

# Keyboard **accessibility**

BASIC STEPS TOWARDS A MORE USABLE AND ACCESSIBLE SITE

**accessibility** = blind users + screenreaders?

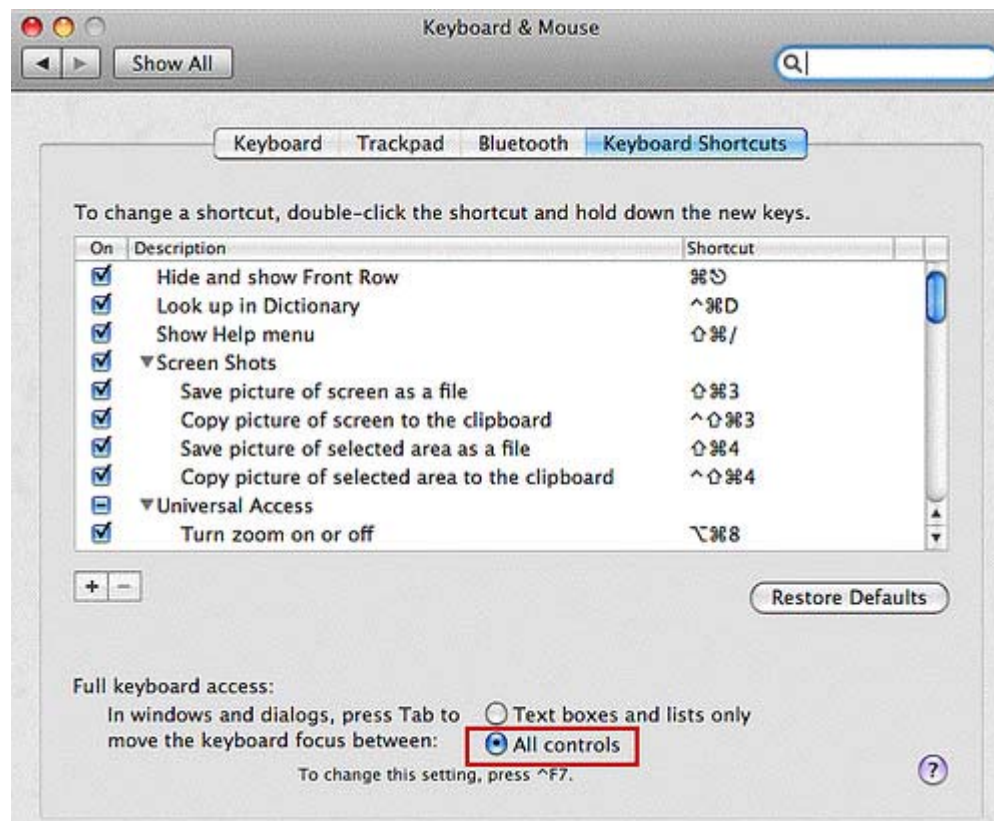
difficult to test – need to install and learn  
**screenreader**

