

98-130

TECHNIQUES FOR WEB INTERFACES

LESSON 8: "USEFUL PROGRAMS, TOOLS, AND PLUGINS"

Here's a quick summary of five useful tools. If you have any questions about how to use any of them, feel free to talk to me.

FIREBUG Firebug is a plugin for Firefox. We'll do a demo of Firebug after class; if you can't make it, I encourage you to come to office hours so I can give you a five-minute overview of why it'll improve your life immensely.

Firebug includes:

- **Performance tools** that show which parts of your page load at what times and how long they take.
- **HTML/CSS tools** that allow you to change your stylesheets on the fly and immediately see the effects. Also, you have the ability to 'inspect' any element and immediately see all the styles that apply to it. This is very handy for inheritance; on a complex site, inherited styles may interfere with the styles that you're expecting, so it can be very confusing. Firebug makes these conflicts immediately clear.
- A plethora of **Javascript debugging features** that I won't get into; it's a *very* powerful debugging tool for Javascript purposes.

<http://getfirebug.com/>

YSlow YSlow is a plugin for Firebug (yes, a plugin for a plugin) developed by Yahoo. It runs a diagnosis on your page and evaluates how well you follow some of Yahoo's performance guidelines (linked to and explained in class). Then it'll give you a big letter grade written in crayon and send you off to recess.

Keep in mind that something below an A isn't necessarily bad. Be intelligent about it and keep in mind that Yahoo's guidelines were written for, well, Yahoo. For example, for those who don't need to worry about scaling to millions of users, a CDN is rarely practical, yet YSlow rates it very highly in your 'grade.'

<http://developer.yahoo.com/yslow/>

JSLINT JSLint is special for you Javascript developers.

Douglas Crockford, an engineer at Yahoo who developed the JSON data format, wrote a pretty good book called *Javascript: The Good Parts*. It outlines what Crockford considers to be the really good and really bad ideas of the Javascript programming language... and Javascript is pretty special because it includes an unhealthy amount of the latter (though it can be a great tool in the right hands).

JSLint scans through your Javascript code and judges you, with its nose high up in the air the whole time. It then gives you stylistic suggestions on how to improve your Javascript.

<http://www.jshint.com/>

IETESTER IETester provides an easy way to test your site on multiple versions of Internet Explorer. IE6 still has a huge market share, and is very different from IE7, which has a large market share, and IE8, which (you guessed it) has a large market share. So you can't really just test one of these browsers and say "cool, it works on IE so-and-so-version so we're good." However, you can't easily install multiple versions of IE on the same computer either (usually in order to do this you have to have multiple virtual machines around and use a product like VMWare).

This allows you to just open, say, an "IE5.5" tab and see a simulated view of your site as IE5.5 would render it. It's really, really, incredibly useful, but keep in mind that it's only a simulation... so when in doubt, actually check it out using a real version of IE.

<http://www.my-debugbar.com/wiki/IETester/HomePage>

HTML/CSS VALIDATION The W3C provides online validation tools for your HTML and CSS.

These tools will parse your HTML/CSS and tell you what's valid and what's invalid. In my experience, the HTML validator is far more valuable and can actually be a good educational tool; it takes a look at the doctype you're using and will alert you to typos and invalid HTML. Personally, I'd run every site you create through this validator.

The CSS validator is handy too, but keep in mind that it's very limited in intelligence, and some of the more useful cutting-edge CSS properties (like the proprietary `-moz` and `-webkit` properties that we'll talk about in our very last lecture) are technically invalid CSS.

<http://validator.w3.org/>
<http://jigsaw.w3.org/css-validator/>