graded browser support & progressive enhancement

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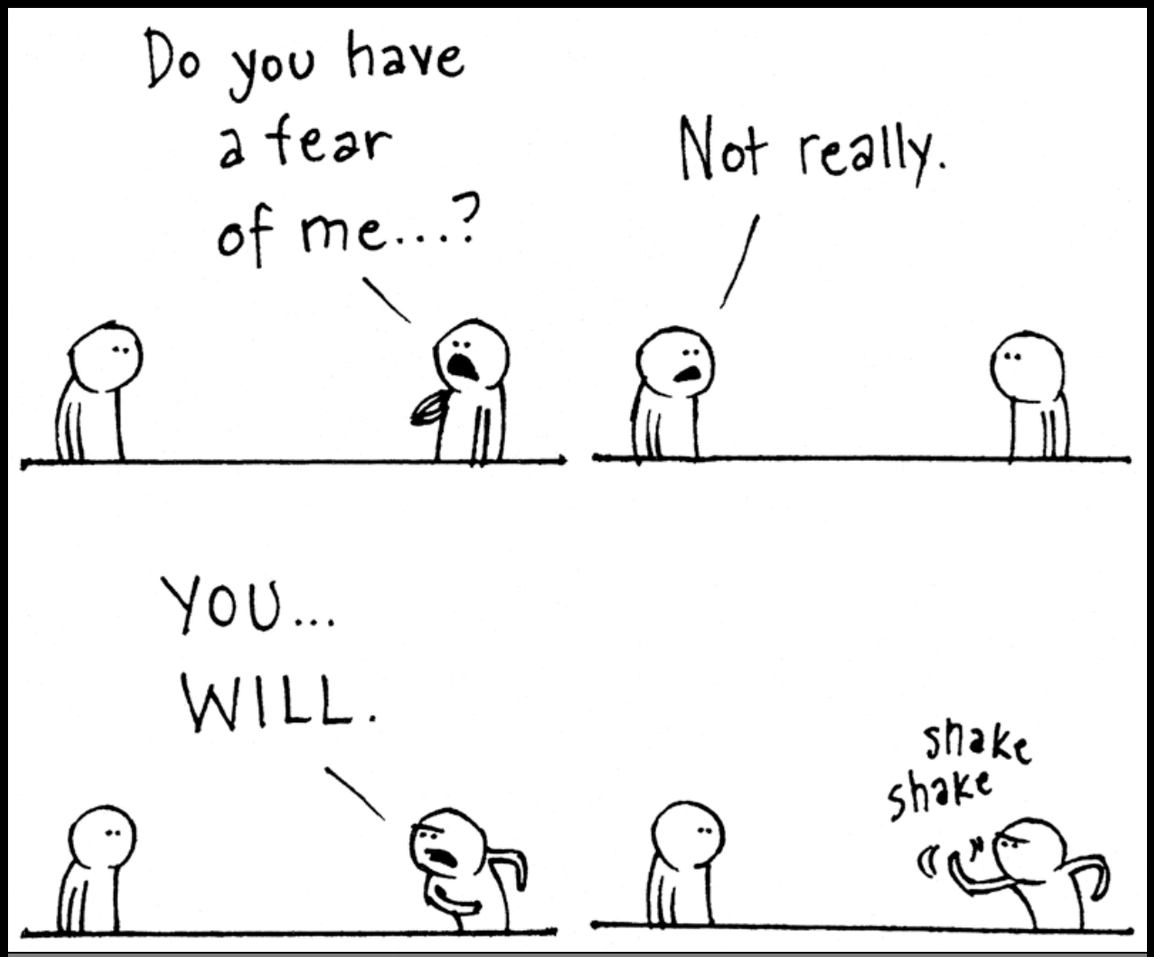
http://cackhanded.net/presentations/fling07

who am I?

I apologise for this. It amused me at the time.

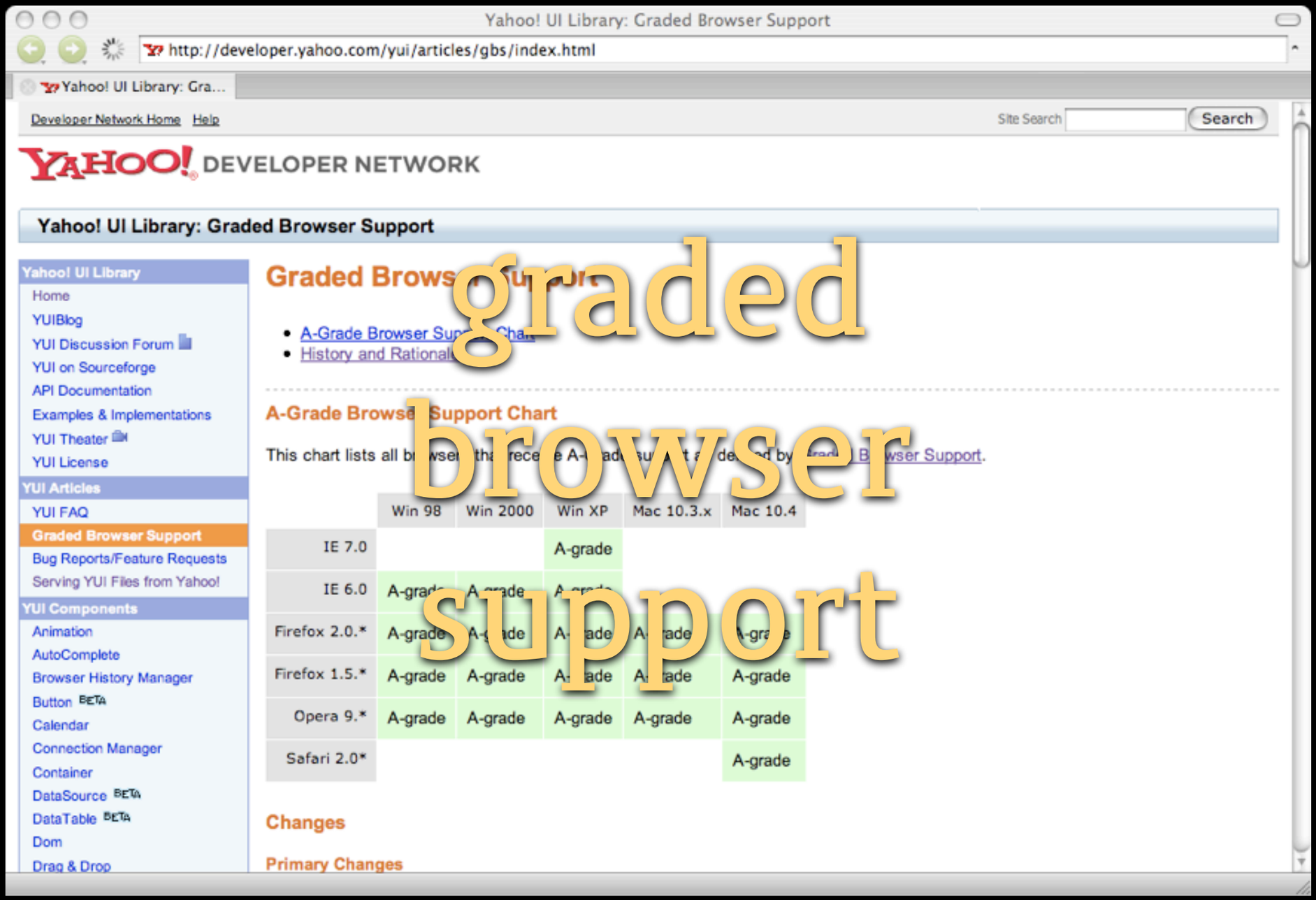
I'd like to look explain one of these things in a little bit more detail.



code reviews

One of the things I do at work is run code reviews. In brief this is a stage before formal Q.A. testing in which other members of the Web Development team and sometimes the back-end Engineering team go through code, templates and the CMS structure to look for common gotchas and optimisations. I call it “collective wisdom”.

This is why I am going to tell you about GBS and point out all of the ways that Yahoo! doesn’t follow it’s own rules. Never mind, eh?


Yahoo! UI Library: Graded Browser Support
http://developer.yahoo.com/yui/articles/gbs/index.html
Yahoo! UI Library: Gra...
Developer Network Home
Help
Site Search
Search
YAHOO! DEVELOPER NETWORK
Yahoo! UI Library: Graded Browser Support
Yahoo! UI Library
Home
YUIBlog
YUI Discussion Forum
YUI on Sourceforge
API Documentation
Examples & Implementations
YUI Theater
YUI License
YUI Articles
YUI FAQ
Graded Browser Support
Bug Reports/Feature Requests
Serving YUI Files from Yahoo!
YUI Components
Animation
AutoComplete
Browser History Manager
Button BETA
Calendar
Connection Manager
Container
DataSource BETA
DataTable BETA
Dom
Drag & Drop
Graded Browser Support
A-Grade Browser Support Chart
History and Rationale
A-Grade Browser Support Chart
This chart lists all browsers that receive A-grade support and are graded by Graded Browser Support.
Win 98
Win 2000
Win XP
Mac 10.3.x
Mac 10.4
IE 7.0
A-grade
IE 6.0
Firefox 2.0.*
Firefox 1.5.*
A-grade
Opera 9.*
A-grade
Safari 2.0*
A-grade
Changes
Primary Changes
graded
browser
support

“Support does not mean that everybody gets the same thing.

“Support does not mean that everybody gets the same thing. Expecting two users using different browser software to have an identical experience fails to embrace or acknowledge the heterogeneous essence of the Web. In fact, requiring the same experience for all users creates a barrier to participation.”

“Availability and accessibility of content should be our key priority.

“An appropriate support strategy allows every user to consume as much visual and interactive richness as their environment can support.”

“Consider television. At the core: TV distributes information. A hand-cranked emergency radio is capable of receiving television audio transmissions. It would be counter-productive to prevent access to this content, even though it’s a fringe experience.

Some viewers still have black-and-white televisions. Broadcasting only in black-and-white — the "lowest common denominator" approach — ensures a shared experience but benefits no one. Excluding the black-and-white television owners — the "you must be this tall to ride" approach — provides no benefit either."

the grades

A-Grade	Full support: the most recent browsers on the most popular OSs; receive all HTML, CSS, JS and are actively tested against
C-Grade	Core support: browsers known to be incapable of modern standards and functionality; receive HTML only
X-Grade	No support: unknown browsers assumed to be capable; receive all HTML, CSS, JS and a warning

A-Grade

- IE6 on Windows 98, 2000 & XP
- IE7 on XP
- Firefox 1.5 & 2.0 on Windows 98, 2000 & XP; OS X 10.3 & 10.4
- Opera 9 on Windows 98, 2000 & XP; OS X 10.3 & 10.4
- Safari on OS X 10.4

C-Grade

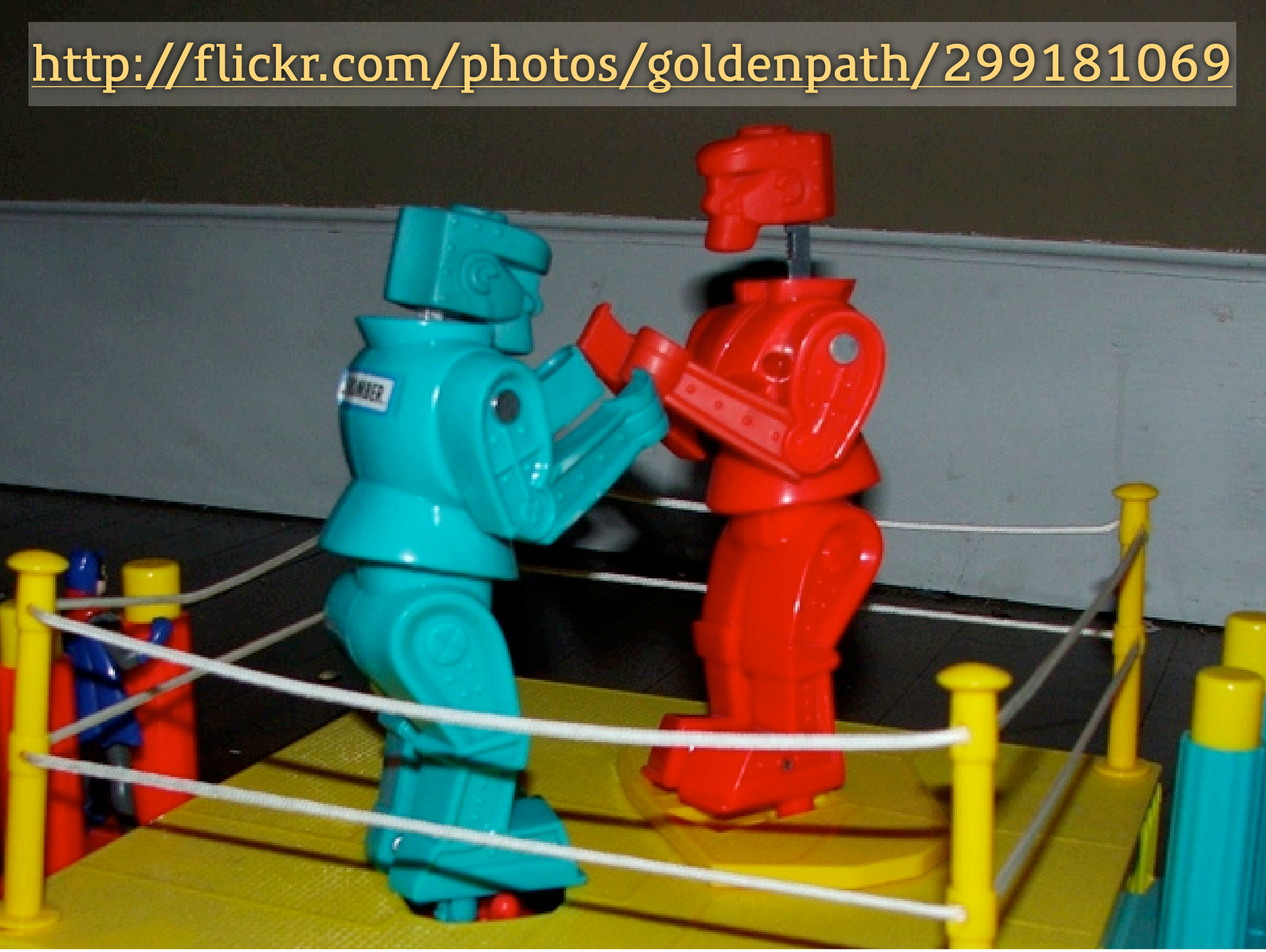
- IE < 6
- Firefox < 1.5
- Opera < 9
- Safari on OS X 10.3 or below

X-Grade

- everything else

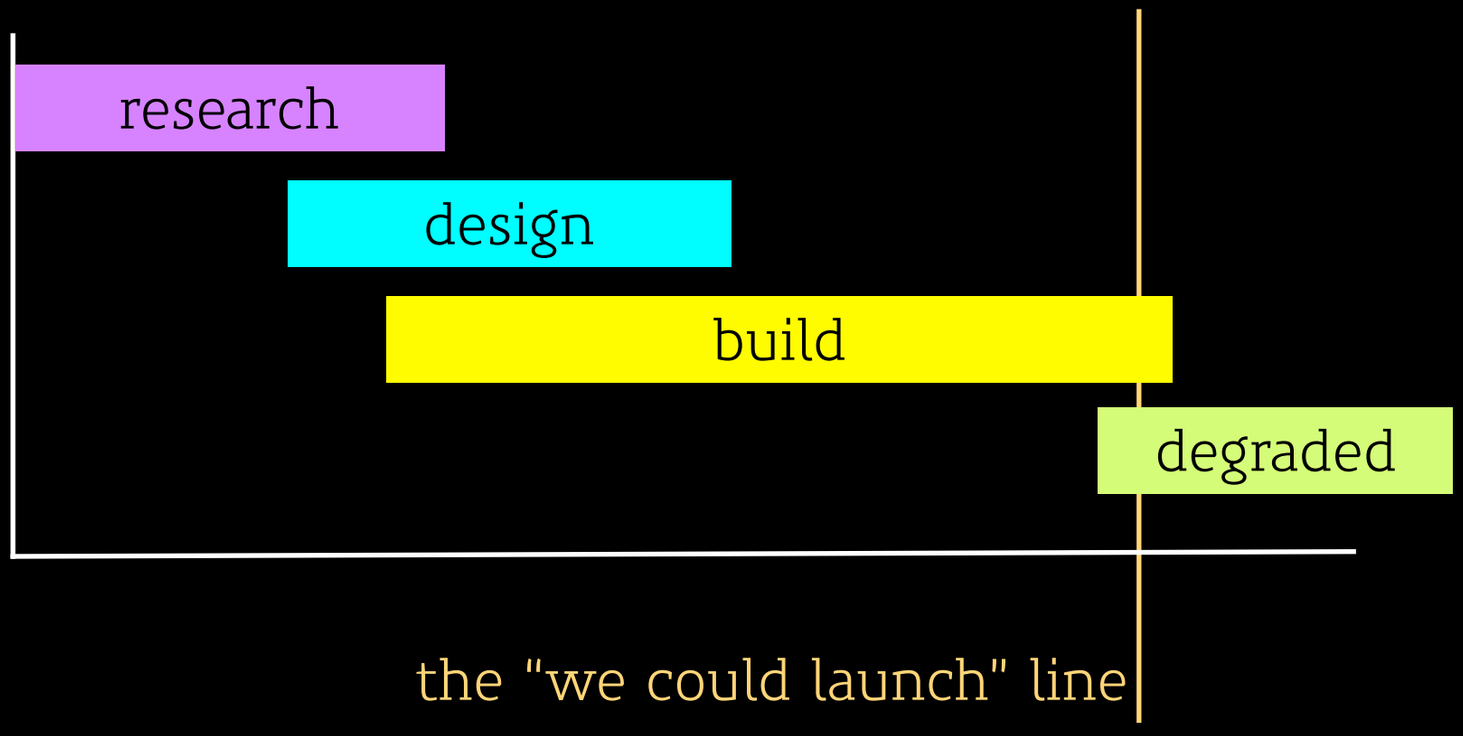
“Progressive enhancement is a core concept of Graded Browser Support.”