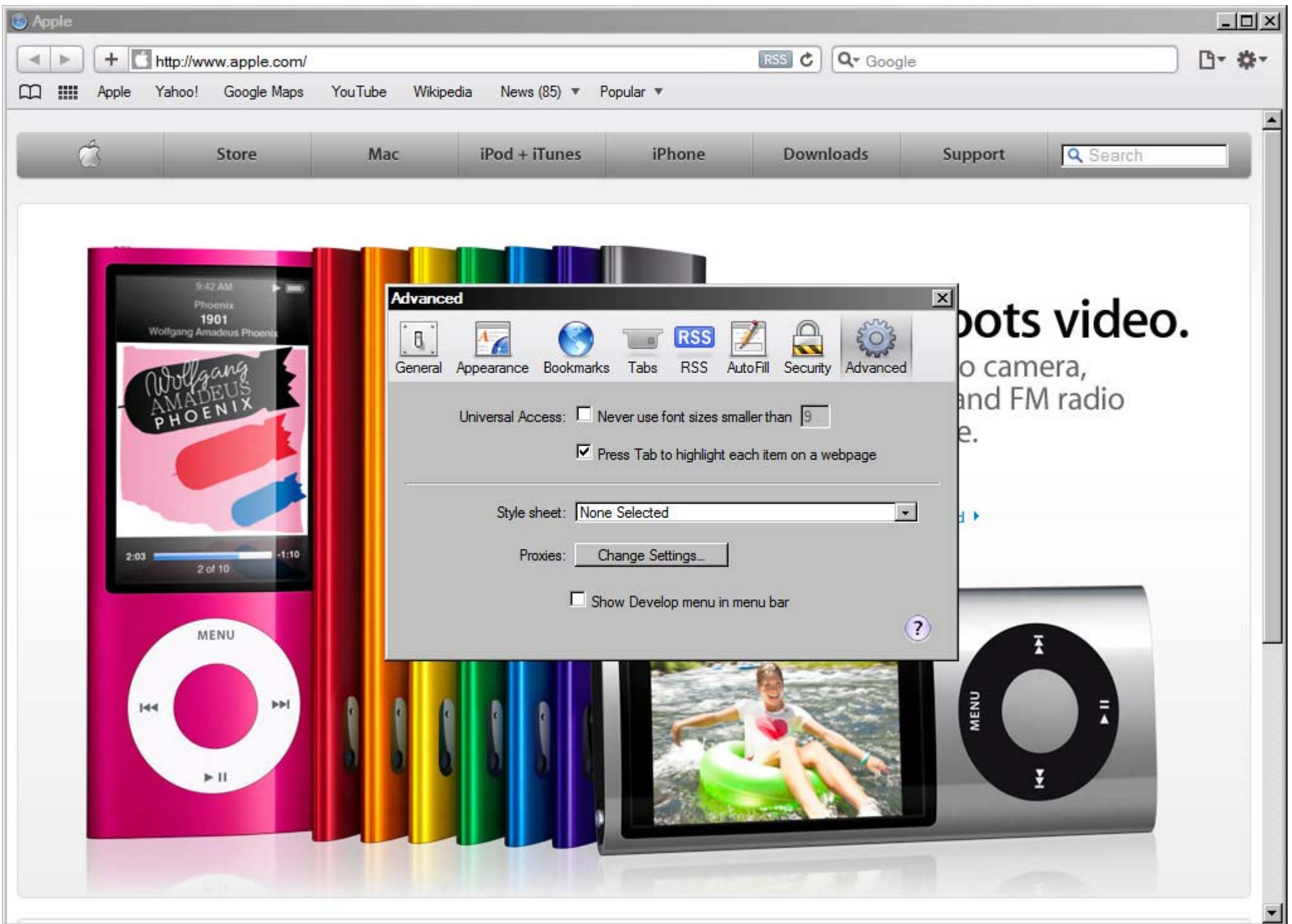
many different forms of disability



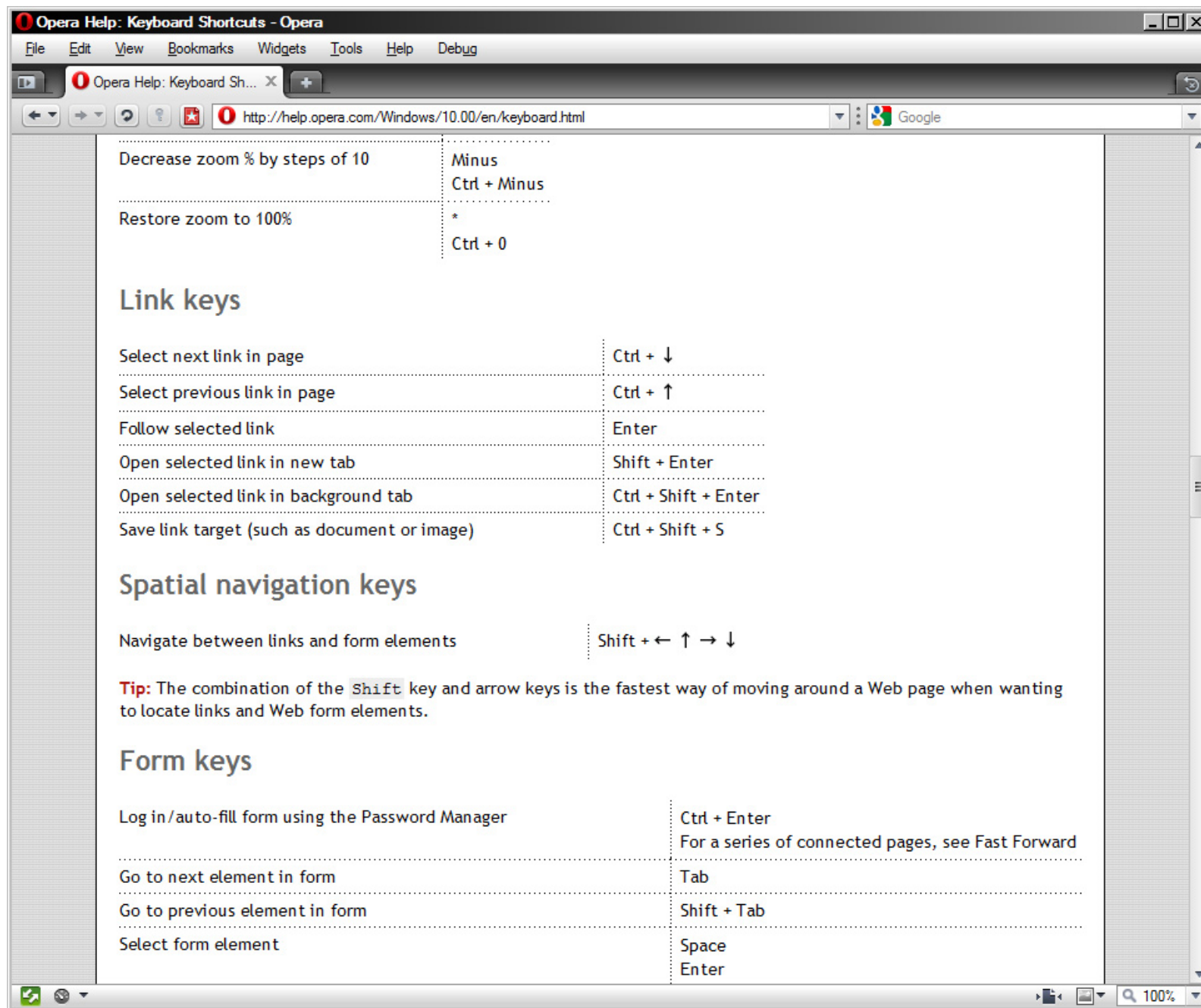
keyboard or keyboard-like interfaces

easiest to test...no special software required





by default users **TAB**



using keyboard, move from one focusable  
element to the next

standard focusable elements:

**links, form elements, image map areas**



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events, contenteditable), the Selectors API, and CSS3 (Media Queries, Web Fonts, Color and Selectors specs).

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Chris Mills — 2009/09/01

This article presents some all-new Web Fonts showcases, written by the Opera developer relations team, to educate and inspire you! Check them out, and...

- [Color in Opera 10 — HSL, RGB and Alpha Transparency](#)  
Molly E. Holzschlag — 2009/09/01  
This guide explains how the RGB (Red, Green

Zi Bin, Cheah — 2009/09/06

In conjunction with Opera 10, we have introduced seven Web Fonts showcases and other cool stuff in the Opera 10 experience. Today, I've made a Web ...

