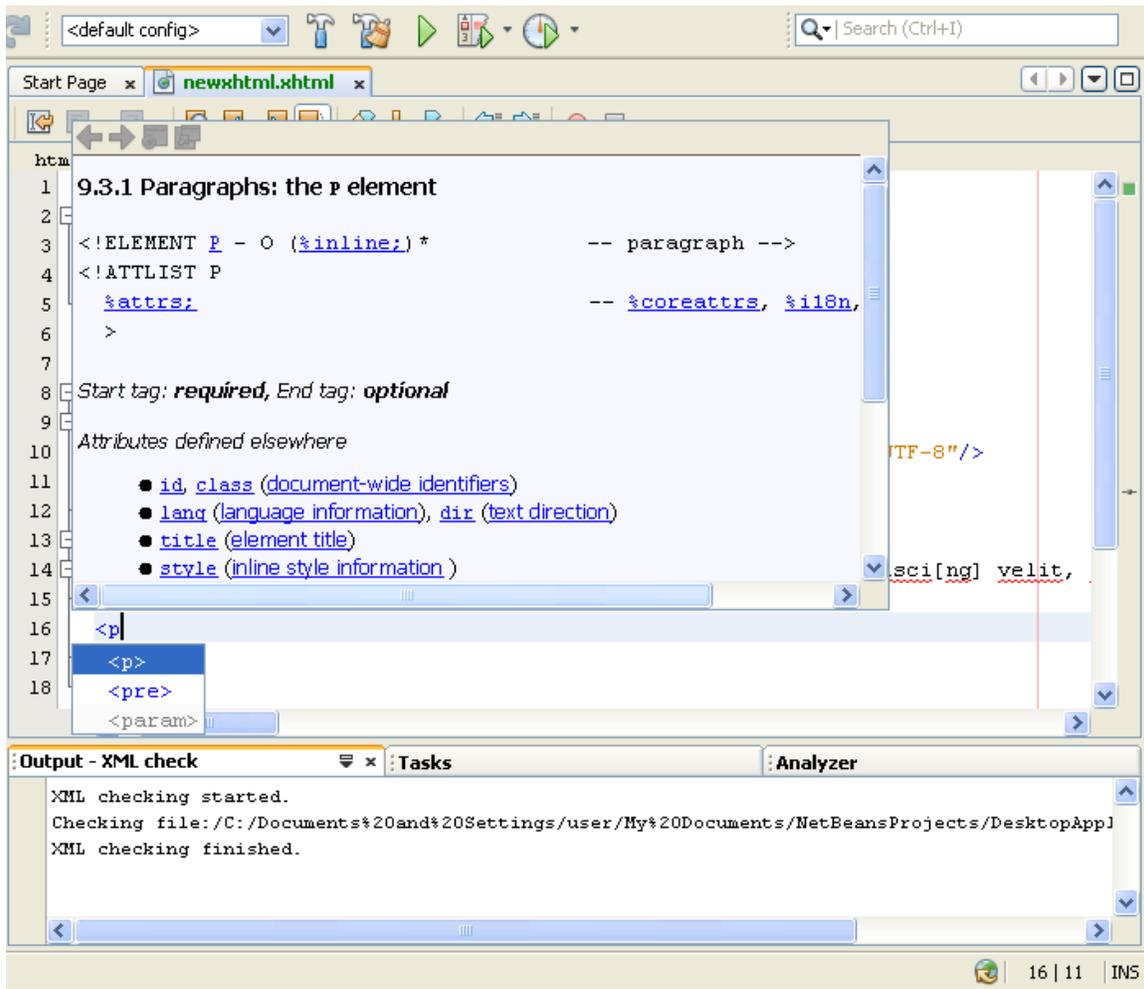


Figure 4: Adding a paragraph tag

Browsers put all text together unless specified otherwise by XHTML code. Blank lines are ignored, and the text is "flowed" to fit the browser window.

Figure 5 shows the insertion of the <p> and </p>, "paragraph," tags at the beginning and end of each of the two paragraph and shows the result in the Firefox browser.