progressive enhancement
vs.
graceful degradation



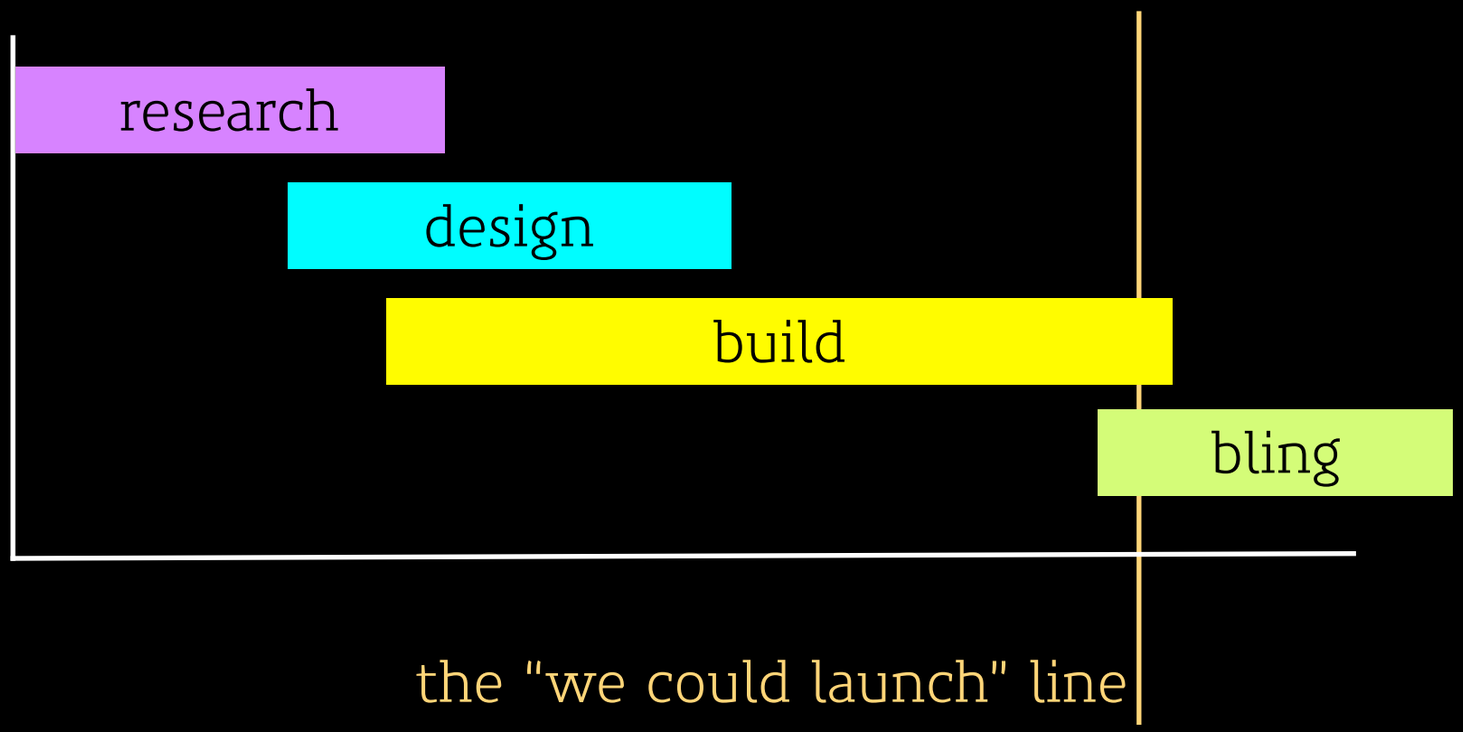
There is a problem however, in that many people do not see the difference between graceful degradation and progressive enhancement. There is a misconception that it is the same goal just seen from two different perspectives. Indeed, I've even had to explain it to my boss at work, and I'm still not sure it's clear to him. The article has this to say:

"These two concepts influence decision-making about browser support. Because they reflect different priorities, they frame the support discussion differently. Graceful degradation prioritizes presentation, and permits less widely-used browsers to receive less (and give less to the user). Progressive enhancement puts content at the center, and allows most browsers to receive more (and show more to the user). While close in meaning, progressive enhancement is a healthier and more forward-looking approach."



graceful degradation

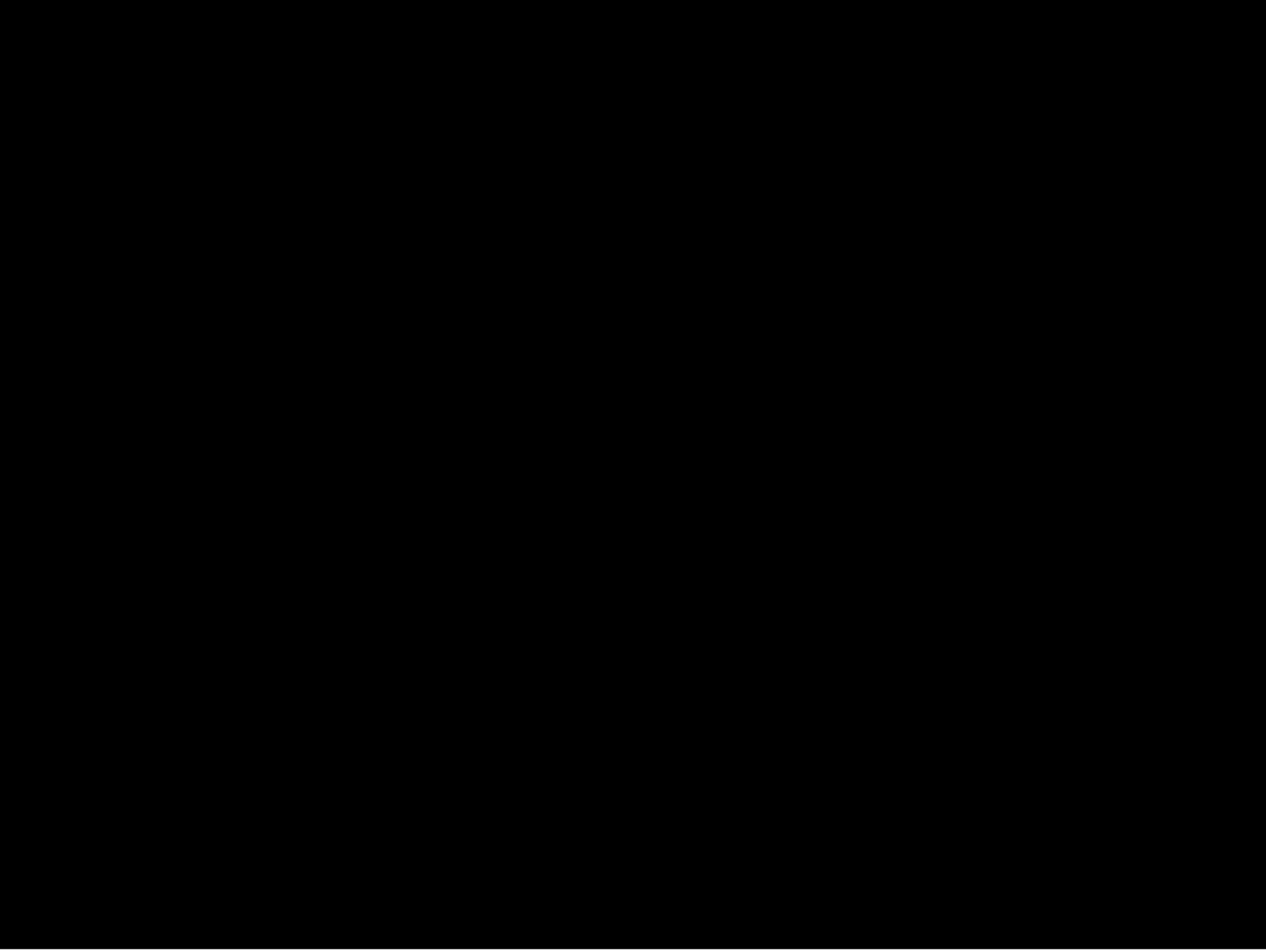
Any project is squeezed as time-to-launch grows short. If your “accessibility” is the last stage of your build process (graceful degradation) it’s quite possible you’ll never actually get time to do it.



progressive enhancement

If you take care of your accessibility and content up front, it will work for everyone. Then you can spend as much time as deemed necessary adding the extra ‘bling’ to your site.

some examples of
right and wrong



Who doesn't love flickr? A poster-child for Web 2.0 and a wholesale embracer of Ajax techniques. And a whole lot of fun to boot.

In a capable browser, Flickr allows some very nice in-page editing. Clicking in the title or the description turns it into a form allowing you to edit it quickly and easily.

Forget free Coca-Cola - this is staff motivation on Flickr - Photo Sharing!

http://flickr.com/photos/mn_francis/435010076/

Forget free Coca-Cola...

flickr GAMMA

Signed in as cackhanded (36 new) Help Sign Out

Home You Organize Contacts Groups Explore Search everyone's photos Search

Forget free Coca-Cola – this is staff motivation

SAVE OR Cancel

ADD NOTE SEND TO GROUP ADD TO SET BLOG THIS ALL SIZES ORDER PRINTS ROTATE DELETE

Uploaded on March 26, 2007
by cackhanded

cackhanded's photostream

You are at the last photo

2,938 photos

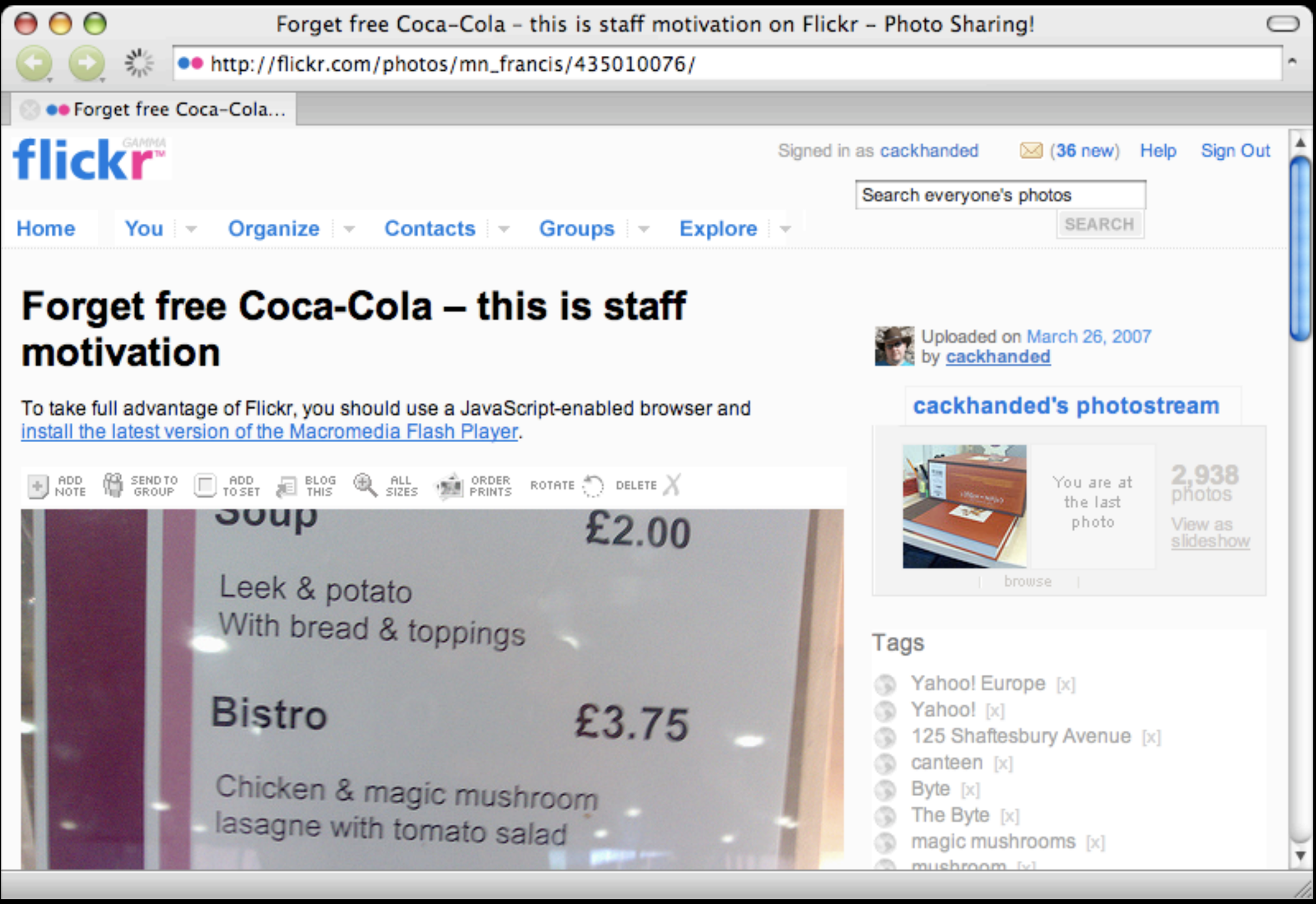
View as slideshow

more | browse

Tags

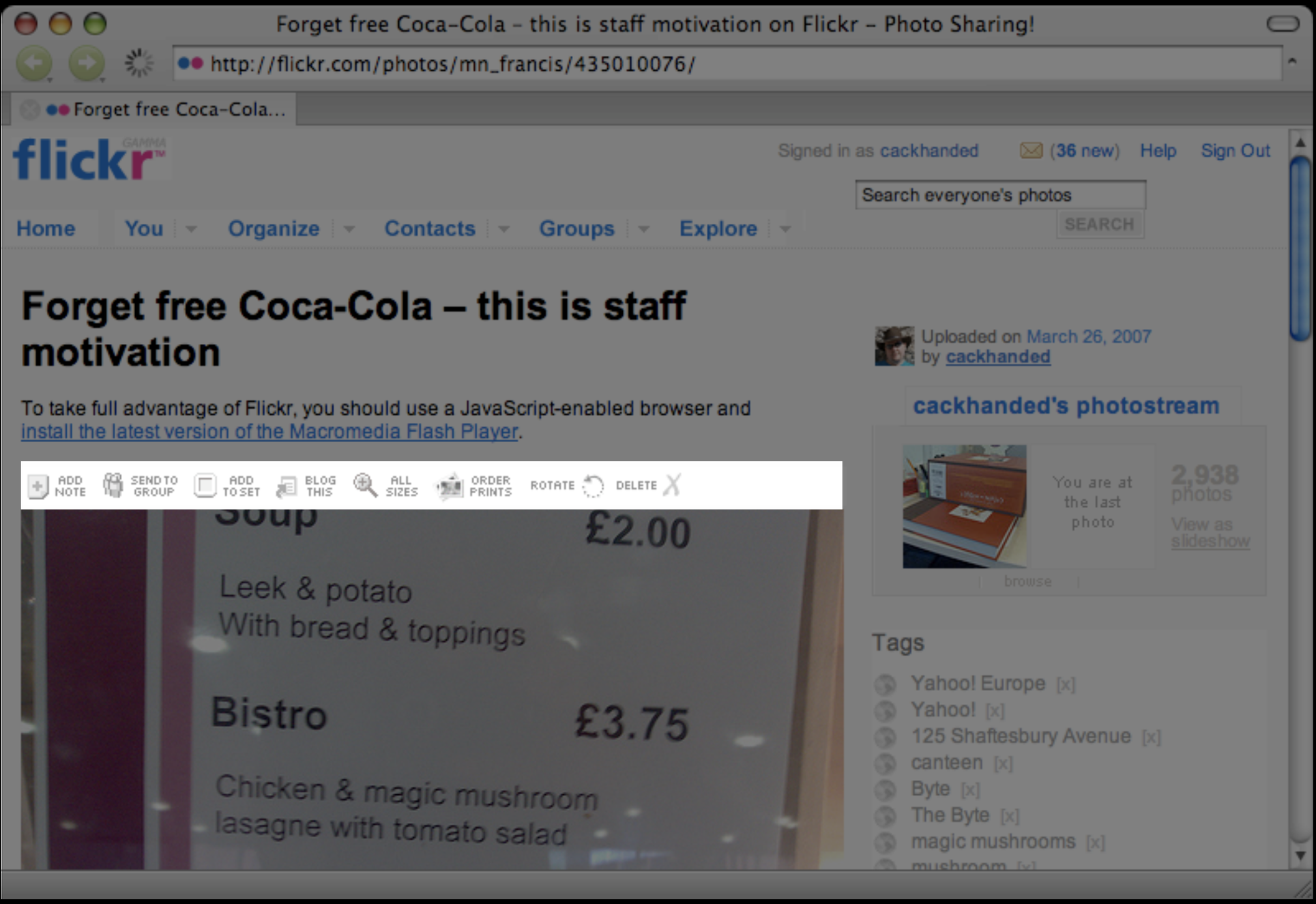
- Yahoo! Europe [x]
- Yahoo! [x]
- 125 Shaftesbury Avenue [x]
- canteen [x]
- Byte [x]
- The Byte [x]
- magic mushrooms [x]
- mushroom [x]

Connecting to l.yimg.com...