- [@font-face Web Fonts resources](#)  
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So you've seen the Opera 10 Web Fonts showcases and want to use the technology to

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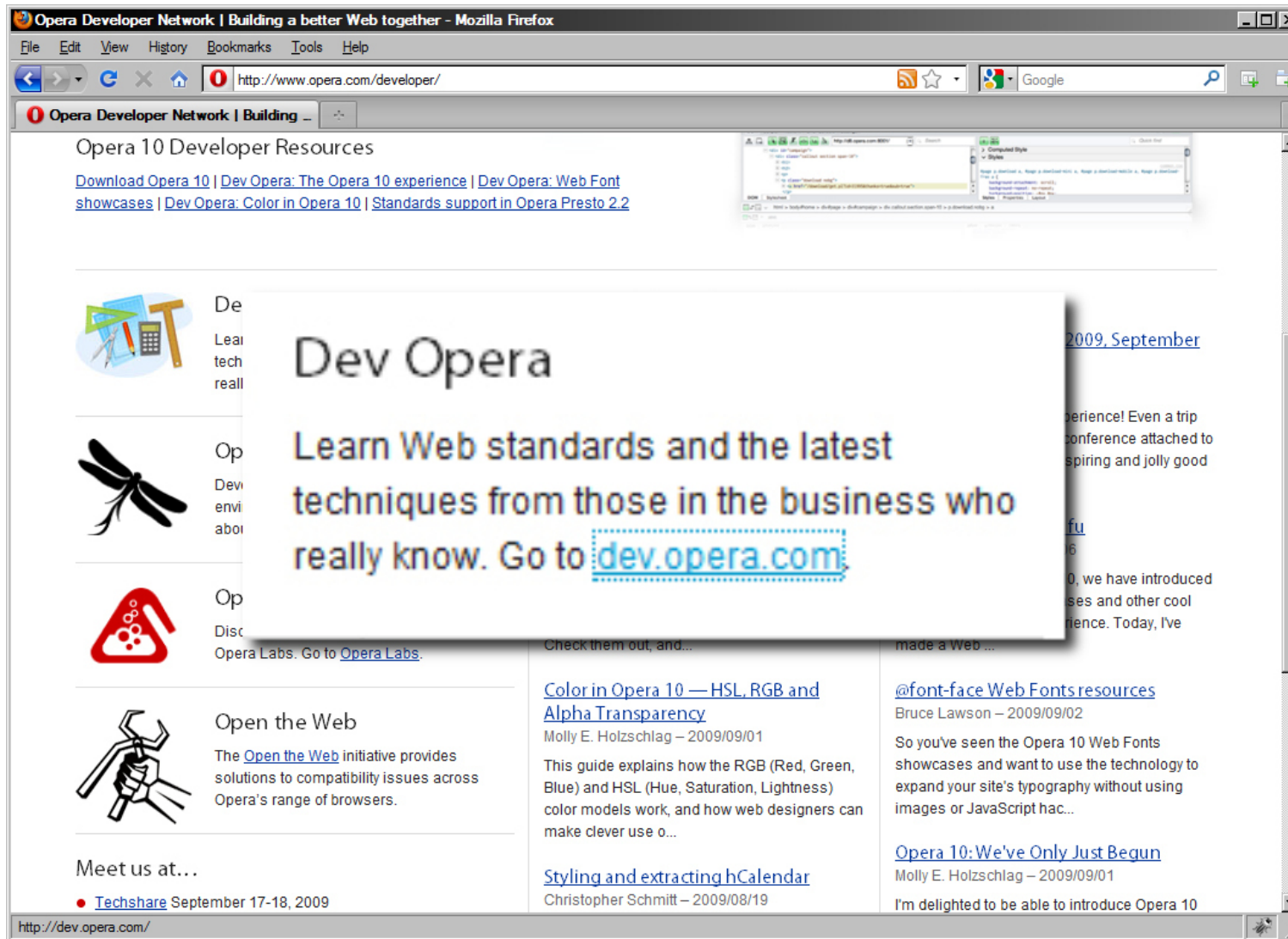
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### Styling and extracting hCalendar

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### Tomorrow's technology, today!

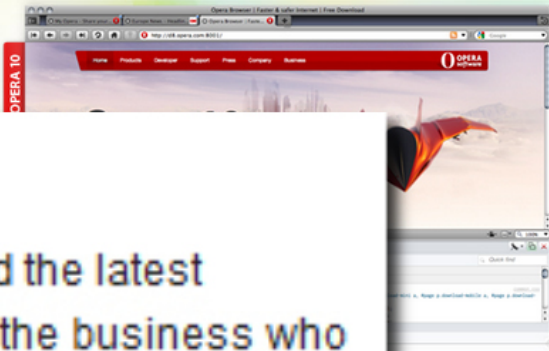
Grab Opera 10 and start developing sites with the latest cutting edge technologies. Our Opera Presto 2.2 rendering standards currently in development (events, contenteditable, Fonts, Color and Selectors)


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 Opera Dragonfly

Develop using the cross-device debugging environment for Opera browsers. Read more about [Opera Dragonfly](#).

[Gridnite part 2: developing the formula engine](#)  
Slava Vishnyakov – 2009/09/09

This is part two of our "Gridnite" series, covering the creation an Opera Unite-powered spreadsheet. We've already covered the basic implementation, a...

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Chris Mills – 2009/09/01

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Chris Mills – 2009/09/08


Another great Brighton experience! Even a trip down to Brighton with no conference attached to it would be fantastically inspiring and jolly good fun,...