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2 <html xmlns="http://www.w3.org/1999/xhtml">
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
5 <title>Some ipsum.com Text</title>
6 </head>
7 <body>
8
9 <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec ligula dui, facilisis quis, consectetur molestie,
10 eleifend eget, quam. Sed nonummy tempus ligula. Aliquam tempor elit et nisl.</p>
11
12 <p>Duis et mi. Maecenas porta, nisi at pellentesque volutpat, massa ligula ornare purus, non pharetra sem turpis et velit.
13 Ut neque magna, auctor sit amet, commodo nec, adipiscing sed, ligula.</p>
14 </body>
15 </html>
```

Figure 5: Adding `<p>` and `</p>` to each Paragraph

demo3.html¹ shows the file constructed thus far. Recall, View/Page Source (in the Firefox browser) will show the XHTML code.

Figure 6 shows how a main title `<h1>` (level 1 heading) is added. In the same way `<h2>` and `<h3>` could be used to add subheadings.

¹See the file at <http://cnx.org/content/m37275/latest/demo3.html>

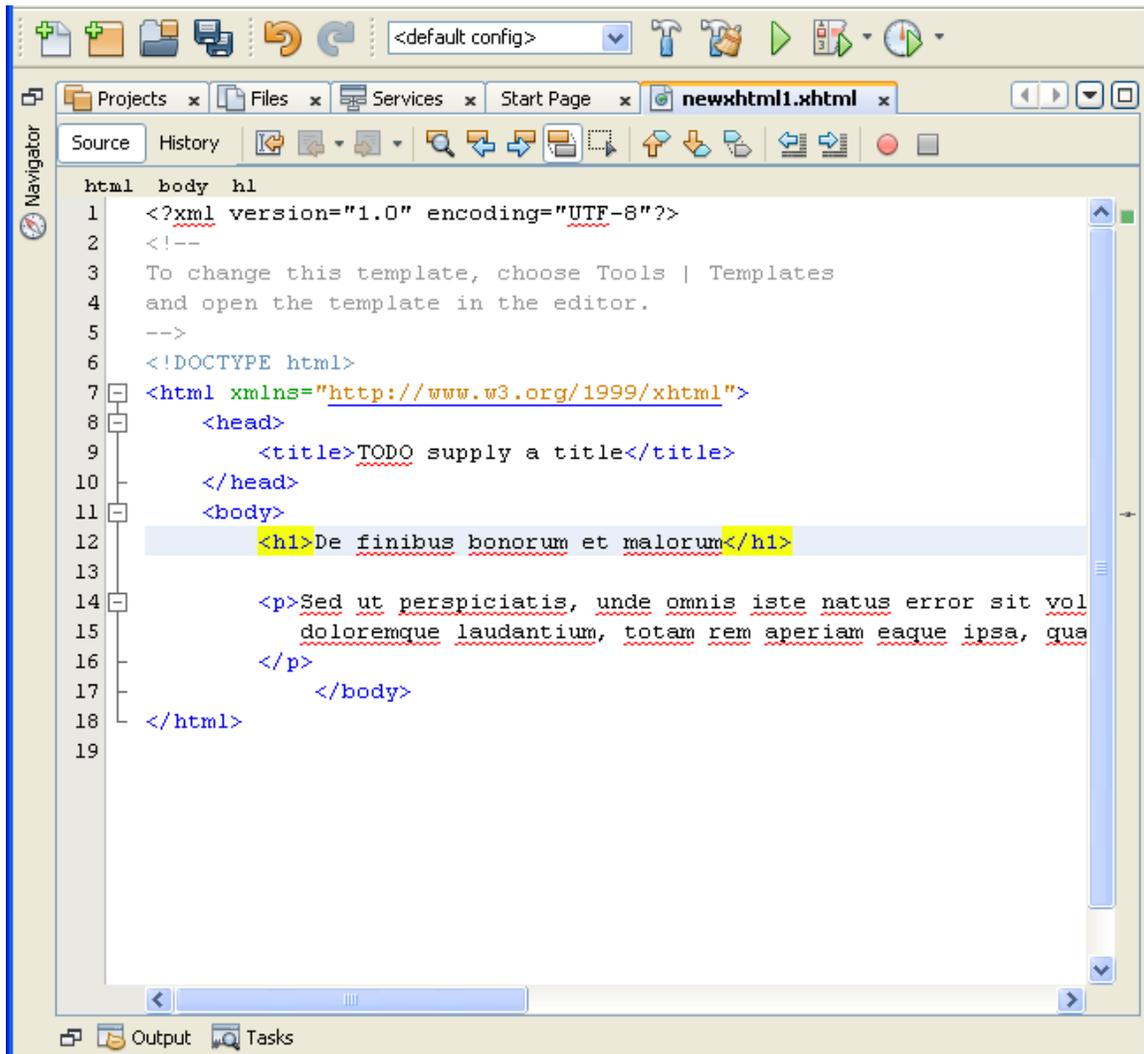
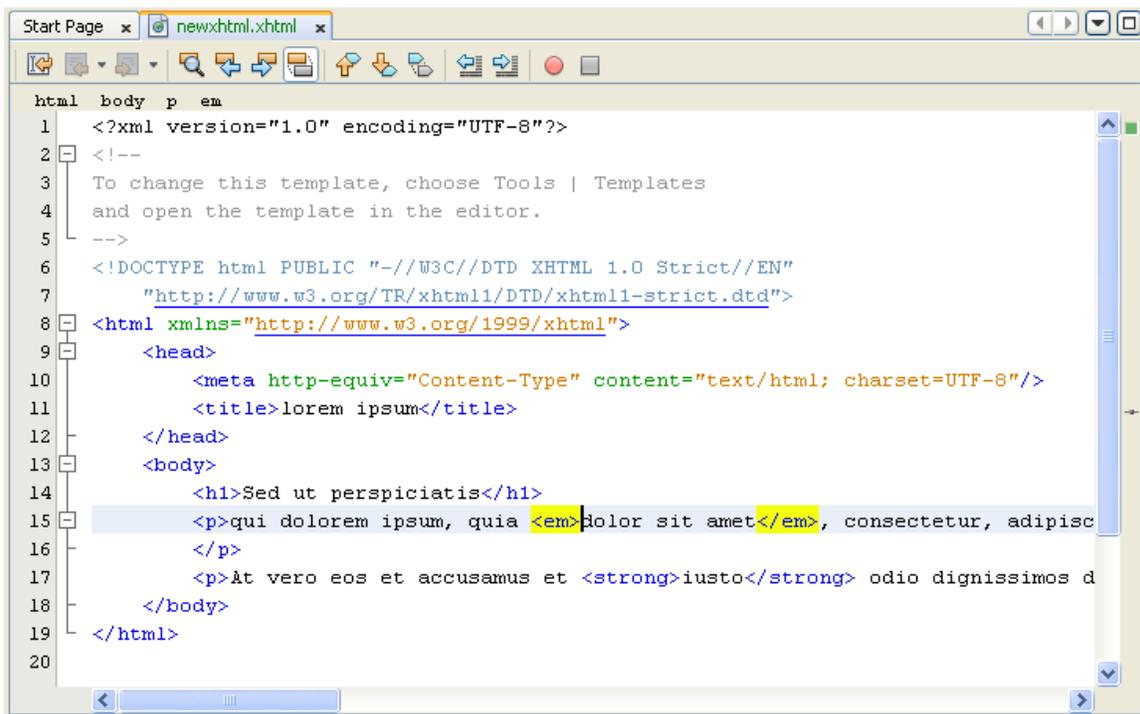


Figure 6: Adding a h1 title tag

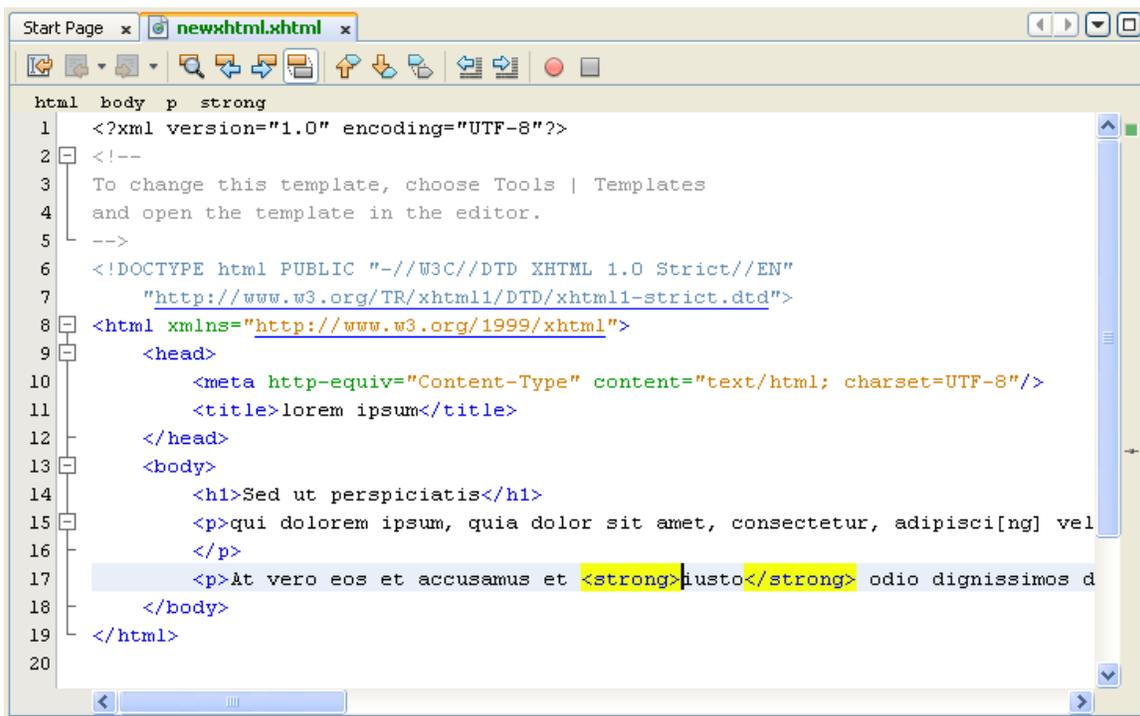
5 The and Tags

We will conclude this section by discussing two more XHTML tags for "emphasizing" certain segments of text. These are the and tags. To distinguish between the two, Andrew (p. 66) suggests the following: "Think of as a loud, slow voice, and and as a raised tone of voice."