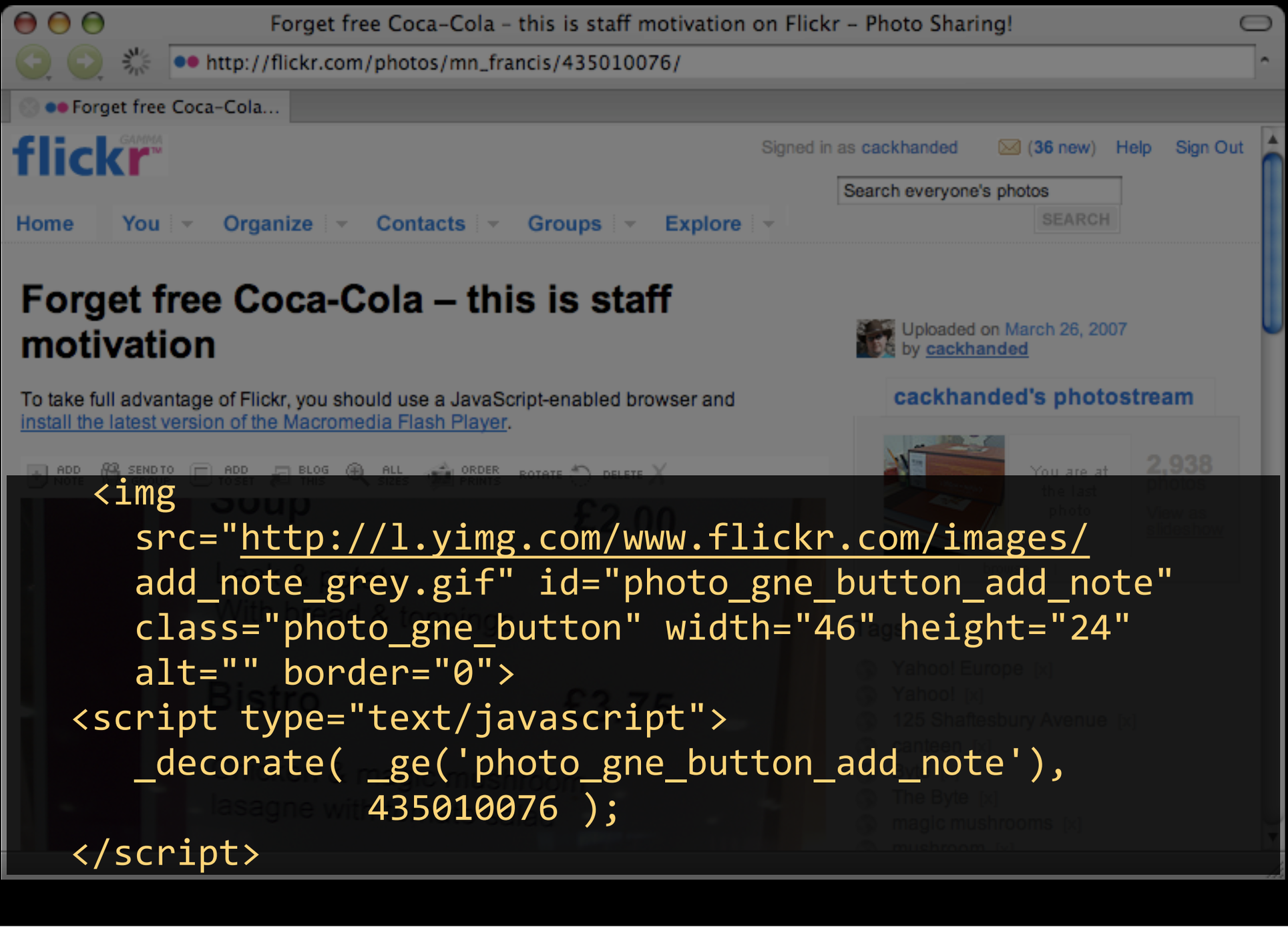


However, with JavaScript off Flickr displays the 'helpful' message: "To take full advantage of Flickr, you should use a JavaScript-enabled browser and install the latest version of the Macromedia Flash Player."

Clicking in the title or the description now does nothing.

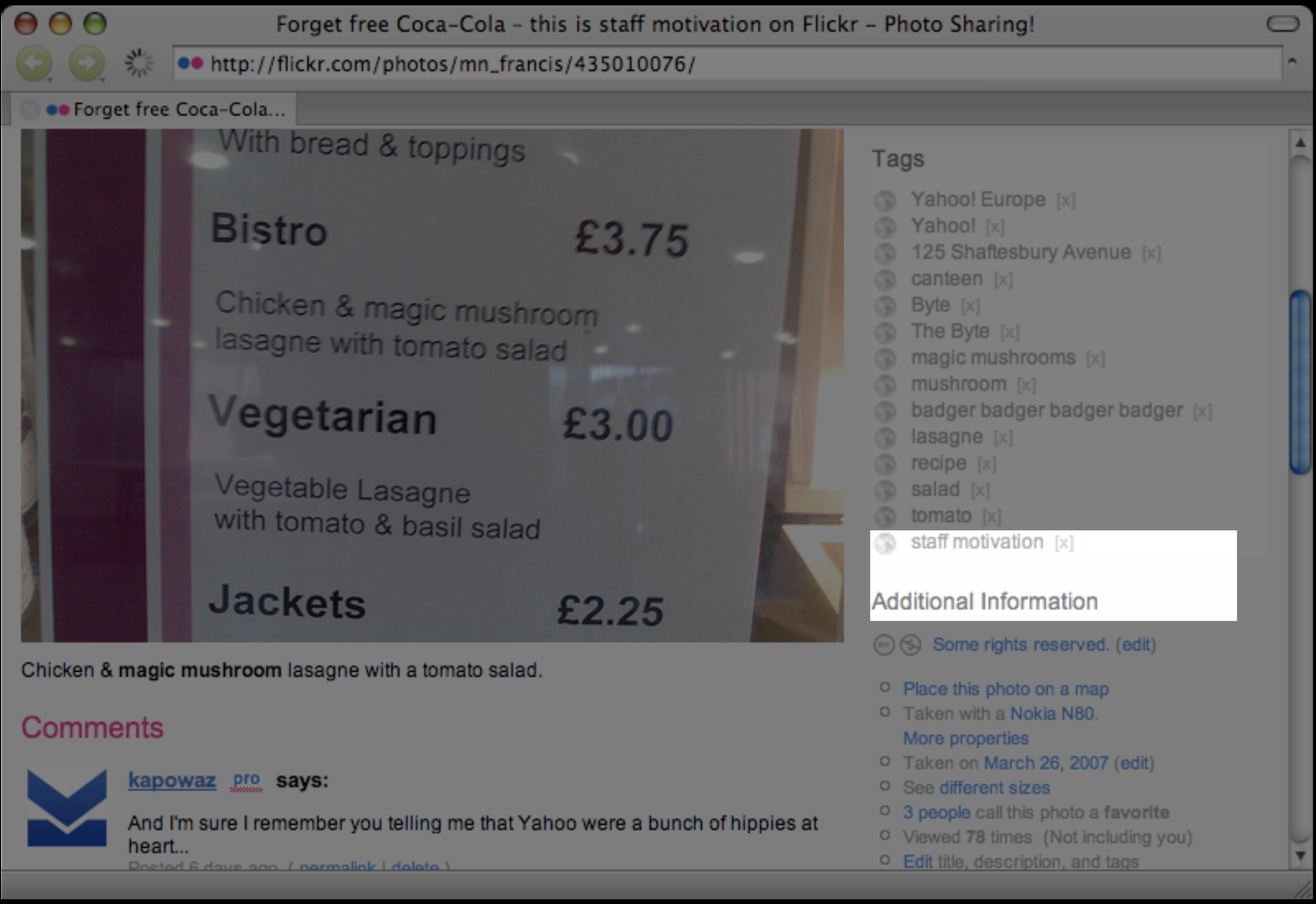


So let's take a look at the buttons above the image. When you click on them now, they do nothing. Why is this?



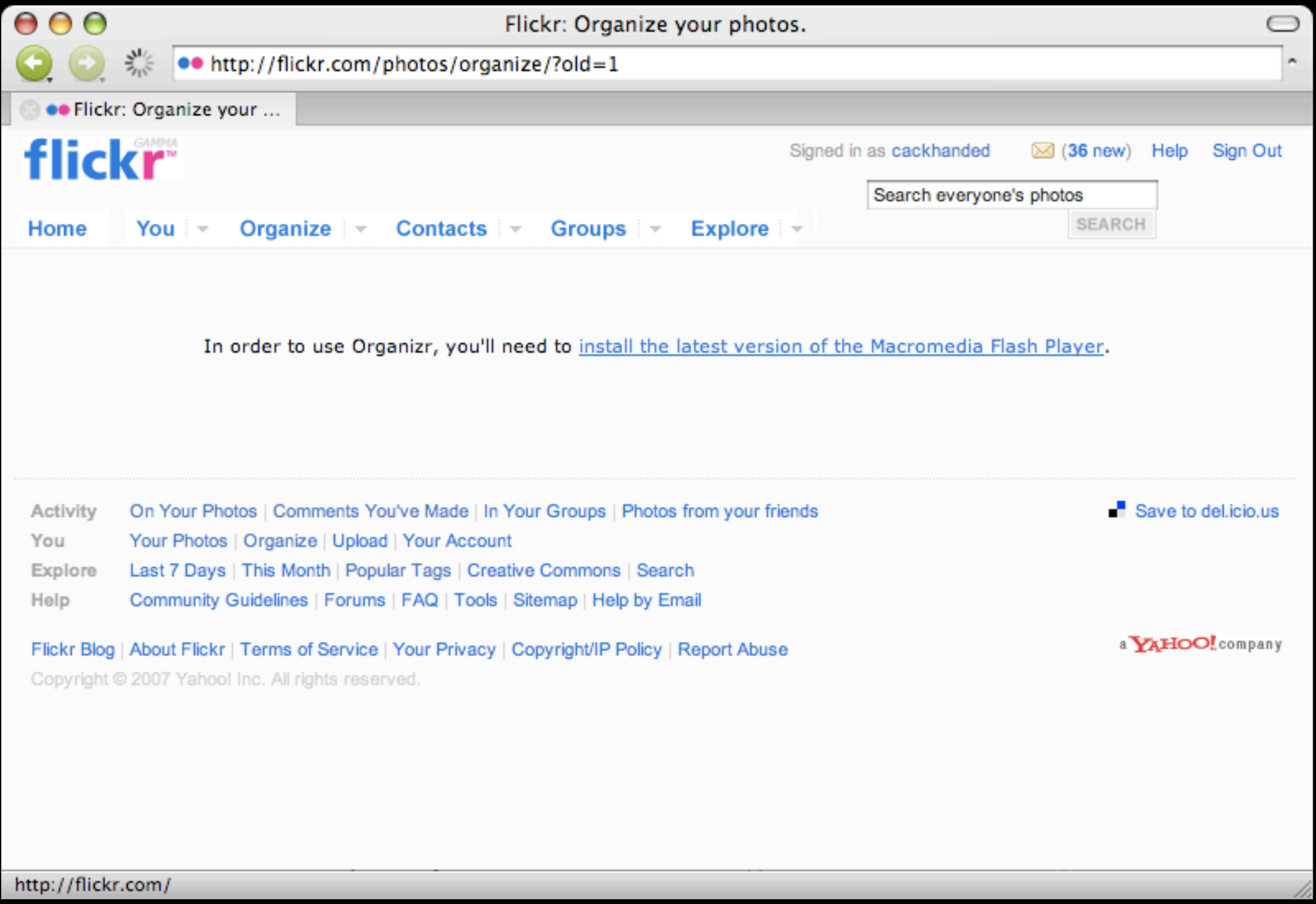
The code for the buttons clearly explains why. They are activated by JavaScript, and there is no fallback anchor. So clicking on them without JavaScript enabled does nothing.

There are other basic problems with the button code as well. Note the lack of the alt attribute on the buttons.



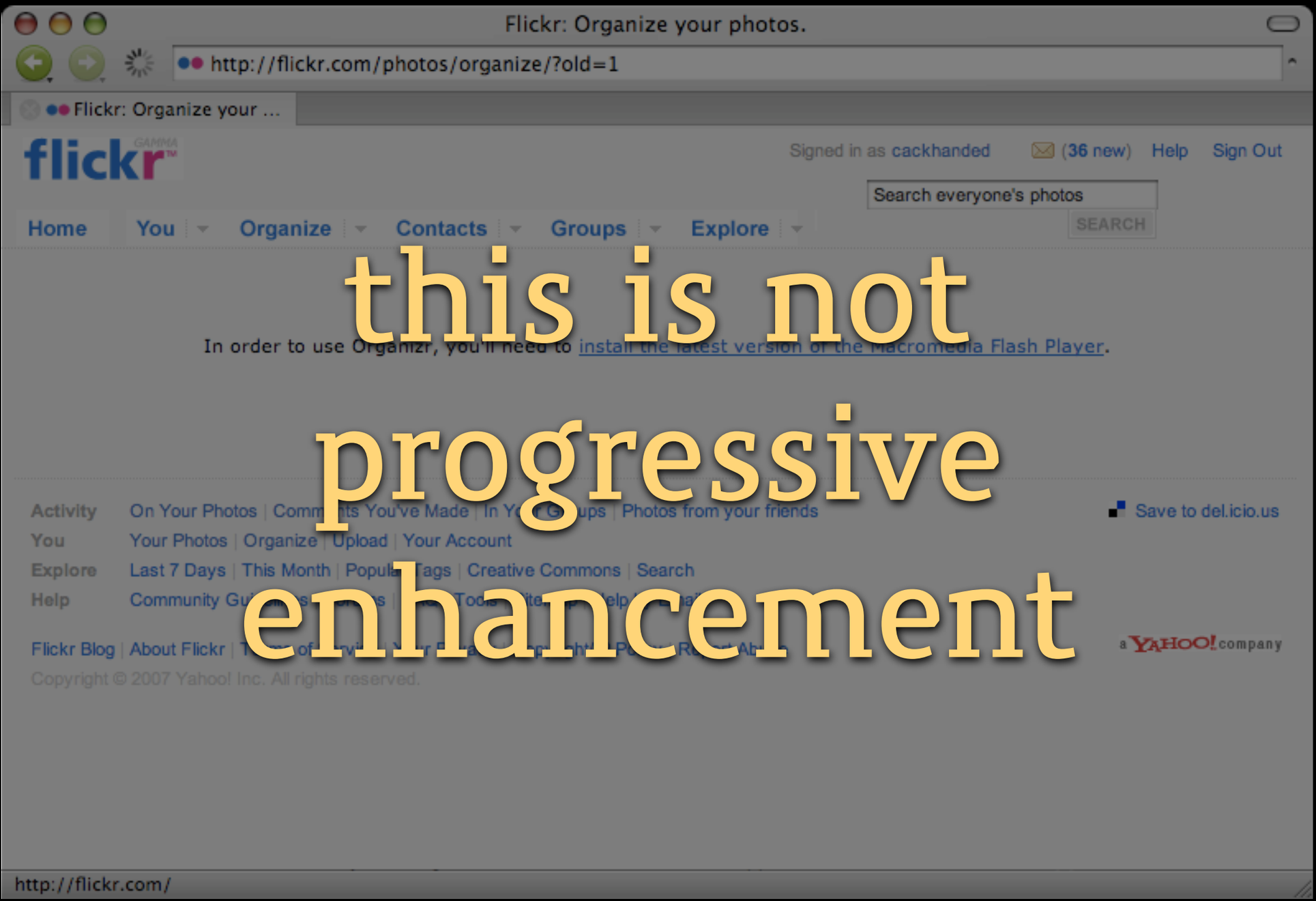
Also, where did the ability to add a tag go?

