## Use of Cascading Style Sheets (CSS) with HTML and XML Files

**Step 1.** Open <a href="http://www.csis.ul.ie/coursemodule/CS4146/?wkid=3">http://www.csis.ul.ie/coursemodule/CS4146/?wkid=3</a> and download the file **lab02files.zip**. Unzip **lab02files.zip**. You should have the following four files:

- lab02.html
- lab02.xml
- lab02html.css
- lab02xml.css

Step 2. Open lab02.html in a Web browser. You should see the following screen

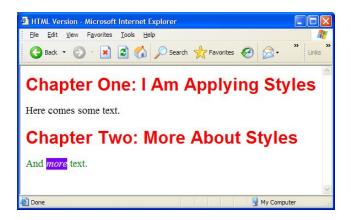


Step 3. Now open lab02.html in Notepad. Our first goal is to link lab02.html to the stylesheet lab02html.css. To do this we need to insert the line

<link rel="stylesheet" type="text/css" href="lab02hml.css">

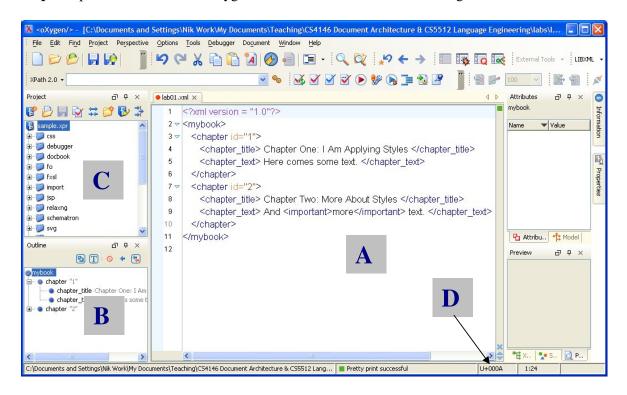
into the **head** element of **lab02**.html (after the title element).

**Step 4.** Now refresh **lab02.html** in your browser. You should see the following window (the headings in red and the second paragraph in green).



**Step 5.** The second goal of this exercise is to demonstrate how XML files can be used instead of HTML files for creating Web pages. We will use the XML Editor Oxygen 7.0.

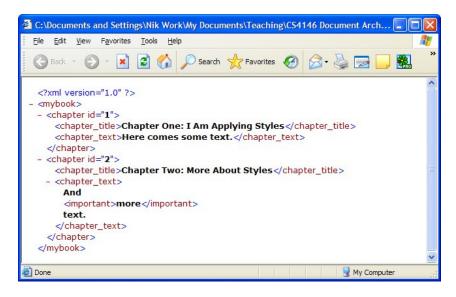
Step 6. Open lab02.xml in Oxygen 7.0. You should see the following.



Take your time to check out some features of Oxygen.

- You can increase or decrease the font size from the Document menu. Document→Font size
- Window A contains the file that you have opened, i.e. lab02.xml.
- Window B contains a tree view of the XML document.
- Window C contains some example XML project. You can close it by clicking on the x button above it.
- Note that field D in the status bar shows the 16-bit code (Unicode) of the character which is right after the cursor in the main window A.

Step 7. Open lab02.xml with Internet Explorer as well. Do it by clicking with the right-button mouse on lab02.xml and choosing to open it with Internet Explorer. You should see the following window.

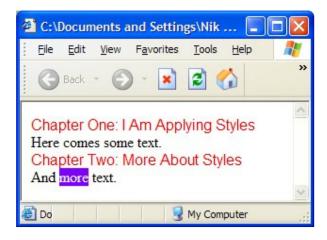


Step 8. Now we will link lab02.xml to the stylesheet lab02xml.css in order to change the way Internet Explorer display lab02.xml. (We will edit lab02.xml in Oxygen.) To link the XML file to the stylesheet we need to insert the following processing instruction

<?xml-stylesheet type="text/css" href="lab02xml.css"?>

after the xml declaration in lab02.xml, i.e. as a second line.

**Step 9.** Save **lab02.xml** in Oxygen and then refresh it in Internet Explorer. The result should look like



- Step 10. Now open the two stylesheets lab02html.css and lab02xml.css in Oxygen and compare them. Find the meaning of the properties used in the stylesheets by browsing the list of properties in the specification of CSS 2.1 at <a href="http://www.w3.org/TR/CSS21/propidx.html">http://www.w3.org/TR/CSS21/propidx.html</a>.
- **Step 11.** Can you apply "mystyle" to the subelement **chapter\_text** of the second **chapter** element in **lab02.xml**?
- **Step 12.** (**Optional**) You can learn more about the cascading stylesheets (CSS) from the following tutorials on the Web.
  - Beginners: http://www.w3.org/MarkUp/Guide/Style
  - Advanced: http://www.webreference.com/authoring/style/sheets/layout/advanced/