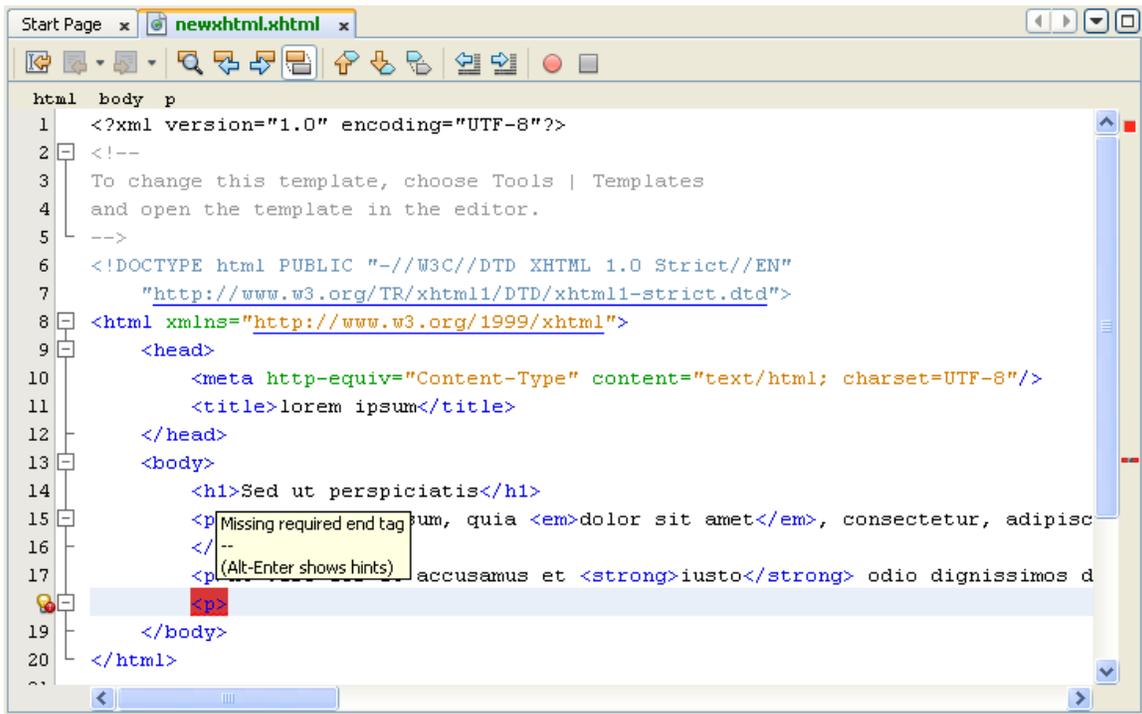
```
html body p em
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!--
3 To change this template, choose Tools | Templates
4 and open the template in the editor.
5 -->
6 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
7 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
8 <html xmlns="http://www.w3.org/1999/xhtml">
9 <head>
10 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
11 <title>lorem ipsum</title>
12 </head>
13 <body>
14 <h1>Sed ut perspiciatis</h1>
15 <p>qui dolorem ipsum, quia <em>dolor sit amet</em>, consectetur, adipisc
16 </p>
17 <p>At vero eos et accusamus et <strong>iusto</strong> odio dignissimos d
18 </body>
19 </html>
20
```

Figure 7: Adding an emphasis tag