Well, at least we can change titles and descriptions and add tags to photos using the older Flash-based Organizer, can't we?

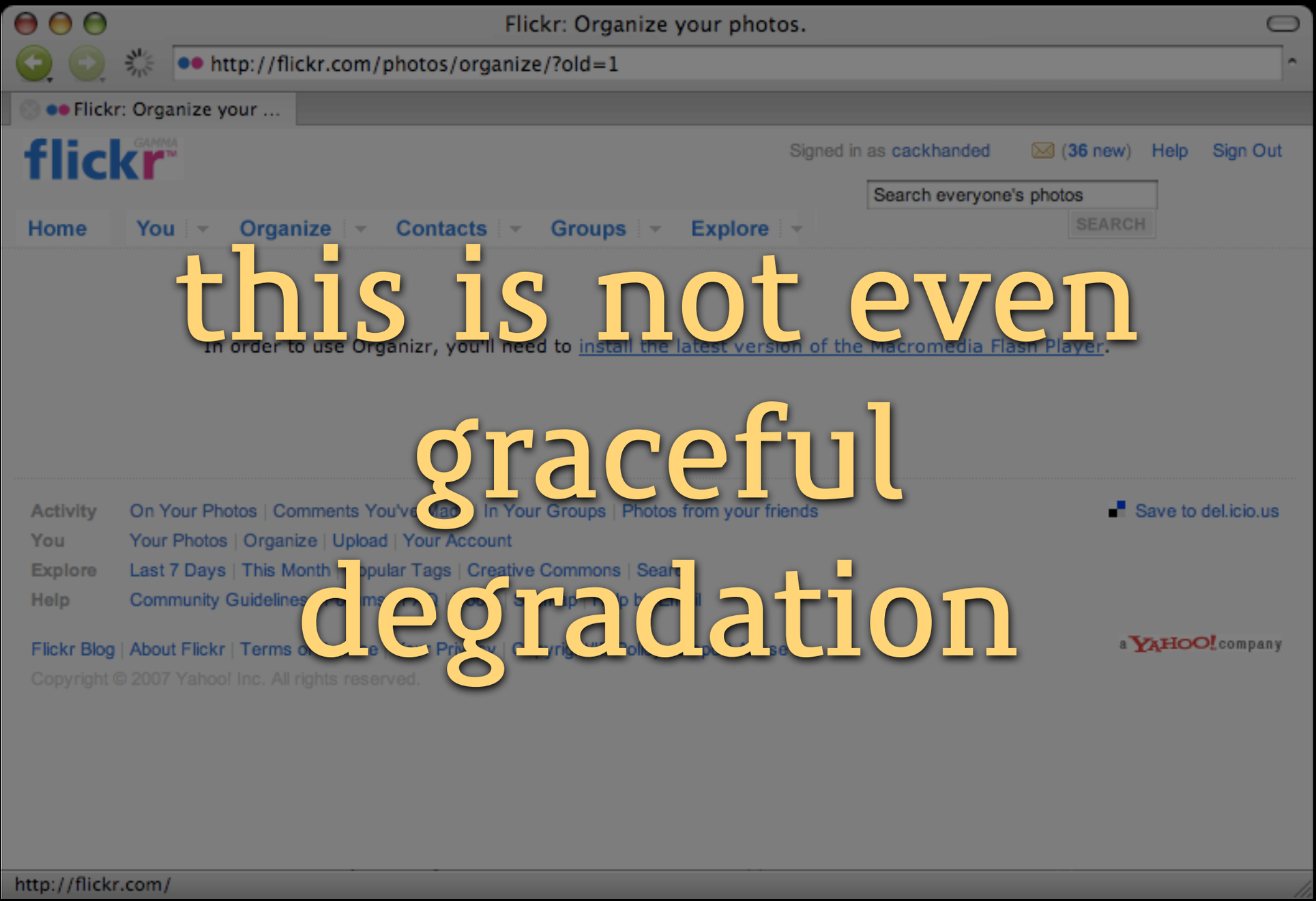


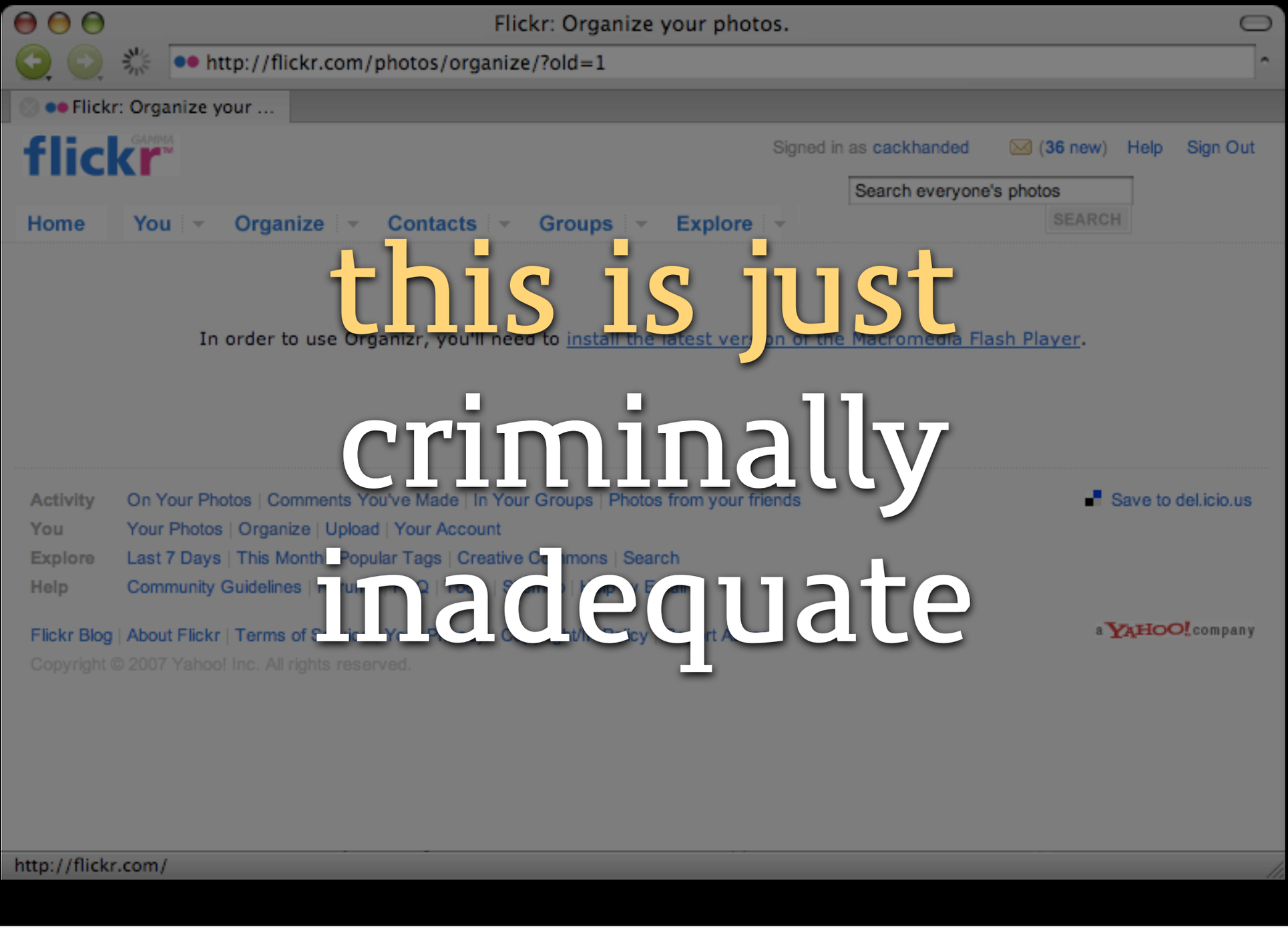
Ah no.

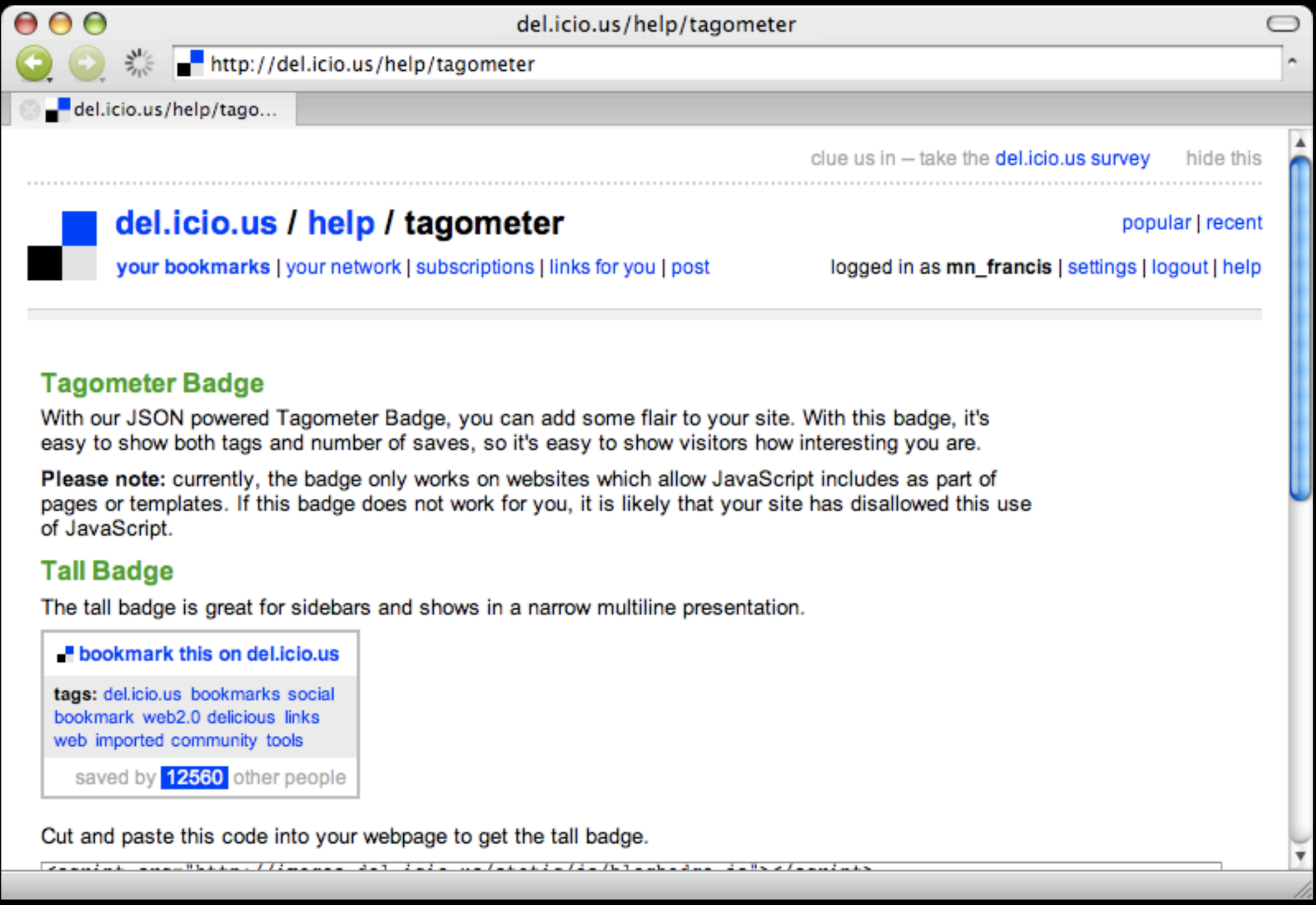
We can't use the Organizer. The error you get tells you to install the latest version of the Flash Player. I have that installed, trust me. I just don't have JavaScript turned on. The Organizer is inserted with JavaScript, without any fallback other than this incorrect and misleading error message.



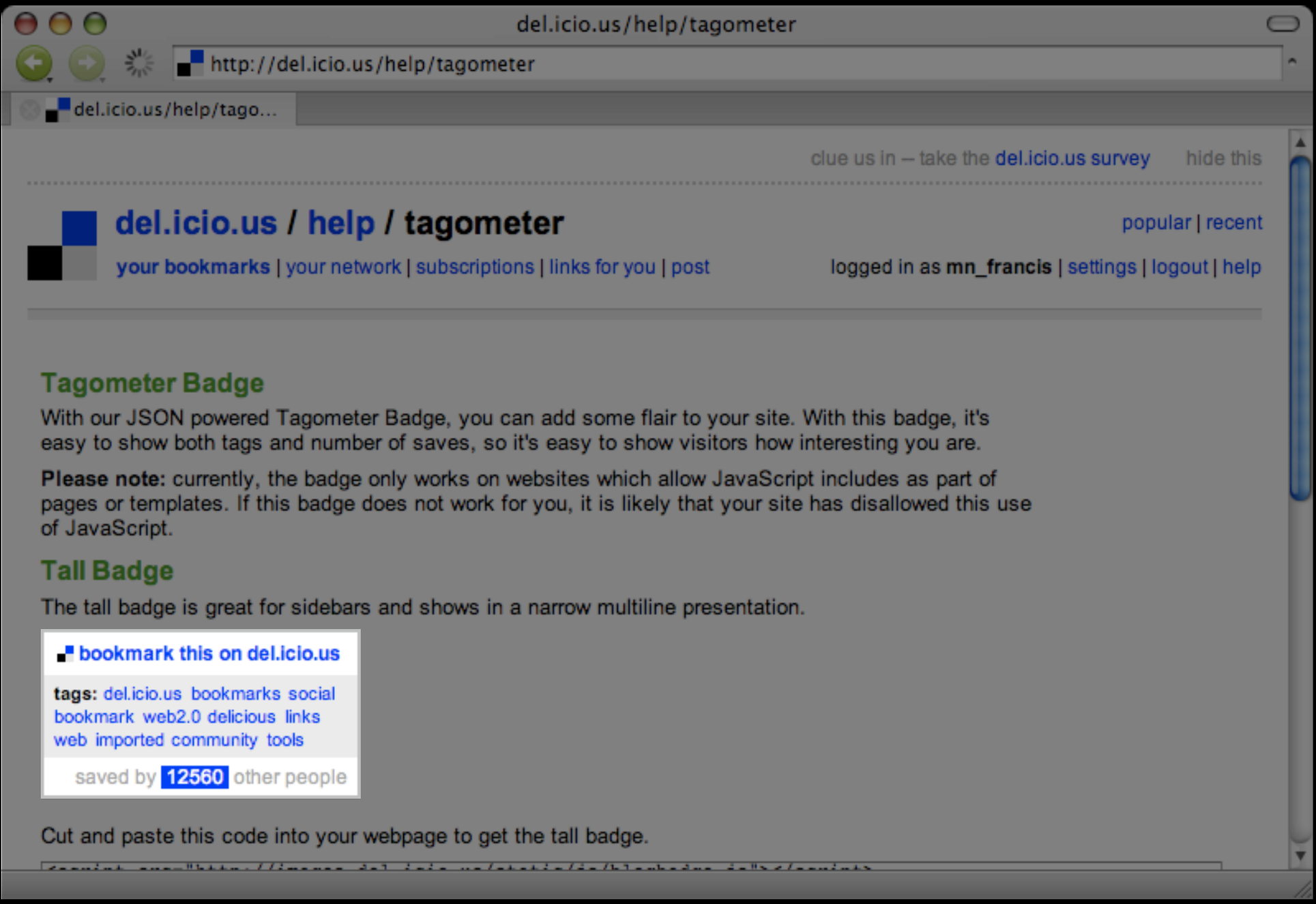
this is not progressive enhancement


Flickr: Organize your photos.
http://flickr.com/photos/organize/?old=1
Flickr: Organize your ...
flickr
Signed in as cackhanded
(36 new)
Help
Sign Out
Search everyone's photos
Home
You
Organize
Contacts
Groups
Explore
SEARCH
this is not even
graceful
degradation
In order to use Organizr, you'll need to install the latest version of the Macromedia Flash Player.
Activity
On Your Photos
In Your Groups
Photos from your friends
Save to del.icio.us
You
Your Photos
Organize
Upload
Your Account
Explore
Last 7 Days
This Month
Creative Commons
Help
Community Guidelines
Flickr Blog
About Flickr
a YAHOO! company
Copyright © 2007 Yahoo! Inc. All rights reserved.
http://flickr.com/


