Why Bother to Validate?

Why does valid code matter? Many designers and developers do not understand the importance of valid HTML code. The Quality Assurance Interest group of the World Wide Web Consortium (W3C) estimates that 99% of Web pages contain some invalid HTML code[1]. Independent studies have suggested that as little as .007% of all web pages are written to a valid HTML standard[2]. If so little time is spent on meeting the standard then why bother to have a standard at all?

A number of aspects of this issue must be investigated to understand the problem. The first is that the majority of web pages are poorly constructed by individuals who have little formal training. The web page may (or may not) look good but function poorly. As you will discover in your design pattern research assignment it is difficult to find quality examples that meet recognized design and development parameters. Most of these errors are easy to repair and will have little impact on the look and feel of the website. These common errors include[3]:

- No Document Type Definition (DTD) declaration
- Missing required attributes of the tag
- Non-standard attribute of the tag
- Omitted end tag or end tag mismatch
- Improperly nesting tags
- Spelling, spelling, spelling then cut and pastes half of what's needed!

At first glance these errors look pretty benign but invalid HTML code is the root cause of many browser display problems and accessibility issues. Each of the different browsers will handle different code failures in different ways. For example; Internet Explorer 9 "may ignore a problem like a missing closing <TABLE> tag, a mobile browser ignores the entire table and all its contents." This will change the total display of the web site. There is also a high degree of failure if you are using technology to read aloud the website or parse the website into a different language. Missing or non standard attributes are not understood by the conversion software.

One of the most common excuses I hear is "it looks fine in Firefox!" or "it looks great on my laptop" Each browser will render the code in a different manner. Web designers/developers must understand that a majority of users will be using Chrome or Internet Explorer on a desk top. Usage statistics on Web Browsers is collected monthly from the routers that service the Internet by the "StatCounter"

Poorly written code can also affect the page ranking completed by a search engine. “Search engines that utilize “spiders” are basic text browsers, while an advanced browser like Internet Explorer 10 or Chrome may not care if you forget to close some quotation marks inside a tag, a search engine spider does!”

The single biggest contributor to the cause of these mistakes is the reliance of the web developer on Graphic User Interface web design tools like Adobe’s Dreamweaver and Microsoft’s Expressions. These tools do not adhere to Web Standards unless they are specifically configured to do so. This results in a large proportion of these users of these tools inadvertently creating havoc because they have little formal understanding of how the World Wide Web works. To meet the challenge of the standards involved in the smooth transition of new technologies and the inclusion of varied technologies into a heterogeneous environment requires the skills of a knowledgeable web designer or developer. Poorly written code or code created by a poorly written template is a significant contributing factor to the lack of valid code on the Internet today. Ensuring that designers and developers understand the importance of valid HTML code should solve these issues.

HTML Validator: http://validator.w3.org/

CSS Validator: http://jigsaw.w3.org/css-validator/

References:

1. Karl Dubost (2002-04-08). “My Web site is standard! And yours?”. “, Retrieved April 25, 2008 from W3C Quality Assurance website: http://www.w3.org/QA/2002/04/Web-Quality

2. Dagfinn Parness (2001-12-04). “How to cope with incorrect HTML “, Retrieved April 25, 2008 from University of Bergin website: http://www.ub.uib.no/elpub/2001/h/413001/Hovedoppgave.pdf

3. Larisa Thomason (2003-12-01). “Why Valid Code Matters”. Retrieved April 25, 2008 from Keynote Net Mechanic website: http://www.netmechanic.com/news/vol6/html_no20.htm

4. Unknown (2008-01-01). “The Affordable Web Site Analysis Tool”. Retrieved April 25, 2008 from The Counter website: http://www.thecounter.com/stats/