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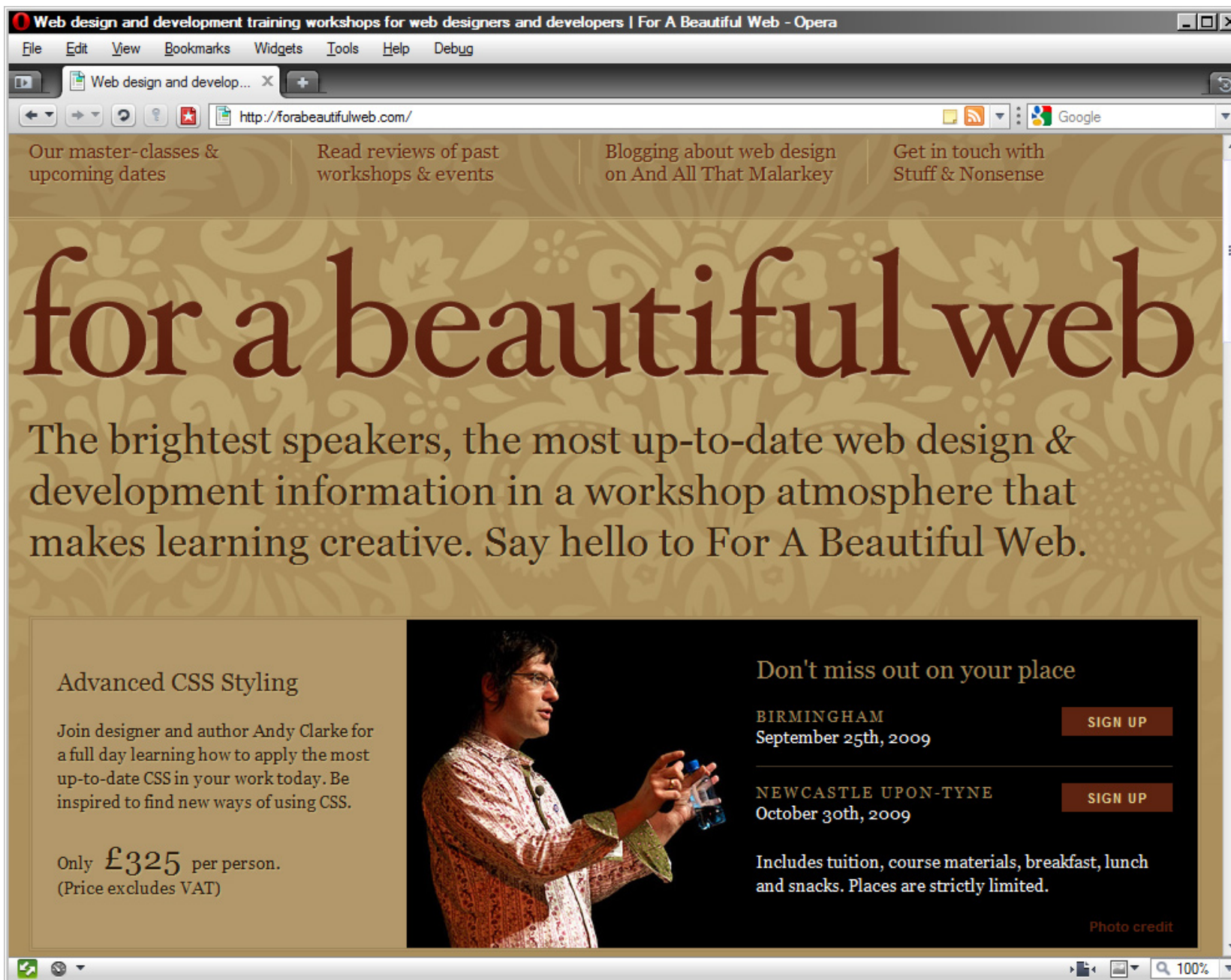
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don't forget the **fancy styling**



```
a.action:hover {  
    background-color:#a82310;  
    color:#fff !important;  
    text-decoration:none;  
}
```

```
#promo-dvd .content a:hover img {  
    background-color:#d5c7ae;  
}
```