Flickr: Organize your photos.
http://flickr.com/photos/organize/?old=1
Flickr: Organize your ...
flickr
Signed in as cackhanded
(36 new)
Help
Sign Out
Search everyone's photos
Home
You
Organize
Contacts
Groups
Explore
SEARCH
this is just
In order to use Organizr, you'll need to install the latest version of the Macromedia Flash Player.
criminally
inadequate
Activity
On Your Photos | Comments You've Made | In Your Groups | Photos from your friends
Save to del.icio.us
You
Your Photos | Organize | Upload | Your Account
Explore
Last 7 Days | This Month | Popular Tags | Creative Commons | Search
Help
Community Guidelines
Flickr Blog | About Flickr | Terms of
a YAHOO! company
Copyright © 2007 Yahoo! Inc. All rights reserved.
http://flickr.com/



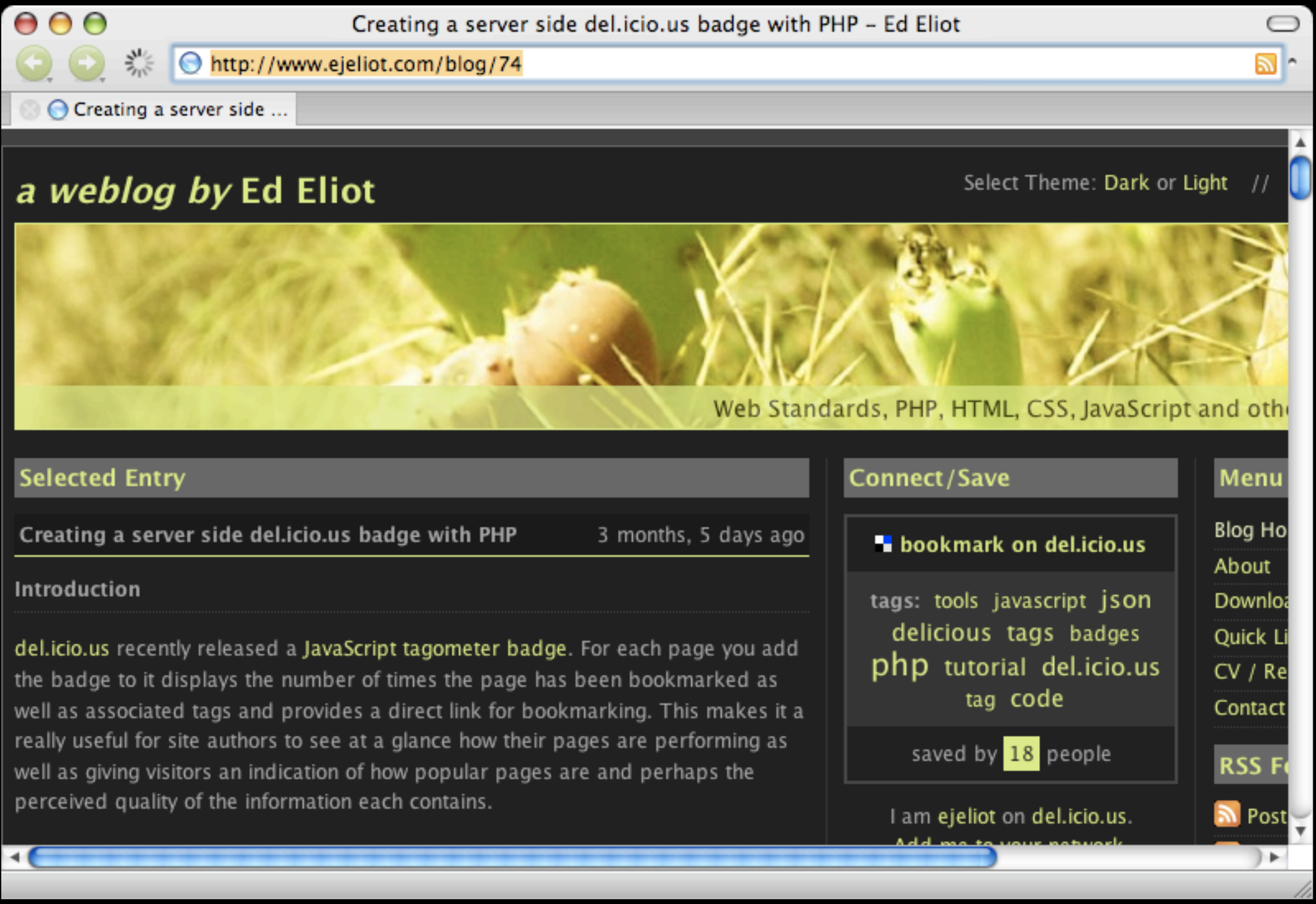
The del.icio.us tagometer badge.



The del.icio.us site recently added a “tagometer badge” which allows visitors to a web page to see up-to-the-minute information on how many times that page has been bookmarked, and the most popular tags they are using.

In the text on the page it states “**Please note:** currently, the badge only works on websites which allow JavaScript includes as part of pages or templates.” The badge is inserted by JavaScript, and JavaScript alone.

This is graceful degradation. Most people that run blogs that would use this service have no programming skills, so unless they are given something they can just drop-in to their site, they have no del.icio.us functionality at all. In this case graceful degradation is better than nothing. But it would be better if there were something in the page content to indicate that such functionality would be available, and to at least provide a link to the page on del.icio.us with the information displayed.



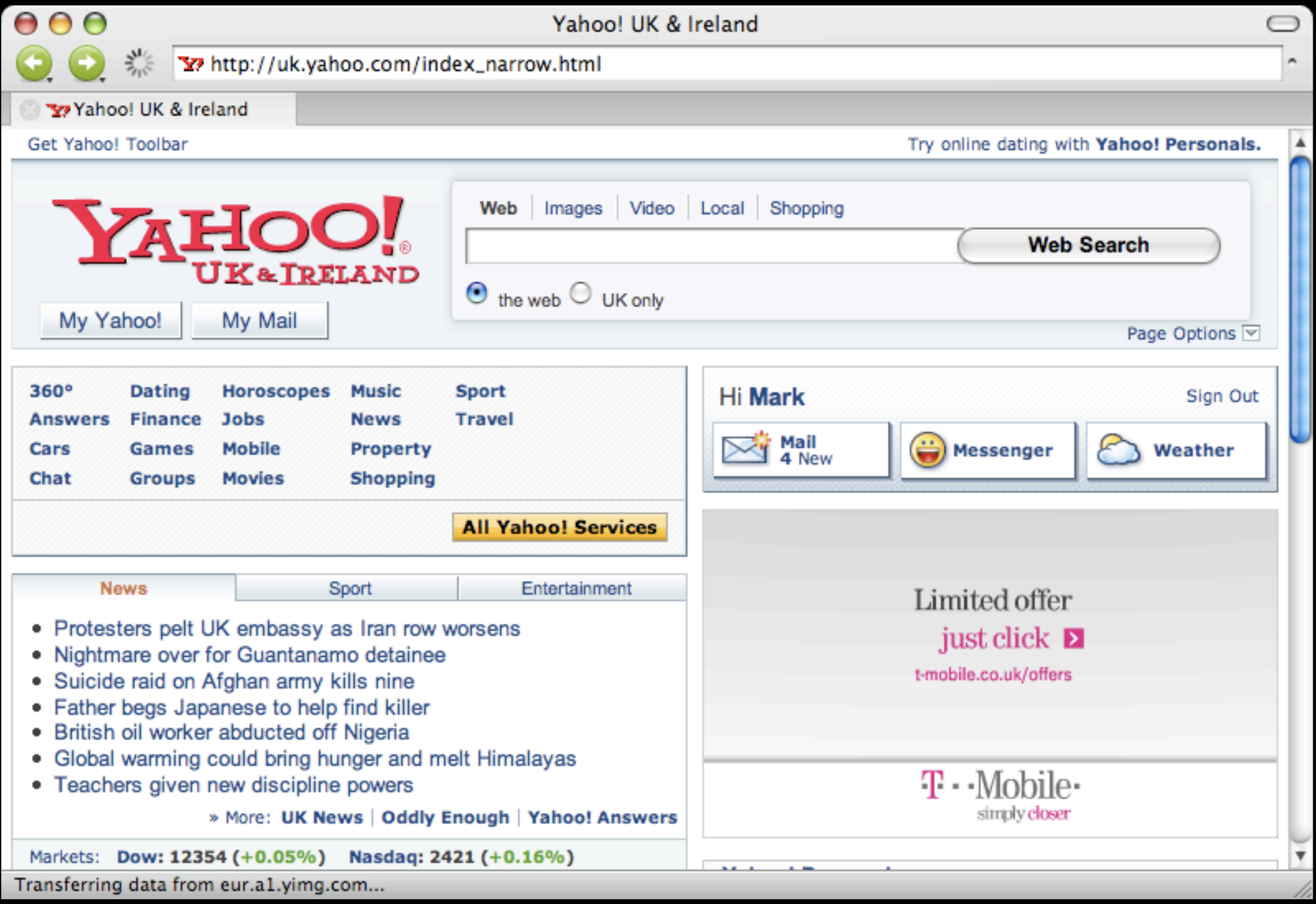
A Yahoo! employee, Ed Eliot, reverse engineered the del.icio.us badge and ported it to PHP, improving upon it as he did so because he didn't like that it wasn't as configurable and that it was inserted by JS. Now the badge's content is available to all users of his personal site regardless of their browser capabilities.

But this is neither graceful degradation nor is it progressive enhancement.

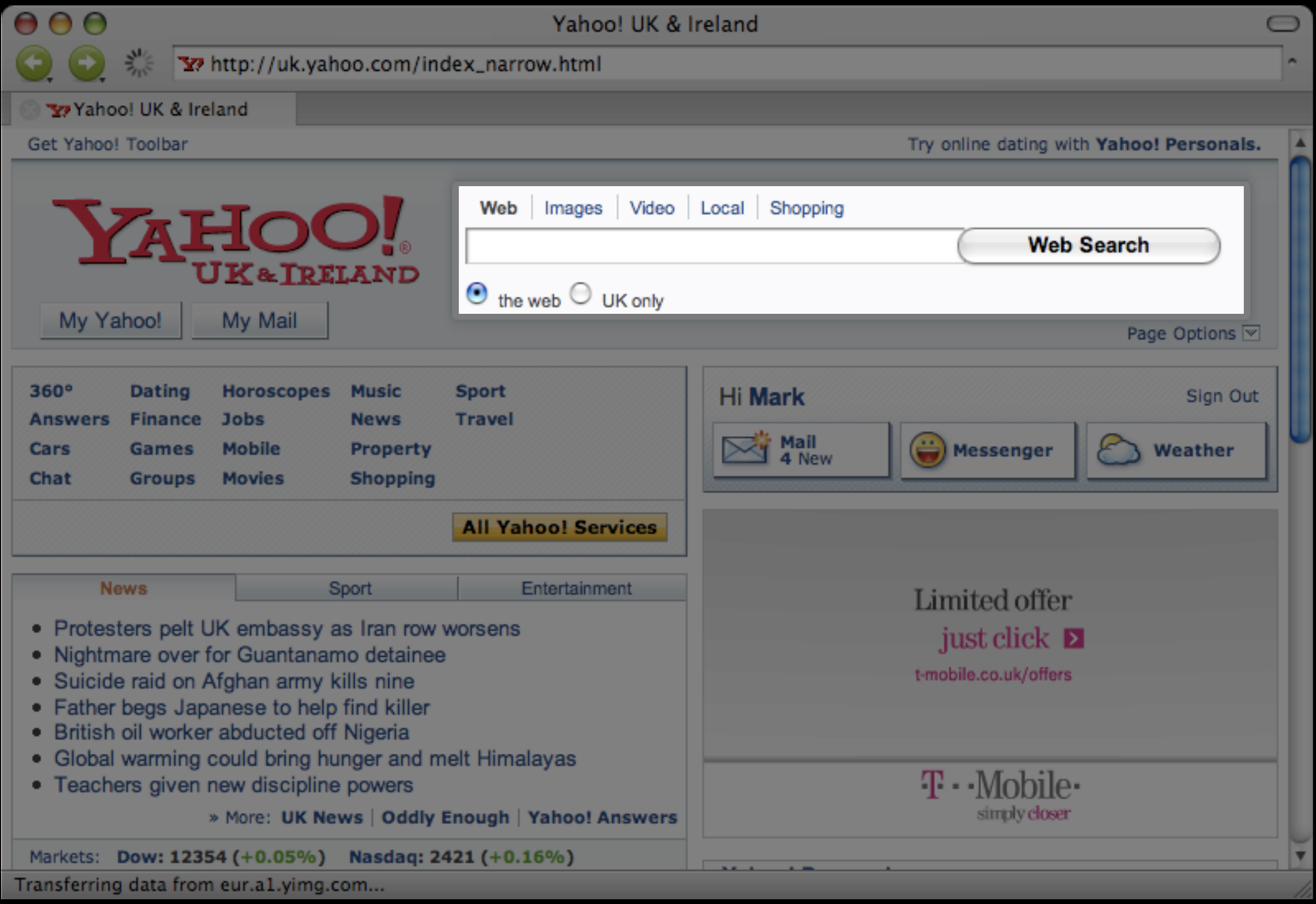
This is just The Right Way To Do It.

By including the functionality in the server-side code, every user is able to access the links and information contained within the del.icio.us tag block.

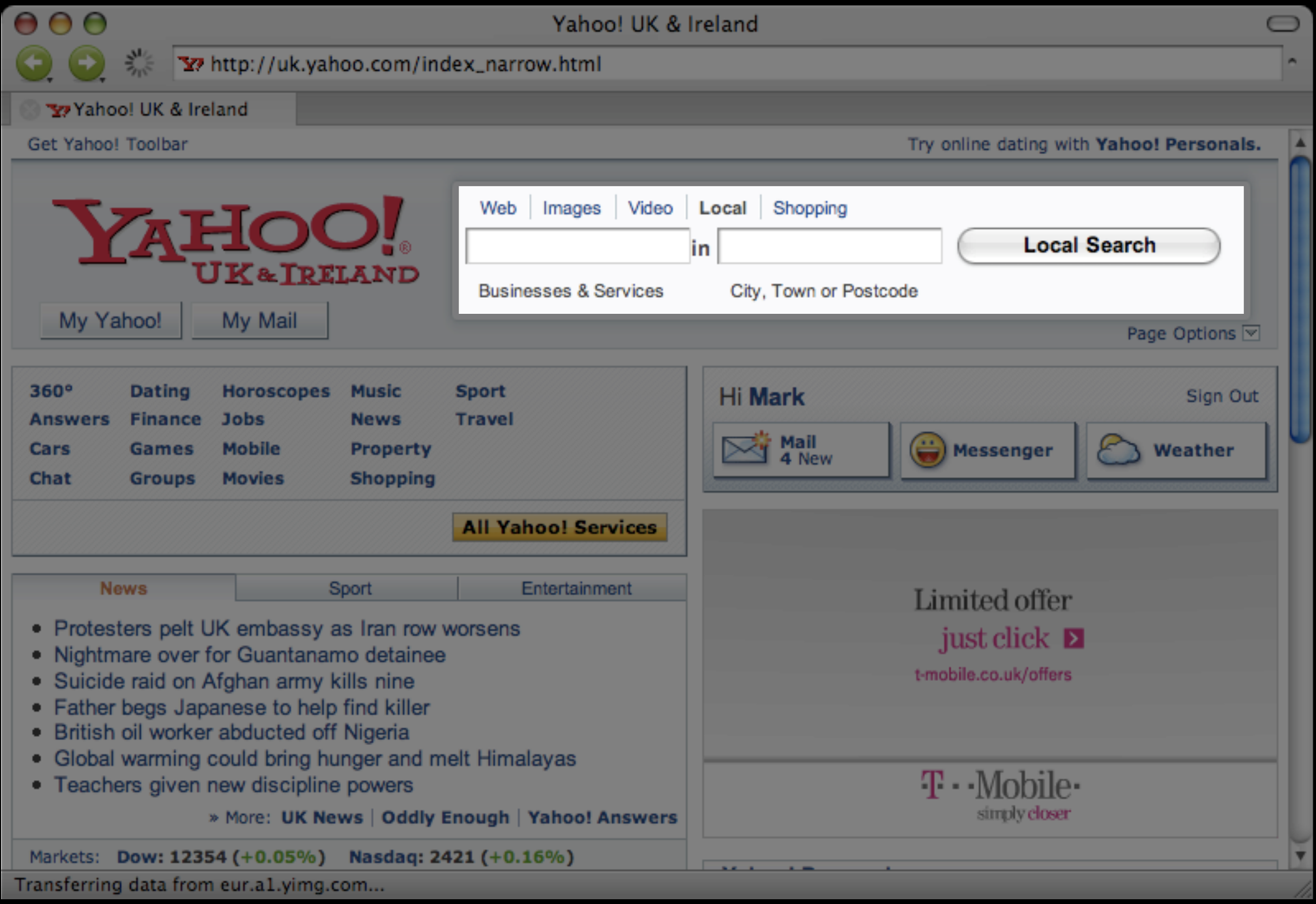
However, the ability to integrate PHP into a blog is beyond many users. But as builders of systems, it should not be beyond you. You should always strive to put content into pages on the server, where feasible.