```
html body p strong
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!--
3 To change this template, choose Tools | Templates
4 and open the template in the editor.
5 -->
6 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
7 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
8 <html xmlns="http://www.w3.org/1999/xhtml">
9 <head>
10 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
11 <title>lorem ipsum</title>
12 </head>
13 <body>
14 <h1>Sed ut perspiciatis</h1>
15 <p>qui dolorem ipsum, quia dolor sit amet, consectetur, adipisci[ng] vel
16 </p>
17 <p>At vero eos et accusamus et <strong>justo</strong> odio dignissimos d
18 </body>
19 </html>
20
```

Figure 8: Adding a "strong" tag



```
html body p
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!--
3 To change this template, choose Tools | Templates
4 and open the template in the editor.
5 -->
6 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
7 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
8 <html xmlns="http://www.w3.org/1999/xhtml">
9 <head>
10 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
11 <title>lorem ipsum</title>
12 </head>
13 <body>
14 <h1>Sed ut perspiciatis</h1>
15 <p>Missing required end tag: p, quia <em>dolor sit amet</em>, consectetur, adipisc
16 </p>
17 <p>(Alt-Enter shows hints) accusamus et <strong>iusto</strong> odio dignissimos d
18 </p>
19 </body>
20 </html>
```

Figure 9: Netbeans displays syntax errors during editing

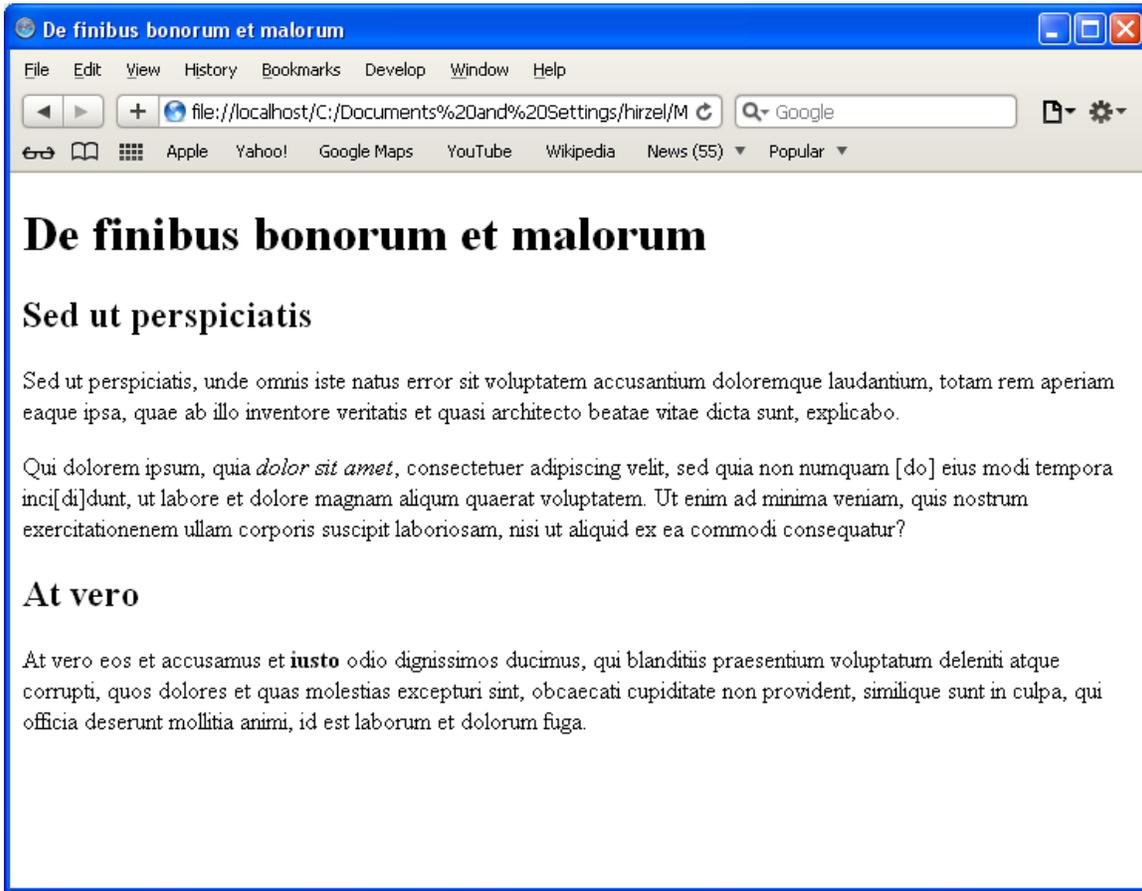


Figure 10: Display in the Safari 4 web browser

Recall, View/Page Source in the web browser will show the XHTML code.

6 Summary

Table 1 shows the 12 tags which were introduced in this module.

| tag | description |
|---------|--|
| DOCTYPE | Information which tells the browser how to interpret the file |
| html | document root element of the html file |
| head | head part of the html file |
| meta | Additional information for the browser how to interpret the file |
| title | title to be given to the web page in the browser window bar |
| body | head part of the html file |
| h1 | First level title |
| h2 | Second level title |
| h3 | Third level title |
| p | paragraph |
| strong | mostly rendered as bold text |
| em | emphasized, mostly rendered as italic text |

Table 1

Full example code