**a:focus**, **a:hover**, **a:active** { ... }

don't suppress **outline!**



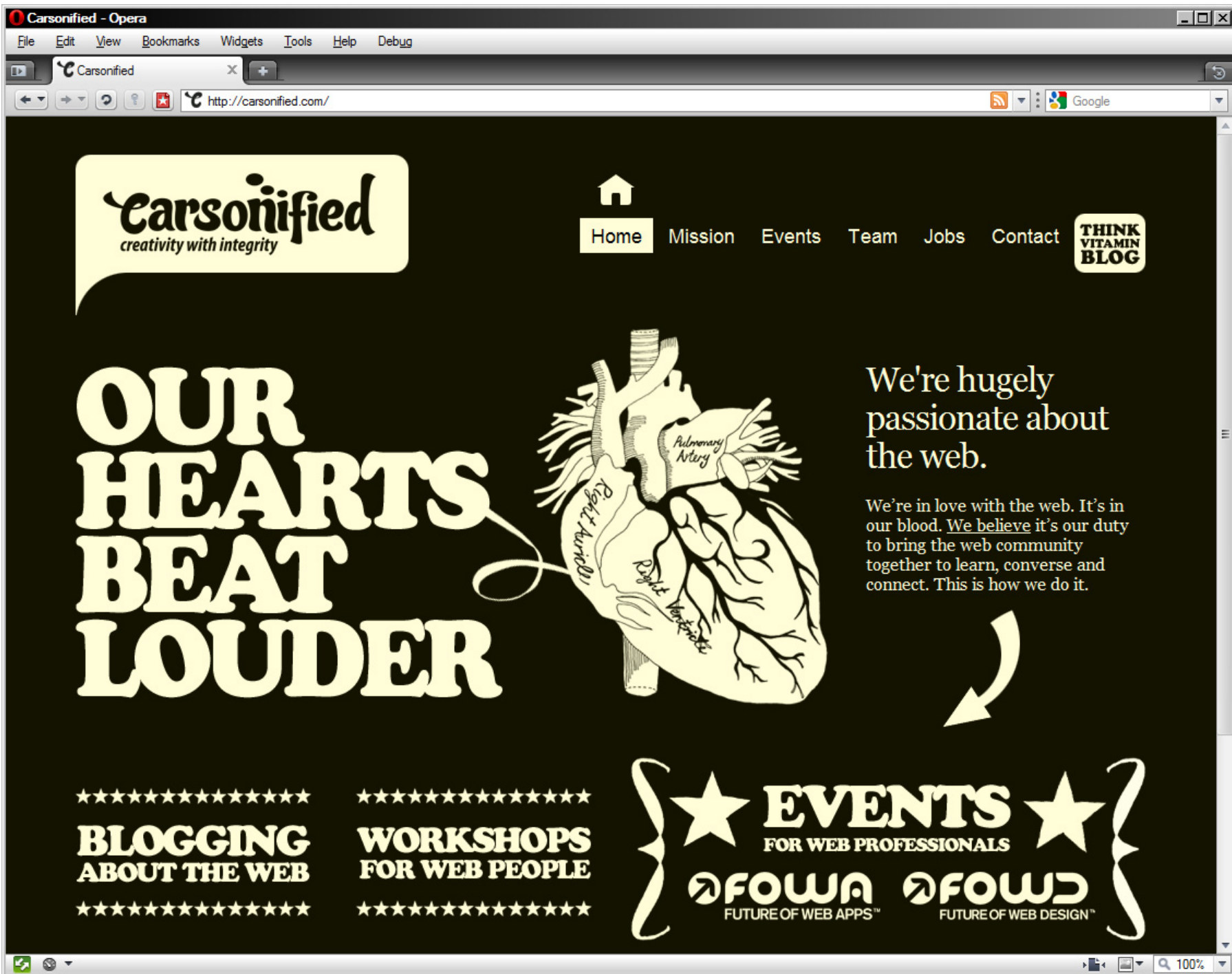
keyboard accessible, but where am I?

```
/* =Reset Styles - Thank you Eric Meyer  
(http://meyerweb.com/eric/thoughts/2007/05/01/reset-reloaded/)  
*/
```

```
html, body, div, span, applet, object, iframe, h1, h2, h3, h4, h5,  
h6, p, blockquote, pre, a, abbr, acronym, address, big, cite,  
code, del, dfn, em, font, img, ins, kbd, q, s, samp, small,  
strike, strong, tt, var, dl, dt, dd, ol, ul, li, fieldset,  
form, label, legend, table, caption, tbody, tfoot, thead, tr,  
th, td {  
margin: 0;  
padding: 0;  
border: 0;  
outline: 0;  
font-weight: inherit;  
font-style: inherit;  
font-size: 100%;  
font-family: inherit;  
vertical-align: baseline;  
}  
:focus {  
outline: 0;  
}
```

```
/* remember to define focus styles! */
```

why do designers suppress outline?





“get your outline out of my design!”  
...is there a **compromise**?

\*\*\*\*\*

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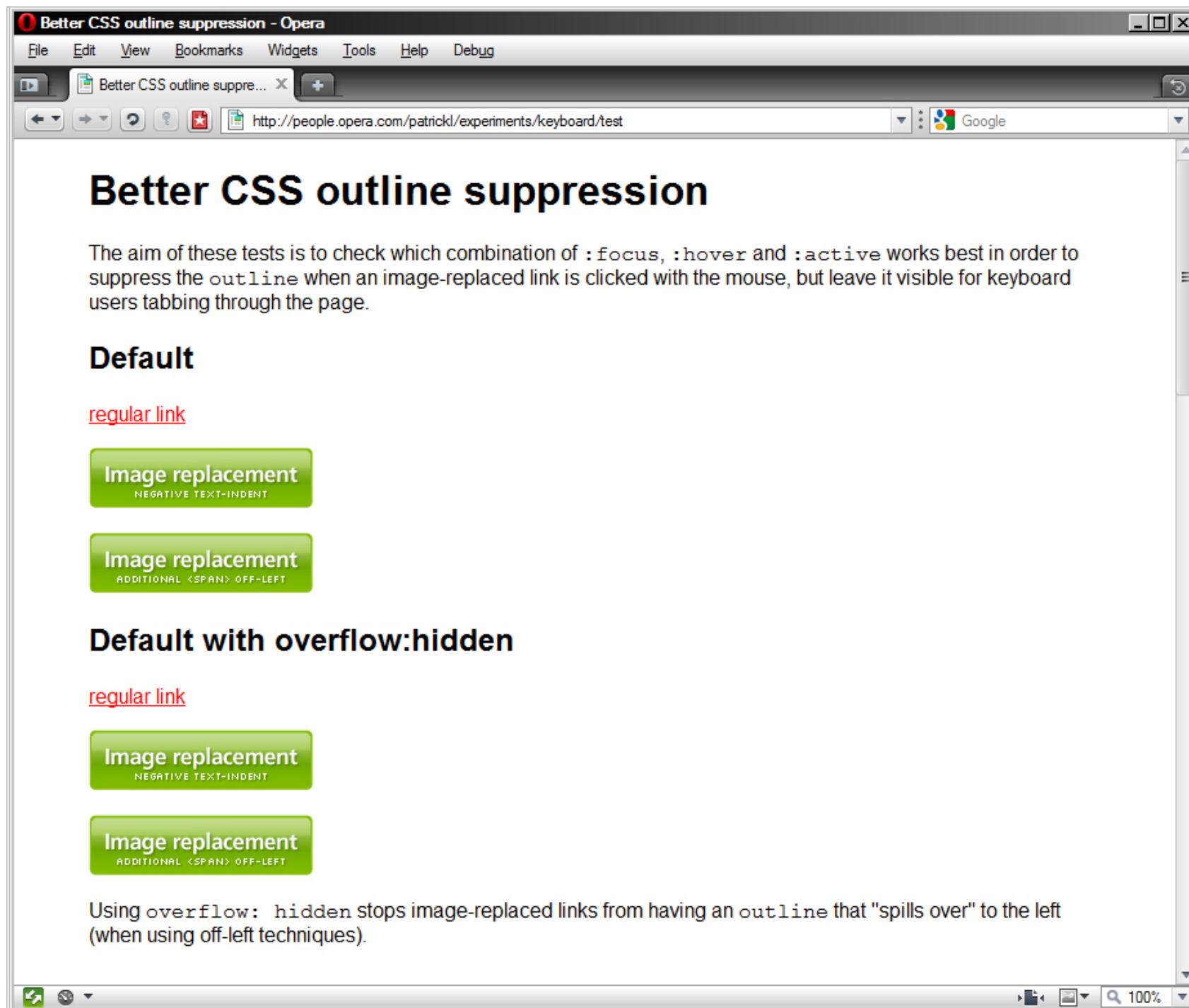
### Contact:

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```
a { ... overflow: hidden; }
```



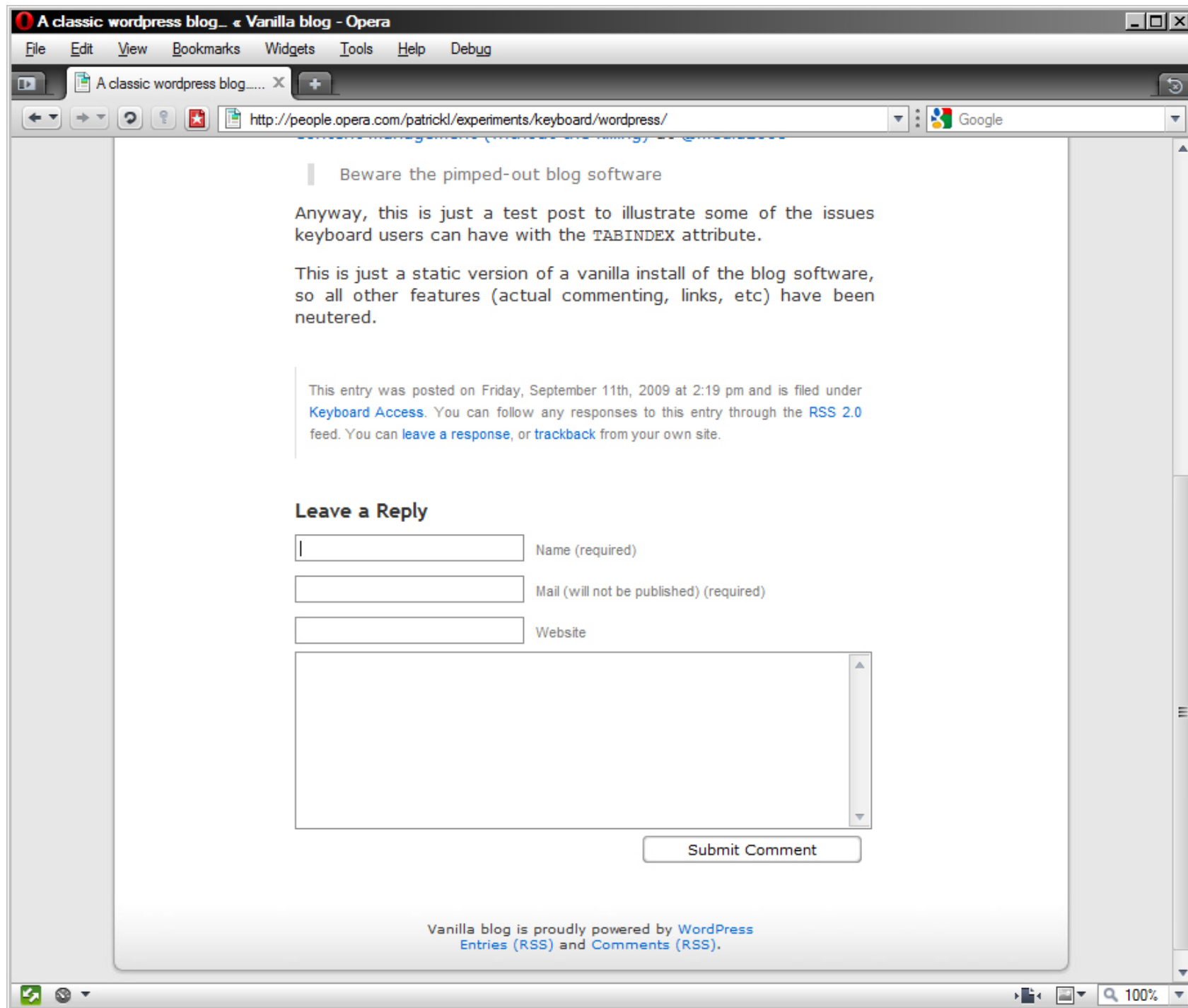
...only suppress it on **:active**

**TAB** cycle – normally just **source order**

**tabindex** forces a certain **TAB** cycle



anything with **tabindex** takes precedence