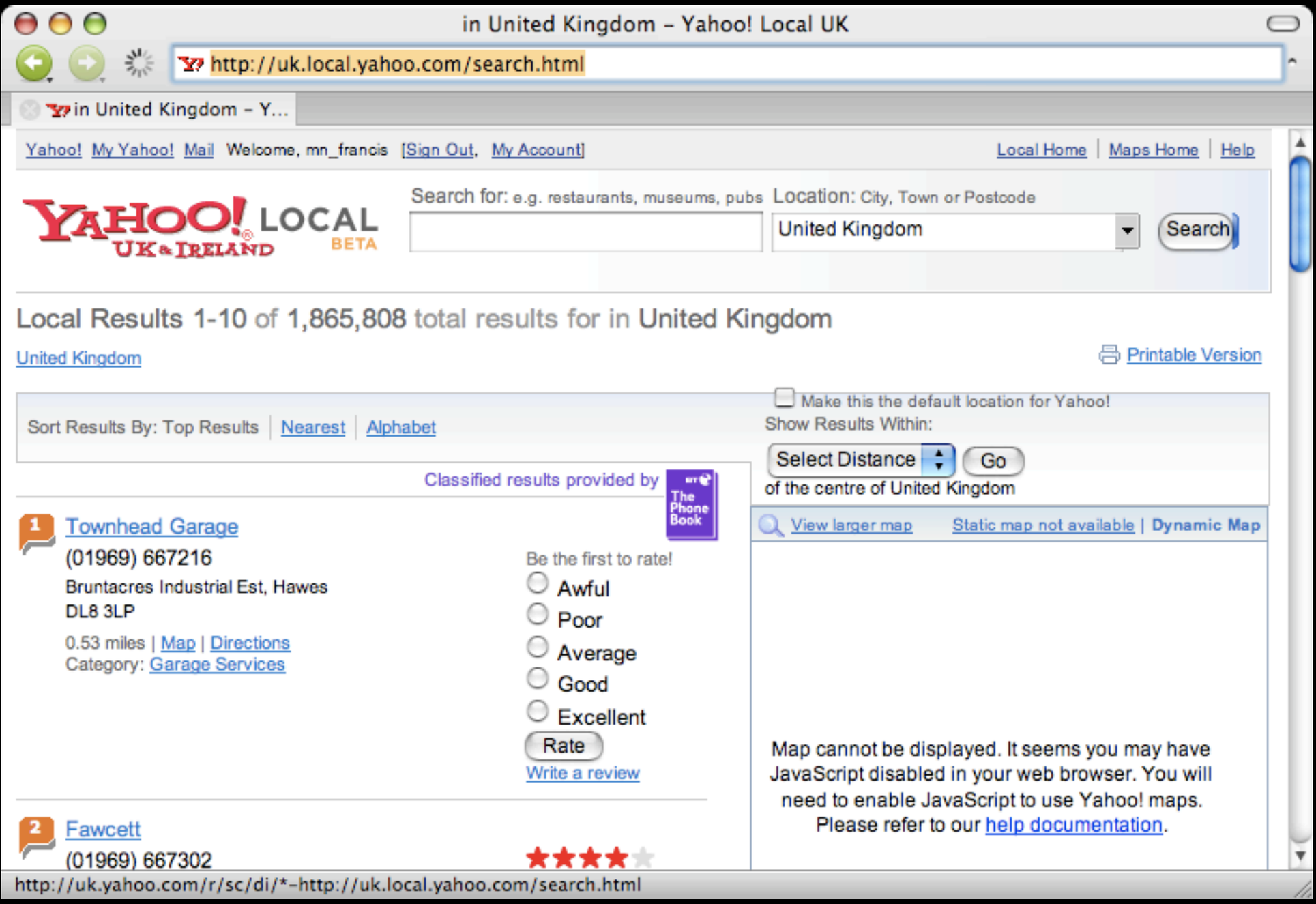
Next, let's take a look at the Yahoo! Frontpage.



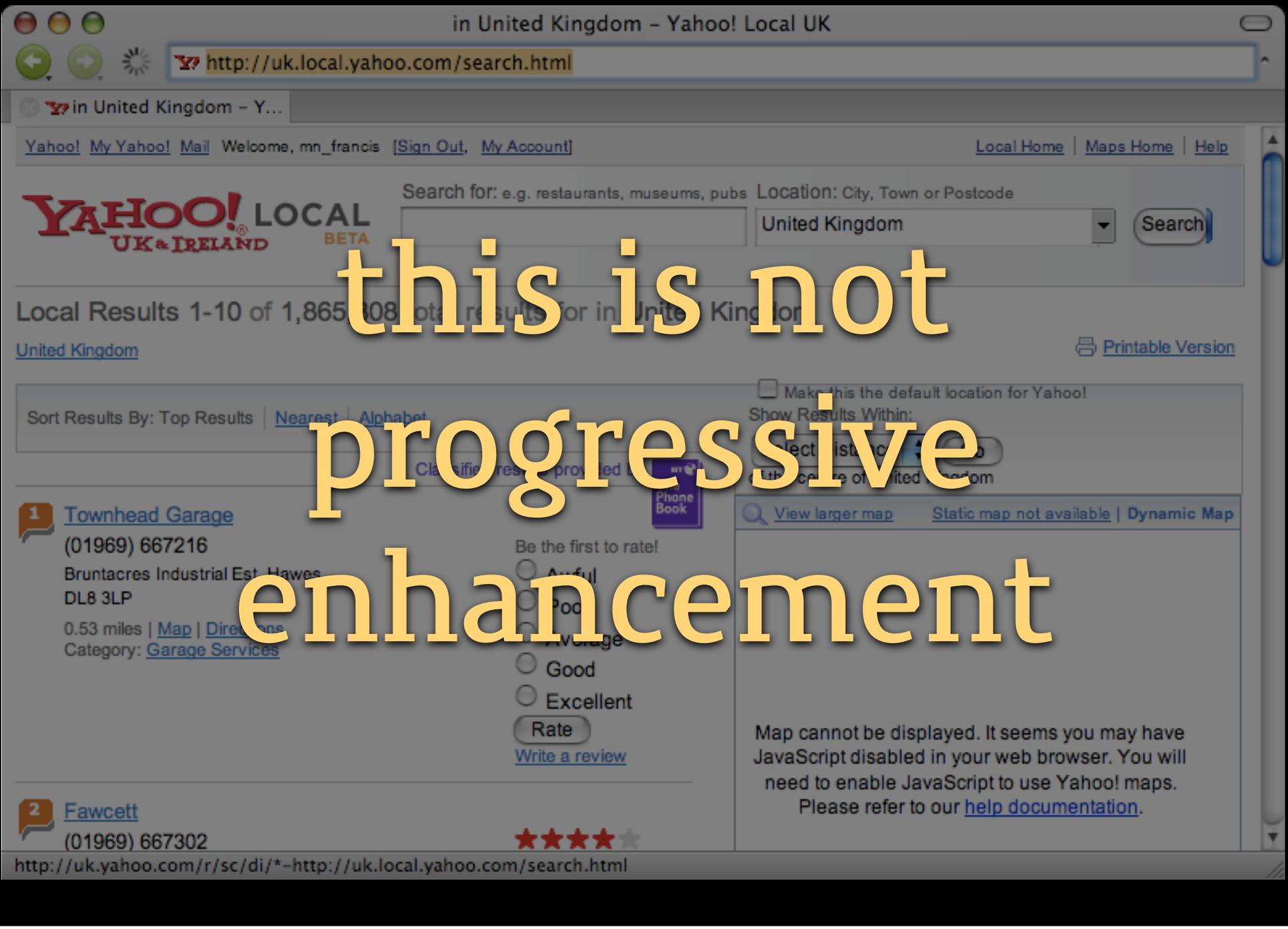
The enhanced search facility allows you select up-front which kind of search you want to do, without having to navigate to the Search site first.



The search form is rewritten by JavaScript as necessary as you click on the links for the different types of search. However, what happens without JavaScript?



When JavaScript is turned off, the Local link is still there and still does something. It navigates the user to the Local property. Unfortunately, any search term they had already typed in would be lost.



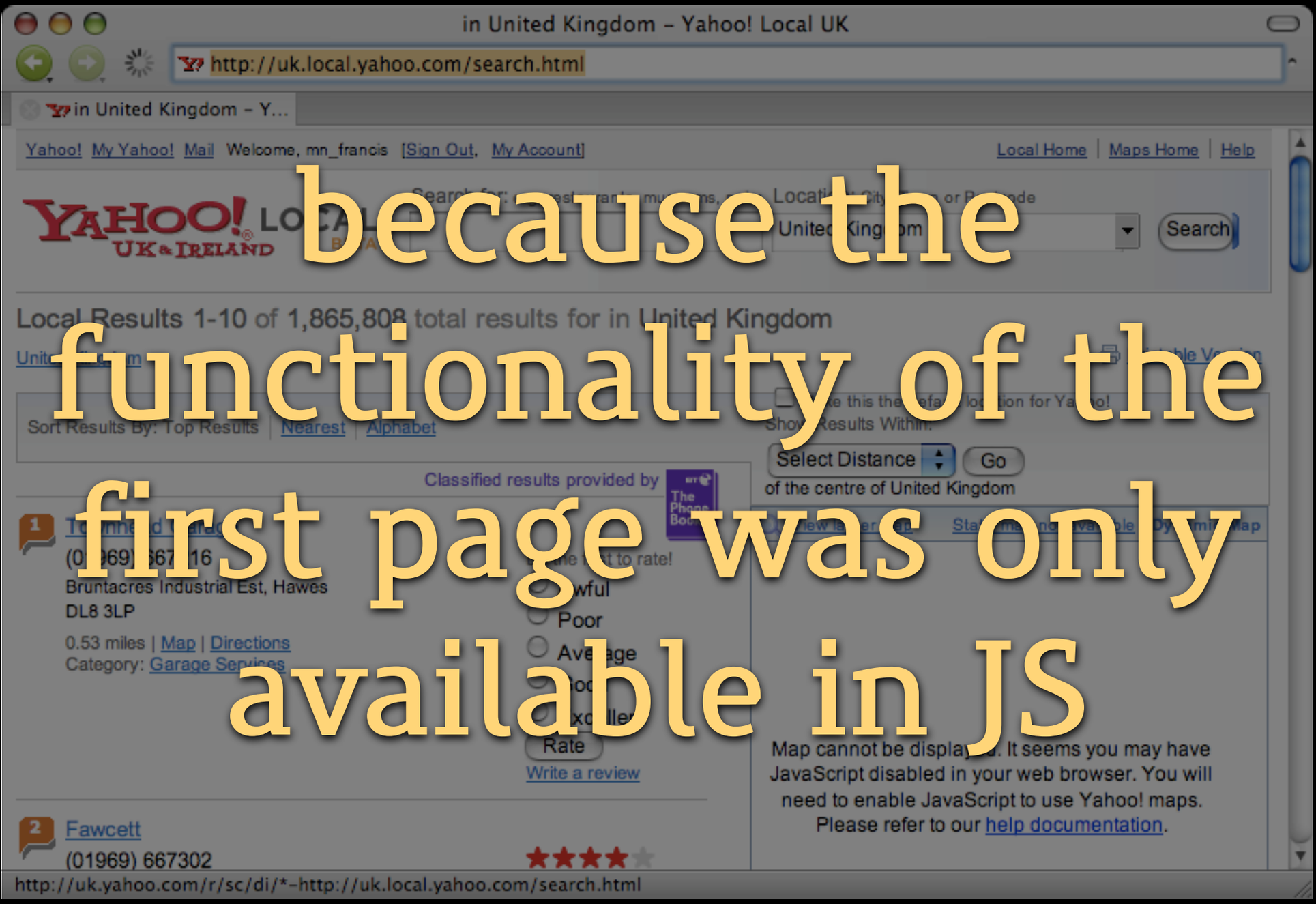
this is not progressive enhancement

This is not progressive enhancement.

(but at least this is graceful degradation)

But at least it is graceful degradation.

Even though the functionality was replicated for the user, and they can still use the site, and if they have a browser capable of using the JavaScript, they get a better experience. Why don't I considered this progressive enhancement?



because the functionality of the first page was only available in JS

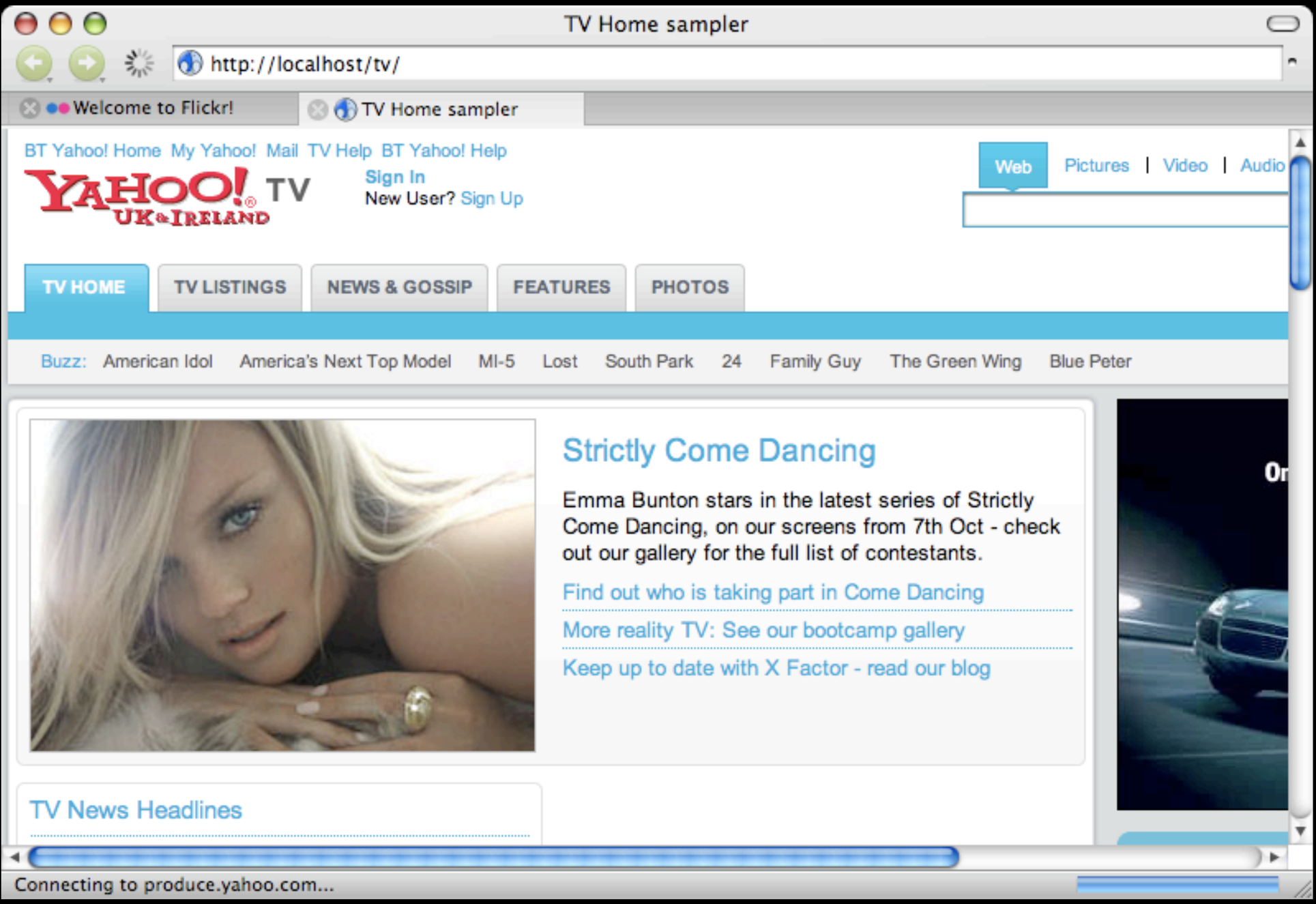
The ability to select the end-result of the search and still be able to use the form was only available to the end-user with JavaScript. Without, the search form works only for searching the web.

