

# Watch this: help for sick pages

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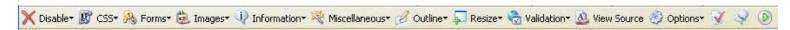
### Heal your sick Webpages!

*The Web writer's problem:* Your Webpage is bloated and slow to load, your JavaScript is buggy, your floated images are out of control, etc.

*The Web reader's problem:* You download a Webpage and wish you could view it without the images, show all the link code, examine its stylesheet, etc.

Solution: The extensions for the new Mozilla Firefox Web browser can help both Web writers and readers.

I have extended my version of Firefox to arm myself with these tools: "Disable" to "Options" are Web Developer tools, is the Standards Compliance mode, and is the JavaScript Console.



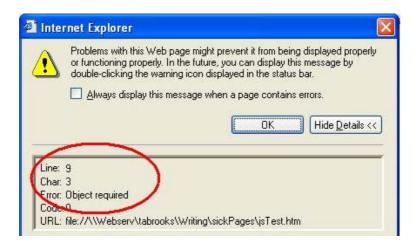
Welcome back to the browser wars! I just switched to Mozilla Firefox. The <u>Firefox</u> Web browser exemplifies the advantage of open-source development where many different people can contribute many different extensions to satisfy many different needs. My needs as a Web writer are being met by the Web Developer extension written by <u>Chris Pederick</u>, and the JavaScript Console Status written by <u>Michael O'Rourke</u>.

#### Show me an example of how it helps you!

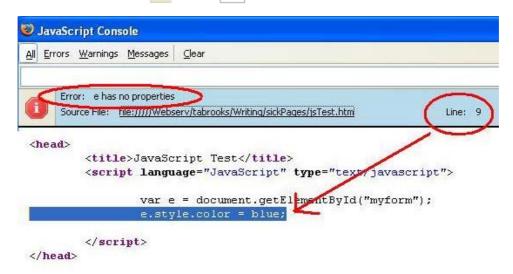
I can decode my buggy JavaScript Javascript is one of the most common client-side Web technologies. It is fundamental to the development of interactive Web pages. Image roll-overs, clickable buttons and form entry validation are common applications. You can even make things fly across your Webpage or build image billboards for the timed display of pictures. But if you're writing Javascript for a Webpage, then your development environment is your Web browser, and debugging JavaScript is often black magic (on a good day) or impossible (on a bad day):

While exploring JavaScript, you'll probably write code that doesn't work as you expect it to and want to debug it. The basic debugging technique for JavaScript is like that in many other languages: insert statements into your code to print out the values of relevant variables so that you can try to figure out what is actually happening. David Flanagan, **JavaScript: The Definitive Guide** O'Reilly, 2002 p.19

Ouch! I have been frustrated for years with cryptic error messages:



The JavaScript Console Status tool gives you more detailed and visual diagnostics, not only telling you what the problem is but also showing you where the error occurred. This is really helpful when you're debugging a JavaScript hundreds of lines long. You know that you have a JavaScript error, when the icon turns to



## Slim your bloated Webpages



I can evaluate the download speed of my Webpage More and more I find myself teaching distance education courses via the Web. While I enjoy high-speed cable connections, some of my students no doubt would be thankful for a 56k modem, while others are hobbled with even less powerful technology. I can run a diagnostic on my Web page to optimize download. Consider the work of art that I wrote at <a href="http://www.ischool.washington.edu/tabrooks/320/2003Revision/syllabus.htm">http://www.ischool.washington.edu/tabrooks/320/2003Revision/syllabus.htm</a>.

The following Speed Report diagnostic tells me I've created a fat page that will be slow to load:

# **Analysis and Recommendations**

- TOTAL\_OBJECTS Congratulations, the total objects on this page (including the HTML) is 4 which most browsers can multithread. Minimizing HTTP requests is key for web site optimization.
- TOTAL\_IMAGES Congratulations, the total number of images on this page is 3. Most browsers can send multiple requests, which can speed display of multiple images.
- load in over 8 seconds on a 56Kbps modem or 6.21 seconds. Consider reducing total page size to less than 30K to achieve sub eight second response times on 56K connections. Be sure to provide feedback for pages over 30K by layering your design to display useful content within the first two seconds. Consider optimizing your site with <u>Speed Up Your Site</u> or contacting us about our optimization services.
- HTML\_SIZE Congratulations, the total size of this HTML file is 2234 bytes, which less than 20K. Assuming that you specify the HEIGHT and WIDTH of your images, this size allows your page to display content in well under 8 seconds, the average time users are willing to wait for a page to display without feedback.
- MAGES SIZE Caution. The total size of all your images is 2894s bytes, which exceeds 15K. Consider optimizing and creatively cropping your images, and combining them where appropriate. Even better, replace graphic text and form controls with styled text to eliminate unnecessary HTTP requests. Ideally each image should be less than 1160 bytes, to easily fit into one TCP-IP packet.
- MULTIM\_SIZE Congratulations, the total size of all your external multimedia files is 0 bytes, which is less than 4K.

#### Other tools

#### **Image tools**



You want to harvest images from a Webpage? "Display Image Paths" will show you where an image is located. "Hide Images" will produce a text-only display. There are several tools to outline images. This is very useful for understanding how much of the Webpage presentation is image or text.

Check the validity of your HTML code Shame on me!

# THIS PAGE IS NOT VALID HTML 4.01 TRANSITIONAL!

Below are the results of attempting to parse this document with an SGML parser.

1. Line 21, column 38: required attribute "ALT" not specified

<img src="gardener.jpg" align="right">

I'm a good example of a sloppy hacker who writes undisciplined HTML code. That's ok if I never work for hire or otherwise have to share my code. Your employer, however, might demand HTML of a certain reliability and standard. You can validate CSS, HTML, Links and more.

### **Postscript**

The Firefox browser is a customizable tool with new extensions being added all the time. It illustrates the evolution of the Web

browser towards a toolbox that the Web surfer can use to negotiate the interactive reading surfaces known as Webpages. By the way, this Web page received warnings for too many objects, too many images, total size, total image size, total CSS size and I'm warned that it will load in about 55 seconds on a 56k modem. Ouch!

#### **Useful links**

- <u>Download Mozilla FireFox</u> at http://www.mozilla.org/products/firefox/
- Firefox extensions at https://addons.update.mozilla.org/extensions/
- Web Developer extension documentation at http://www.chrispederick.com/work/firefox/Webdeveloper/documentation/
- JavaScript Console Status at http://www.cosmicat.com/extensions/scriptstatus/

#### How to cite this paper:

Brooks, T.A. (2005) "Watch this: help for sick pages" *Information Research*, **10**(2) TB0501.html [Available at http://InformationR.net/ir/10-2/TB0501.html]

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