```
<input type="text" name="author"...tabindex="1" />
```

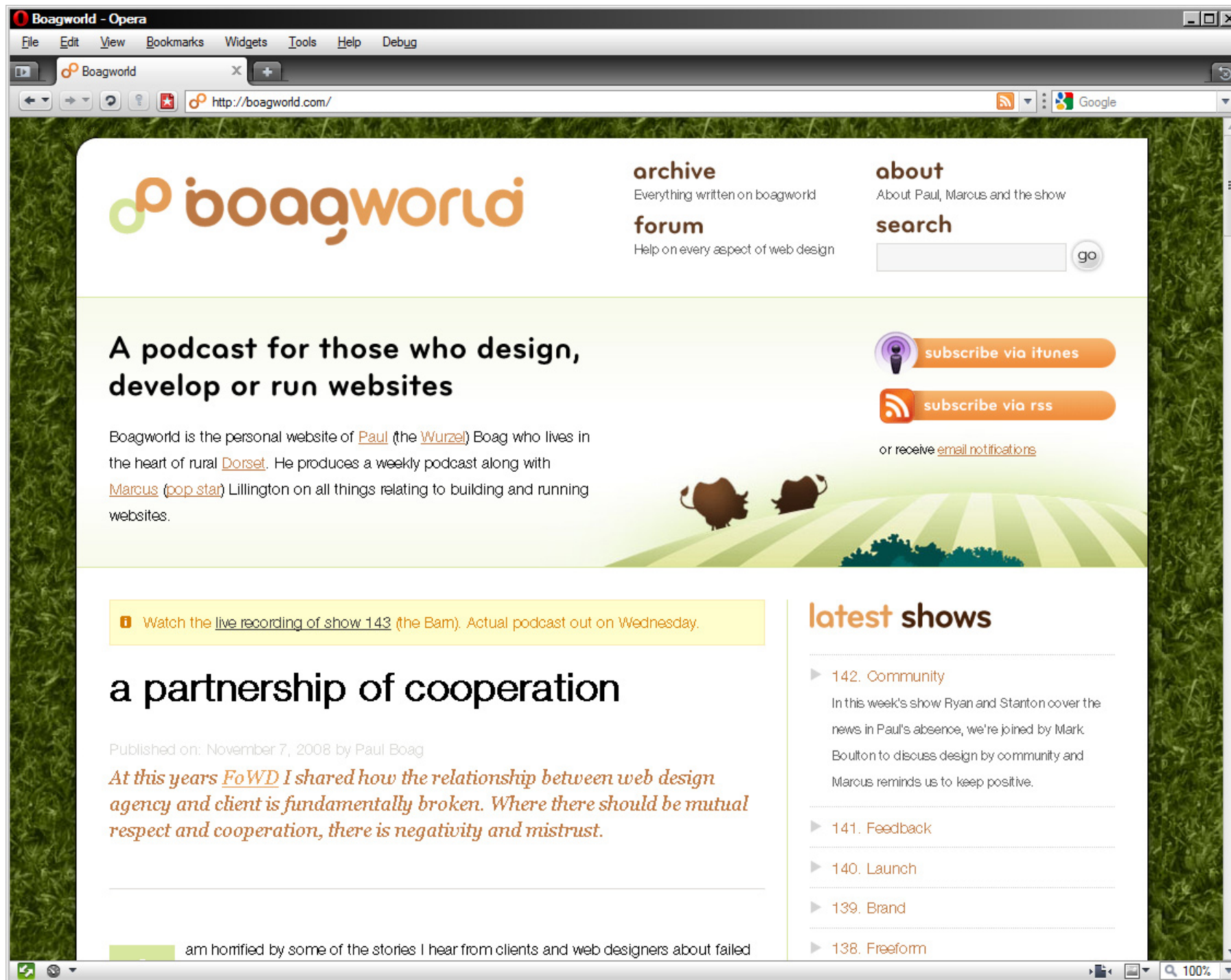
```
<input type="text" name="email"...tabindex="2" />
```

```
<input type="text" name="url"...tabindex="3" />
```

```
<textarea name="comment"...tabindex="4"></textarea>
```

easy enough...let's drop in some JavaScript





keyboard accessible, but **where's the extra  
information?**

```
$( '#whatever' ).hover(  
    function() { ... } ,  
    function() { ... }  
);
```



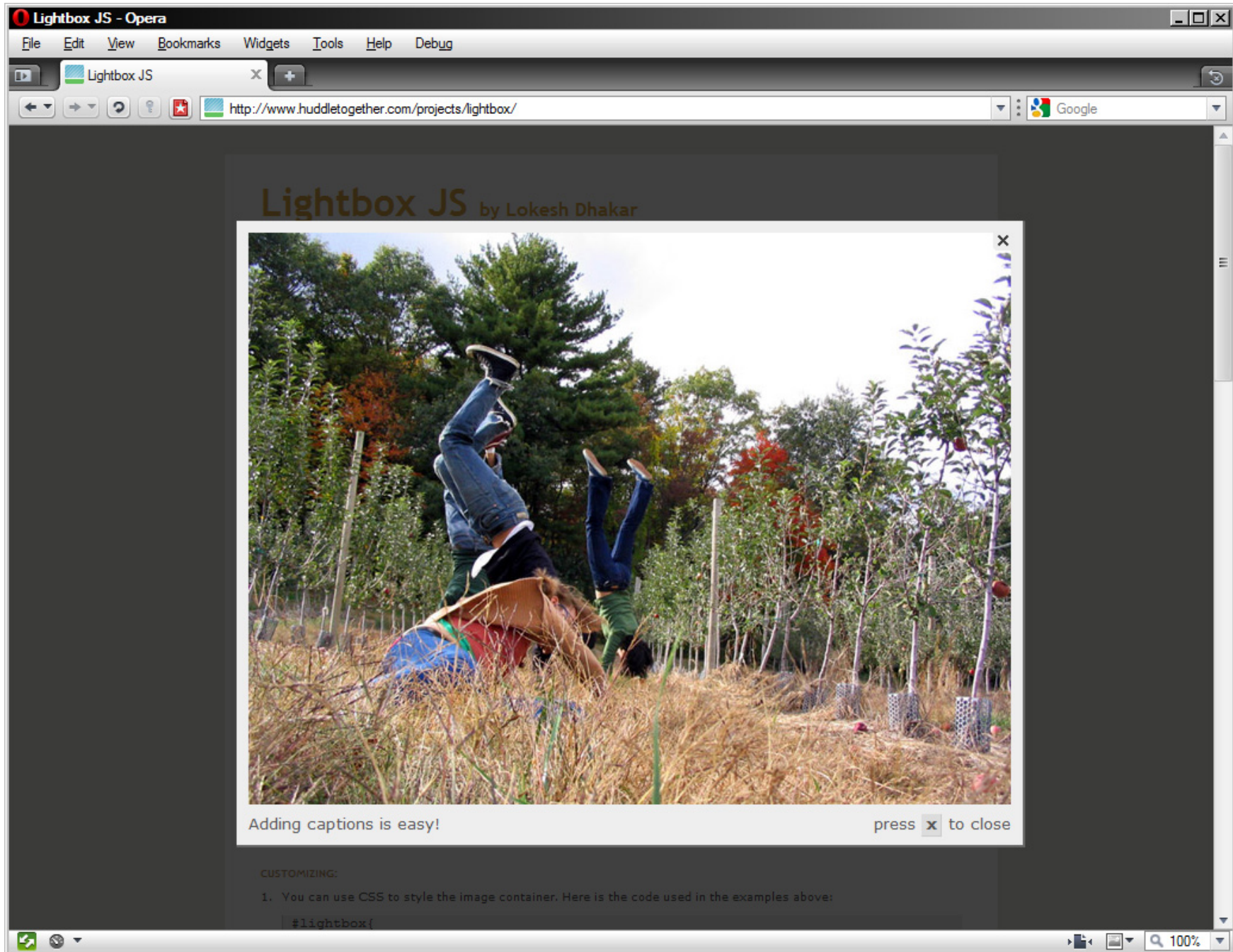
```
$( '#whatever' ).hover(  
    function() {...},  
    function() {...}  
);
```