This is a subtle, and some might say overly picky point. But this is a part of my job, to point out this kind of functionality impairment. Also, this CAN be done in just HTML, so there's no way this can be called progressive enhancement. How?

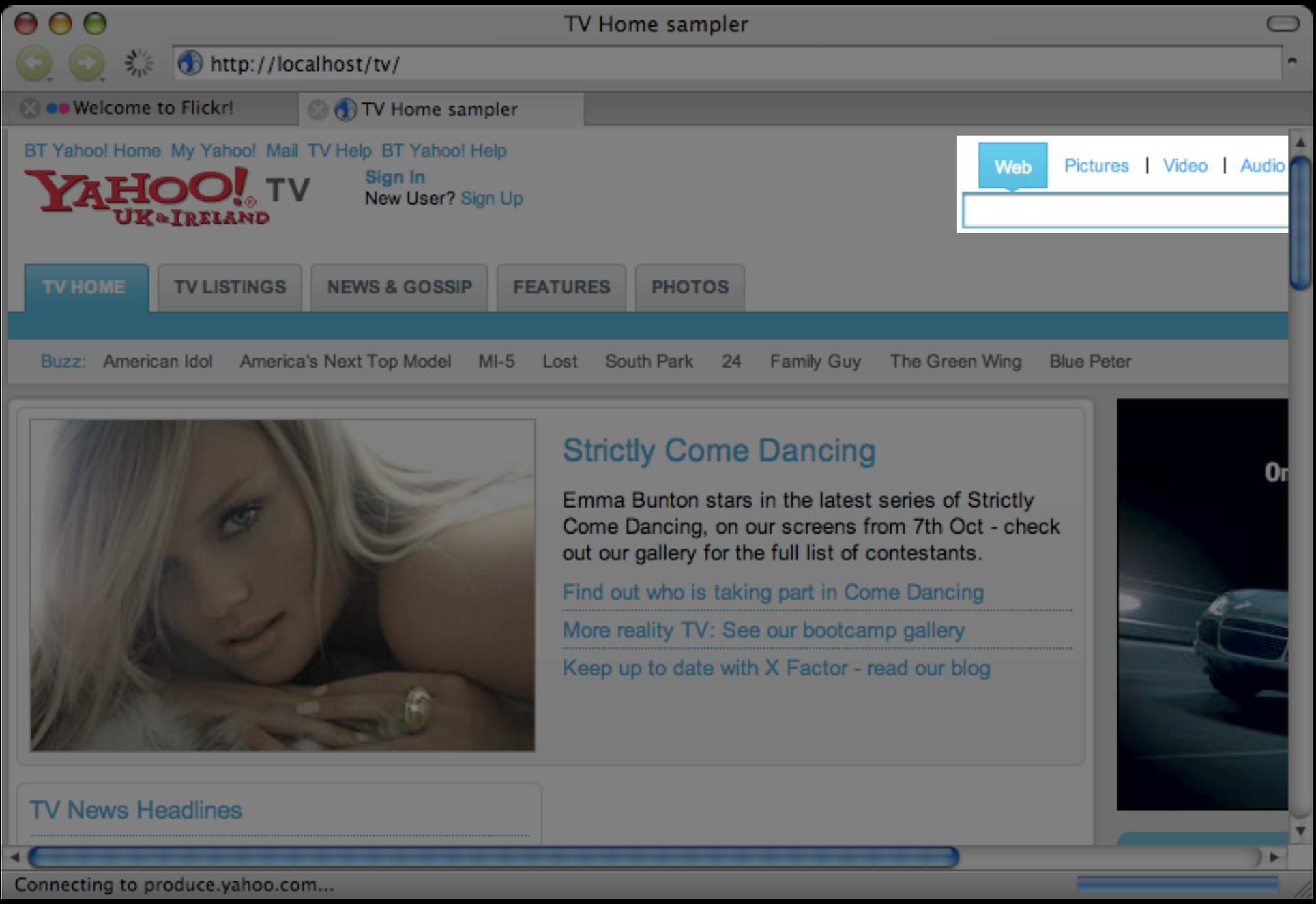
seem a little arbitrary?

In my work, I draw the line between graceful degradation and progressive enhancement at the point where the functionality of the site is available to all.

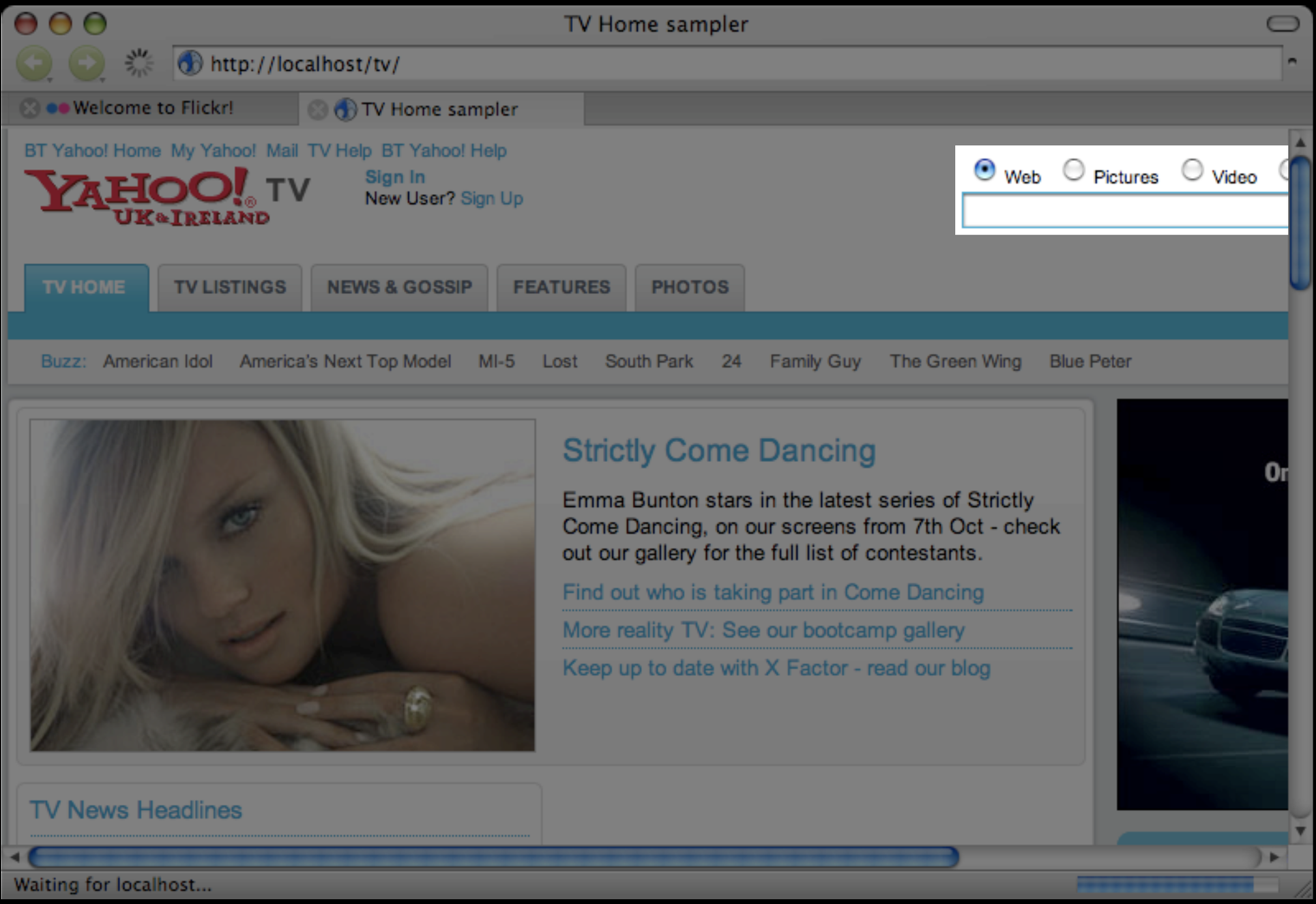
In this particular case, it isn't progressive enhancement because the same functionality could be made available without the use of JavaScript.



In the new TV site, the Search box has the same kind of functionality.

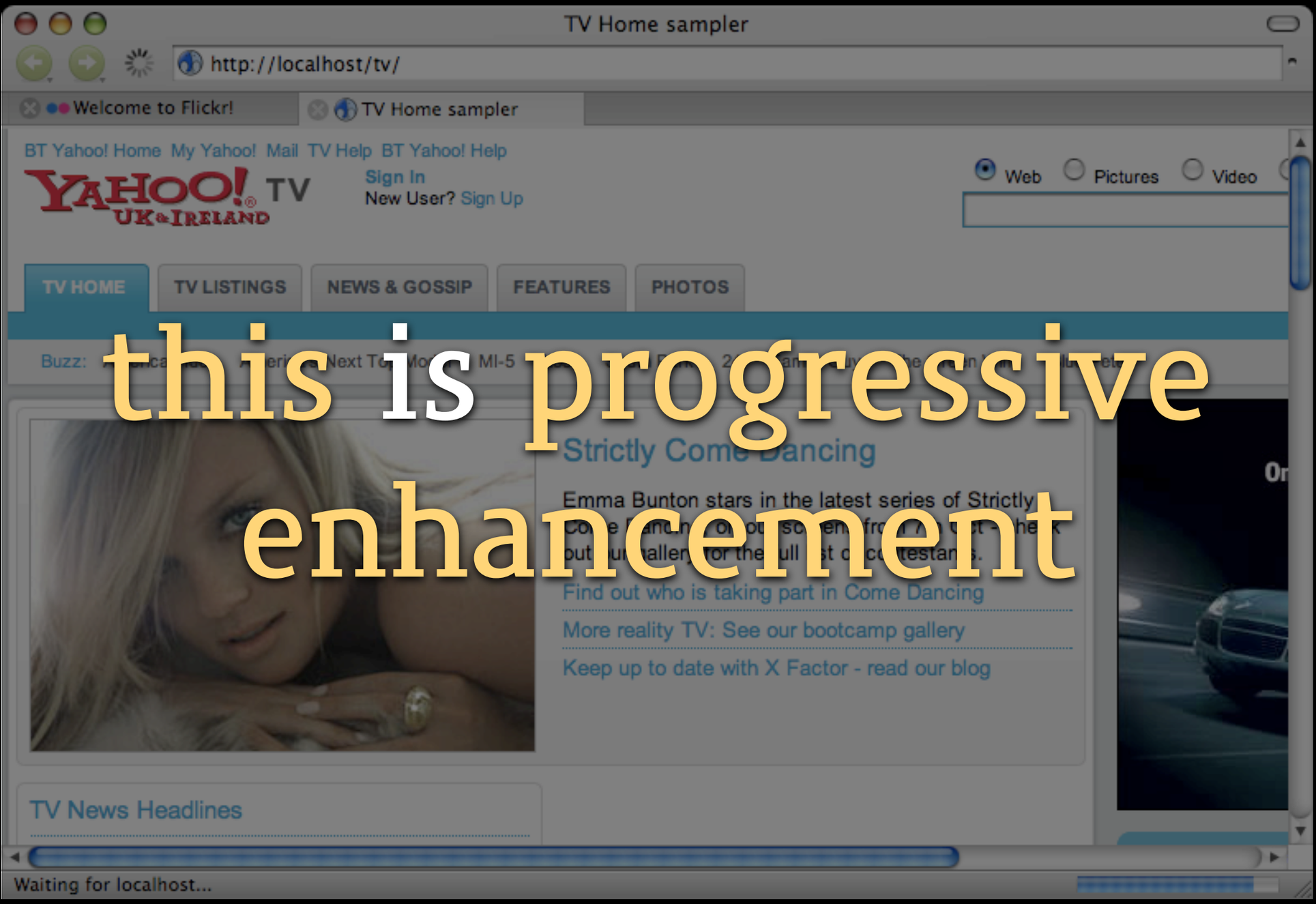


But it has one subtle difference. The ‘links’ to change the search destination are not links at all.

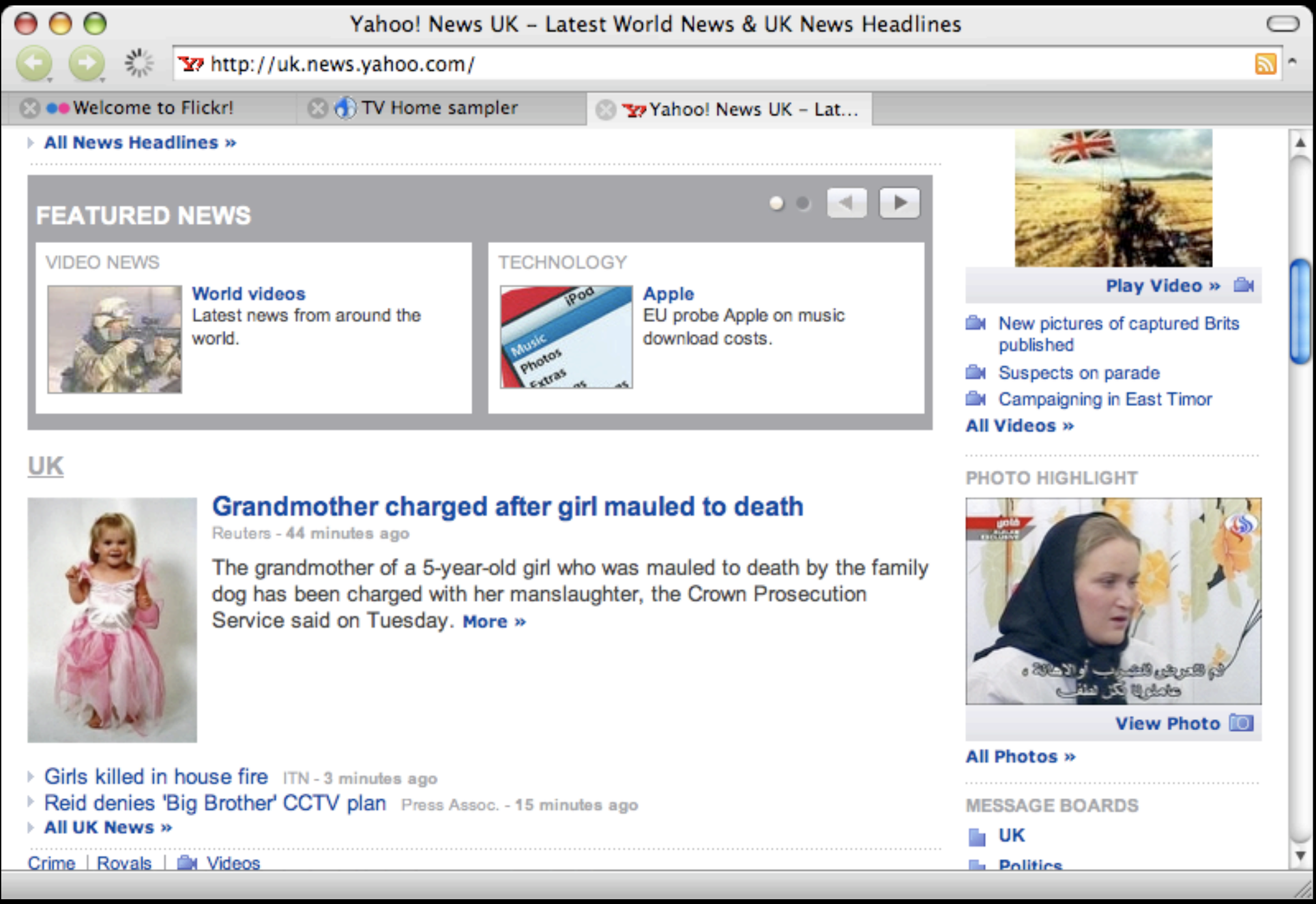


They are actually radio buttons in the form.