```

<?xml version="1.0" encoding="UTF-8"?>
  <!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
<title>De finibus bonorum et malorum</title>
</head>
<body>
<h1>De finibus bonorum et malorum</h1>

<h2>Sed ut perspiciatis</h2>

<p>Sed ut perspiciatis, unde omnis iste natus error sit voluptatem accusantium
doloremque laudantium, totam rem aperiam eaque ipsa, quae ab illo inventore veritatis
et quasi architecto beatae vitae dicta sunt, explicabo.

</p>

<p>Qui dolorem ipsum, quia <em>dolor sit amet</em>, consectetur
adipiscing velit, sed quia non numquam [do] eius modi tempora inci[di]dunt, ut
et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostris
exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi
consequatur?

</p>

<h2>At vero</h2>

<p>At vero eos et accusamus et <strong>iusto</strong> odio

```

dignissimos ducimus, qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint, obcaecati cupiditate non provident, similique sunt in culpa, qui officia deserunt mollitia animi, id est laborum et fugiat.

</p>

</body>

</html>

7 Notes

File extension

A file which is in the local files system needs to have the extension ".xhtml", otherwise the web browser will interpret it as HTML not as XHTML. The file extension might be as well ".xml".

Code for XHTML check

A code snippet to insert into your XHTML file to have a check if the browser really interprets it as an XHTML file ` If it's red, it's HTML. Green is XHTML.`. Source: test for XHTML on stackoverflow²

Netbeans 7.0

Netbeans 7.0 supports HTML5³ besides XHTML. The screenshots of Figure 2 and 3 have been made with Netbeans 7.1.2. The other screen shots of this module are still from Netbeans 6.9 which did not support XHTML5.

Other (X)HTML editors

List of (X)HTML editors⁴

²<http://stackoverflow.com/questions/97522/what-are-all-the-valid-self-closing-tags-in-xhtml-as-implemented-by-the-major-br>

³<http://cnx.org/content/m41186/latest/>

⁴<http://webdesign.about.com/od/windowshtmleditors/tp/free-windows-editors.htm>