```
$( '#whatever' ).focus(function() {...});
```

```
$( '#whatever' ).blur(function() {...});
```

aside: **mobile browsers** don't do hover (well)

**lightboxes**...we love 'em



close it again on **TAB**  
don't invent new keyboard shortcuts

more complex solution: **manage focus**

and now, the dangerous part...

JavaScript attaches behaviour to **anything**



```
$( 'div' ).click(function( ) { ... } );
```

sexy tutorials out there doing it wrong

jQuery Tutorials for Designers - Opera

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## jQuery Tutorials for Designers

This article contains 10 visual tutorials intended for web designers and newbies on how to apply Javascript effects with jQuery. In case you don't know about jQuery, it is a "write less, do more" Javascript library. It has many Ajax and Javascript features that allow you to enhance user experience and semantic coding. Since these tutorials are focused on jQuery, I'm not going to get into the details of the CSS.

Note: the version used in this article is jQuery 1.2.3

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**be lazy**...use libraries that solved this  
YUI, jQueryUI, etc

**beware** 3<sup>rd</sup> party solutions  
even the big boys can get it wrong






Keyboard-accessible Google Maps demo 2 - Opera

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Keyboard-accessible Goo... x Keyboard-accessible Goo... x +

http://devfiles.myopera.com/articles/523/demo02.html Google



Map Satellite Hybrid

Manchester

Map data ©2009 Tele Atlas - Terms of Use

DOM Scripts Network Error Console Settings

dem... Search

```
<div style="position: absolute; left: 0px; top: 0px; width: 59px; height: 62px">
  <div style="position: absolute; left: 0px; width: 59px; overflow-x: hidden; overflow-y: hidden; top: 62px; height: 180px" id="lmcslider">
    <div style="width: 59px; height: 292px; overflow-x: hidden; overflow-y: hidden">
      <img style="position: absolute; left: 0px; top: -62px; border-top-color: currentColor; border-left-color: currentColor; border-right-color: currentColor; border-bottom-color: currentColor; border-top-width: 0px; border-left-width: 0px; border-right-width: 0px; border-bottom-width: 0px;" data-bbox="270 785 545 885"/>
```

DOM Stylesheet

Quick find

Computed Style

Styles

```
element.style {
  position: absolute;
  left: 0px;
  top: -62px;
  border-top-color: currentColor;
  border-left-color: currentColor;
  border-right-color: currentColor;
```

Styles Properties Layout

html > body > div#map\_canvas > div.gmnoprint > div#lmcslider > div > img

Keyboard-accessible Google Maps - Opera Developer Community - Opera

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http://dev.opera.com/articles/view/keyboard-accessible-google-maps/

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# Keyboard-accessible Google Maps

BY [PATRICK H. LAUKE](#) · 7 NOV, 2008

Published in: [IE](#), [CONTROLS](#), [DRAGONFLY](#), [SPATIAL](#), [API](#)

## Introduction

Google Maps is a powerful, free tool for adding maps to a site. Unfortunately, out of the box, these maps are reliant on mouse interaction; therefore, they are completely inaccessible to those using only the keyboard for Web interaction. In this article, we'll examine the problem and, step by step, make our way toward a possible solution.

I'll assume that you're familiar with the basics of [Google Maps](#), have [obtained your API key](#), and implemented a map on your site. Now, let's say that you want to make your map a tad more accessible but without changing the look and feel of your existing map (maybe because your boss or designer insists on it) — a case of *unobtrusive accessibility*, if you will.

## A basic map

To understand the problem of keyboard access, let's use Google's own example code as a starting point to display a map of Manchester, England.

We'll begin by using the lesser-known [Google Static Maps API](#) to place an image of our desired starting map on a page, wrapped in a simple container div. In the absence of JavaScript, this provides users with a

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hijack generated markup to **accessify** it

in conclusion...

if you style **:hover**, also **:focus** and **:active**

don't suppress **outline** completely  
(reintroduce **:focus** and suppress **:active**)

leave **tabindex** alone – source order

JavaScript on **hover** (mouseover/mouseout)  
also on **focus/blur**  
(if focusable element)

**lightboxes** and their problems

only attach behaviour to **focusable elements**



</rant>



[www.opera.com/developer](http://www.opera.com/developer)

patrick.lauke@opera.com