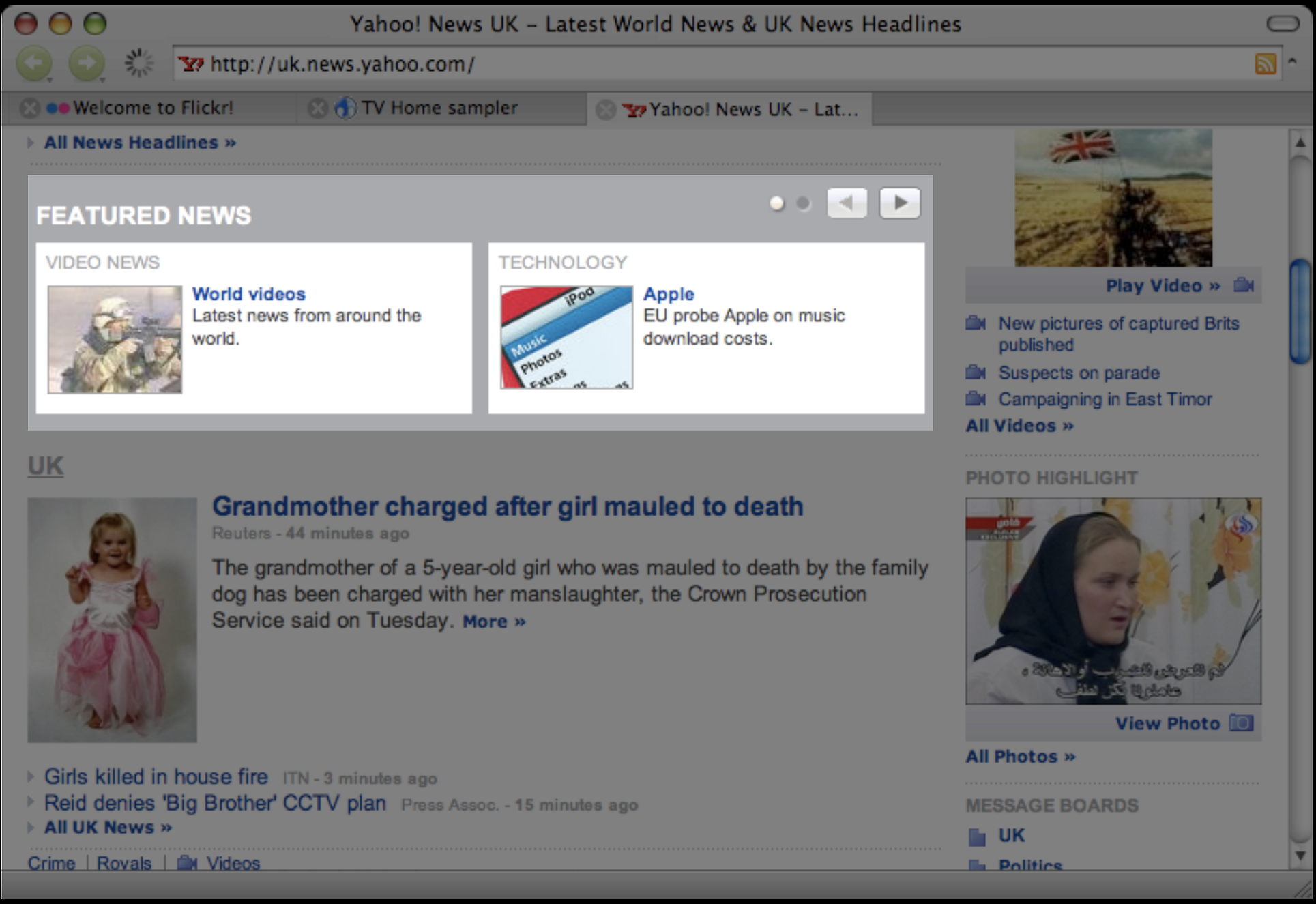
After the search form is submitted by the user, the Search server receives the request and based upon the destination parameter redirects the user to the correct end result.



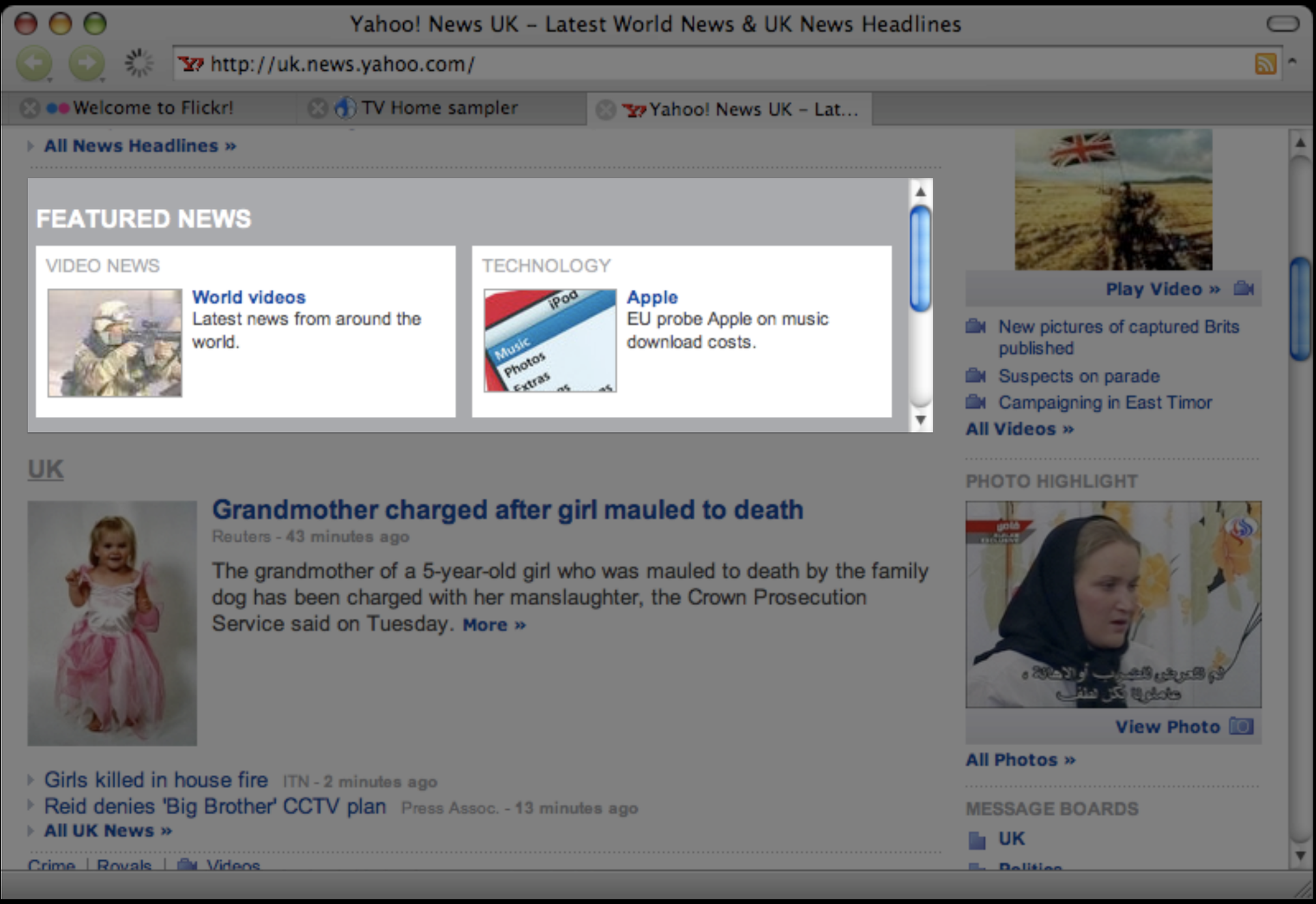
This is finally an example of progressive enhancement at Yahoo!. And this is because the original functionality was available to the user without the use of JavaScript.



The ‘carousel’ widget on the Yahoo! UK News site provides a gallery of different new stories within the page.

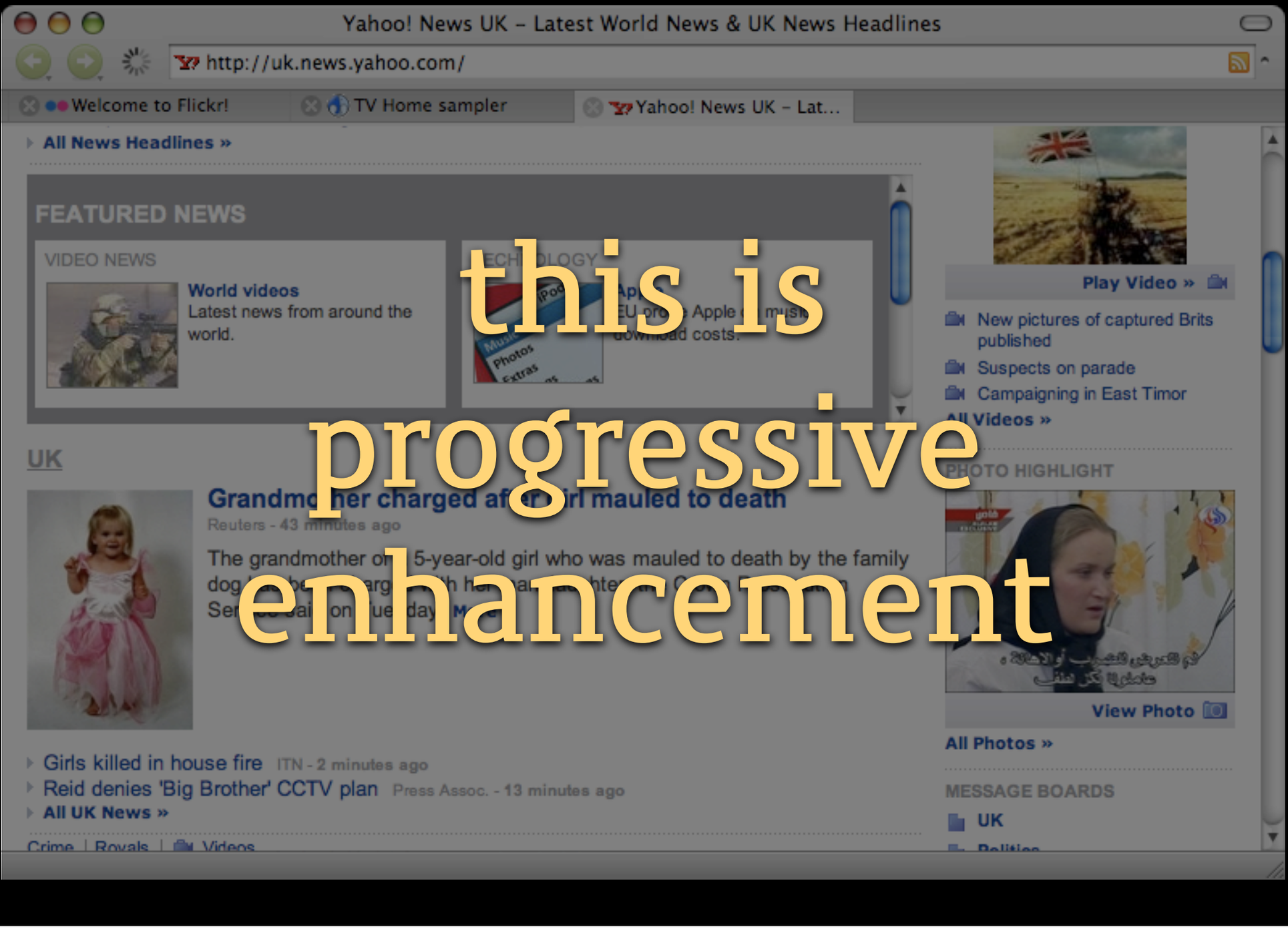


Users can scroll through more stories than are initially presented, making it a quick and lightweight method for browsing content within a page without overwhelming the user with endless similar boxes of news content.



When JavaScript is turned off, the content is still there in the page. Nothing has been denied to the user without JavaScript.

The scrollbar is there to lessen the page jumping around as JavaScript reformats a variable-height box into a single row of modules. I personally disagree with having a scrollbar on the content, as I feel this is a sub-optimal way to deal with this issue. In fact I don't believe it is an issue at all. The developer disagrees and kept the content to the same height without JS on.



This is progressive enhancement because the content in the gallery is still made available to the user.

This module has also been used to provide image galleries, pulling in the later “pages” of images using Ajax. As long as there is a link to a static page where the user can see these further images, this is still progressive enhancement, as all of the content is available as normal, but the initial page has been enhanced to allow direct access to further content.

“Methodologies including layered development via progressive enhancement, Unobtrusive Javascript, and Hijax ensure that higher layers don’t disrupt lower layers.

“…be sure your site’s core content and functionality is accessible without images, CSS, and JS”

“However, representative testing of the core experience is critical. If you choose to adopt a Graded Browser support regime for your own web applications, be sure your site’s core content and functionality is accessible without images, CSS, and JS. Ensure that the keyboard is adequate for task completion and that when your site is accessed by a C-grade browser all advanced functionality prompts are hidden.”

“…in modern web development we must support all browsers. Choosing to exclude a segment of users is inappropriate, and … unnecessary.

"In the first 10 years of professional web development, back in the early ‘90s, browser support was binary: Do you — or don’t you — support a given browser? When the answer was ‘No’, user access to the site was often actively prevented. In the years following IE5’s release in 1998, professional web designers and developers have become accustomed to asking at the outset of any new undertaking, ‘Do I have to support Netscape 4.x browsers for this project?’

By contrast, in modern web development we must support all browsers. Choosing to exclude a segment of users is inappropriate, and, with a ‘Graded Browser Support’ strategy, unnecessary."

Yahoo! EU Web Dev – We're Hiring!

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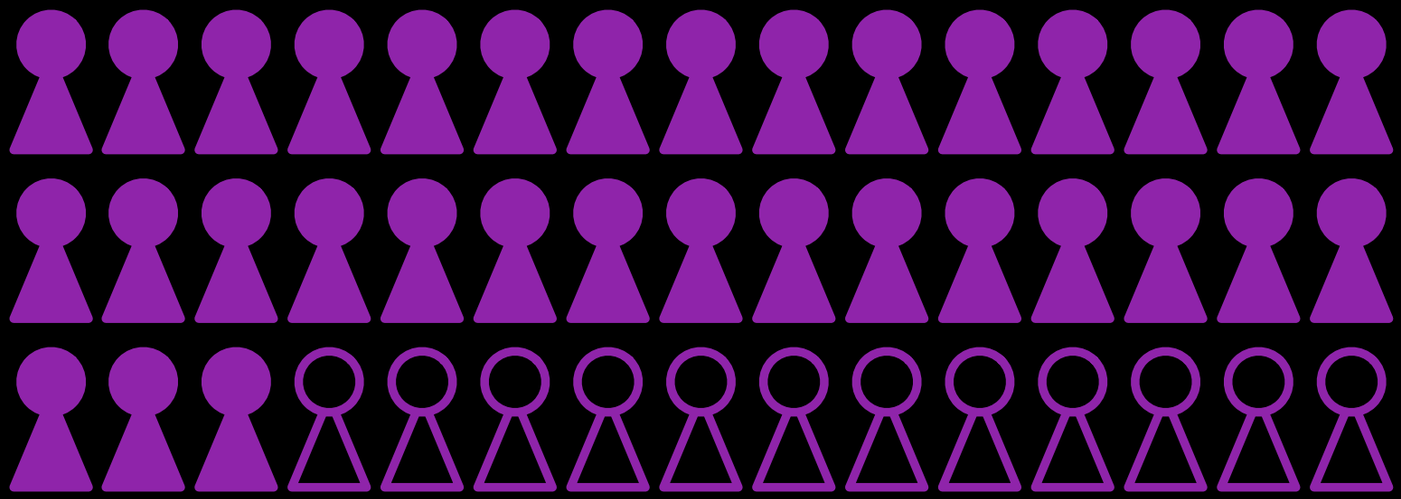

any questions?

Actually, before I take any questions, I have one for you. Does anyone want to work for Yahoo!? :)