CSCU9N5 WWW Testing - self-evaluation

How do you test your web pages? This self-evaluation sheet covers the basic requirements.

Testing via the CS Web Server
Part of good HCI is testing. Designs must always be tested. Dreamweaver provides a WYSIWYG document window, also a preview facility, but it is still important to test your web files in position where a functioning web server can get at them. To test your pages properly on a web server, follow the instructions below on "Publishing Your Web Pages".

Although the pages will probably look the same whether you have looked at them locally as a file or downloaded them from a web server, this behaviour would change if you added executable content to your pages such as PHP. A web server is required to execute the PHP and a page that contained the PHP is unlikely to render correctly if opened as a local file.

Accessibility Testing – W3C
W3C have a very simple preliminary review of accessibility available at:

http://www.w3.org/WAI/eval/preliminary.html

Essentially, this scheme is:

1. Select a representative page sample
2. Examine pages using different graphical browsers
3. Where possible, examine pages using specialized browsers (e.g. Screen readers)
4. Use automated accessibility evaluation tools
5. Summarize obtained results

We will go through some of these processes to check that your web pages work correctly and are compliant with web standards.

Select a representative page sample – probably the home page**.**

Examine pages using graphical browsers
Try various settings in your usual browser to check your page is still functional when you:

- resize the application window to check scrolling
- zoom in and out on the page
- use browser controls to vary font-size, formatting, screen colours (if possible)
- change the display color to gray scale, or print out page in gray scale or black and white, and observe whether the color contrast is adequate.
- use the keyboard to navigate through the links and controls on a page.

Test your web pages in different (graphical) browsers, so if you develop in Firefox, test in Chrome, Safari, Explorer, Opera, etc.

Colour Blindness Testing
To check how someone who is colour blind might see your web site, use one of the several tools available to try out different colour choices, e.g. color wheel at http://gmazzocato.altervista.org/colorwheel/wheel.php. Be sure to try out a red/green combination and note what happens for Deuteranope and Protanope colour deficiencies.

Use automated Web accessibility evaluation tools
The WAVE tool at wave.webaim.org gives a graphical report, combining features of W3C guidelines and Section 508 Guidelines.

- *Go to the WAVE tool at wave.webaim.org.*
- *Test your page. Be sure to try the different tools (No Styles, Contrast) and where possible, fix any errors you find. Revalidate to check that you have correctly fixed them.*
- *Test another web page (e.g. Amazon, University page, etc).*

For a list of other tools that enable you to check your site for accessibility see:
- www.w3.org/WAI/ER/tools/Overview.html

Validation
You should also validate your web pages using the W3C validator at validator.w3.org, to make sure the HTML is correct.

Summarise Results
How did your web site fare?

Publishing Your Web Pages

Publishing your web pages involves two things:

1. Putting your files where a web server can read them
2. Making sure the file permissions are set to world-readable

Choosing Sensible Filenames

In order to avoid problems with filenames as much as possible, follow these guidelines:

- Don't use spaces in filenames. Use underscores instead: e.g. 'my_file.html' not 'my file.html'
- Don't use other special characters either, like colons, slashes, full stops and apostrophes.
- Use lower case. While some web servers don't care about capital letters, most will. The file image34.gif is not the same as Image34.gif.

Putting Files in the Right Place

All web files (HTML files, plus any others required, like images, applets etc.) that you need, must be placed inside a folder called **www** in your home folder on the H: drive. This puts your files on the *Computing Science* web server, not the *University* web server.

1. Navigate (via the H: drive) to your home folder.
2. If there isn't a **www** folder already, create one.
3. Copy your documents (HTML files **and** images, etc.) into this folder.

Viewing in a Browser

As you should have seen above, e.g. if your username is *xyz* and your file is called test.html, the URL for it will be as follows:

http://www.cs.stir.ac.uk/~xyz/test.html

If you have created a site folder within the **www** folder, for example *n5*, then your URL will be:

http://www.cs.stir.ac.uk/~xyz/n5/test.html

File Permissions

If your web browser reports that it does not have permission to view the files or produces a phrase like 'Access Denied' then you will need to change your file permissions to make them world readable. If you need to change file permissions, follow the instructions on:

http://www.cs.stir.ac.uk/local/adm/wwwper.html