

# Improving Efficiency and Usability with CSS3

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ConvergeSE

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# What I do

## Books

*now* **Flexible Web Design:**  
Creating Liquid and Elastic  
Layouts with CSS  
[www.flexiblewebbook.com](http://www.flexiblewebbook.com)

*soon* **Stunning CSS3:**  
A Project-based Guide to  
the Latest in CSS  
[www.stunningcss3.com](http://www.stunningcss3.com)

## Web

**Freelance graphic  
designer and web  
developer**

CSS consultant

Member of Adobe  
Task Force for WaSP

# What is CSS3?

See modules at  
[www.w3.org/Style/CSS/current-work](http://www.w3.org/Style/CSS/current-work)

Abbreviation	Full name
WD	<a href="#">Working Draft</a>
LC	<a href="#">Last Call</a>
CR	<a href="#">Candidate Recommendation</a>
PR	<a href="#">Proposed Recommendation</a>
REC	<a href="#">Recommendation</a>

High Priority	Current	Upcoming
<a href="#">CSS Level 2 Revision 1</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
<a href="#">Selectors</a>	<a href="#">Proposed Recommendation</a>	<a href="#">Recommendation</a>
<a href="#">CSS Mobile Profile 2.0</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
<a href="#">CSS Marquee</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
Medium Priority	Current	Upcoming
<a href="#">CSS Snapshot 2007</a>	<a href="#">Last Call</a>	<a href="#">Candidate Recommendation</a>
<a href="#">CSS Namespaces</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
<a href="#">CSS Paged Media</a>	<a href="#">Last Call</a>	<a href="#">Last Call</a>
<a href="#">CSS Print Profile</a>	<a href="#">Last Call</a>	<a href="#">Candidate Recommendation</a>
<a href="#">CSS Values and Units</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Cascading and Inheritance</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Text</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Text Layout</a>		<a href="#">Working Draft</a>
<a href="#">CSS Line Grid</a>		<a href="#">Working Draft</a>
<a href="#">CSS Ruby</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Working Draft</a>
<a href="#">CSS Generated Content for Paged Media</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Backgrounds and Borders Level 3</a>	<a href="#">Last Call</a>	<a href="#">Candidate Recommendation</a>
<a href="#">CSS Fonts</a>	<a href="#">Working Draft</a>	<a href="#">Last Call</a>
<a href="#">CSS Basic Box Model</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Multi-column Layout</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
<a href="#">CSS Template Layout</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">Media Queries</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Proposed Recommendation</a>
<a href="#">CSS Speech</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Color</a>	<a href="#">Last Call</a>	<a href="#">Proposed Recommendation</a>
<a href="#">CSS Basic User Interface</a>	<a href="#">Candidate Recommendation</a>	<a href="#">Test Suite</a>
<a href="#">CSS Scoping</a>		<a href="#">Working Draft</a>
<a href="#">CSS Grid Positioning</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Flexible Box Layout</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Image Values</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS 2D Transformations</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS 3D Transformations</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Transitions</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Animations</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
Low Priority	Current	Upcoming
<a href="#">CSSOM View</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Extended Box Model</a>		<a href="#">Working Draft</a>
<a href="#">CSS Object Model</a>		<a href="#">Working Draft</a>
<a href="#">CSS Syntax</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Lists</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Tables</a>		<a href="#">Working Draft</a>
<a href="#">CSS Reader Media Type</a>	<a href="#">Working Draft</a>	-
<a href="#">CSS Positioning</a>		<a href="#">Working Draft</a>
<a href="#">CSS Generated and Replaced Content</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Line Layout</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>
<a href="#">CSS Hyperlink Presentation</a>	<a href="#">Working Draft</a>	<a href="#">Working Draft</a>

# Use the parts of CSS3 that:

- ✓ have generally stable syntax.
- ✓ have good support.
- ✓ don't harm non-supporting browsers by their lack.


# Progressive enhancement



Progressive enhancement...aims to deliver the best possible experience to the widest possible audience — whether your users are viewing your sites on an iPhone, a high-end desktop system, a Kindle, or hearing them on a screen-reader, their experience should be as fully featured and functional as possible.

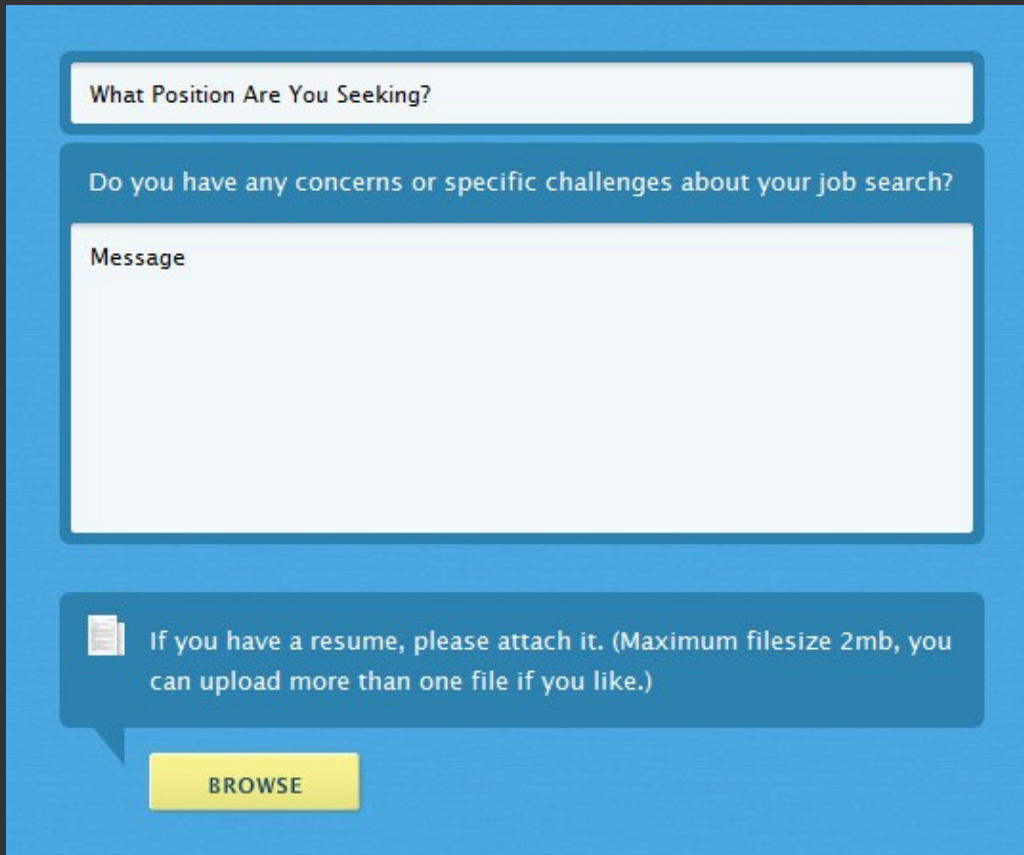
*Designing with Progressive Enhancement,*  
[www.filamentgroup.com/dwpe](http://www.filamentgroup.com/dwpe)



A close-up photograph of a brown pegboard in a workshop. Various tools are hanging on the board, including several pairs of scissors in red, blue, and purple, a yellow-handled rotary cutter, a metal spoon, a ruler, and a small blue storage bin. The background is slightly blurred, showing more tools and a wooden workbench.

A few of the things  
you can use...

# border-radius



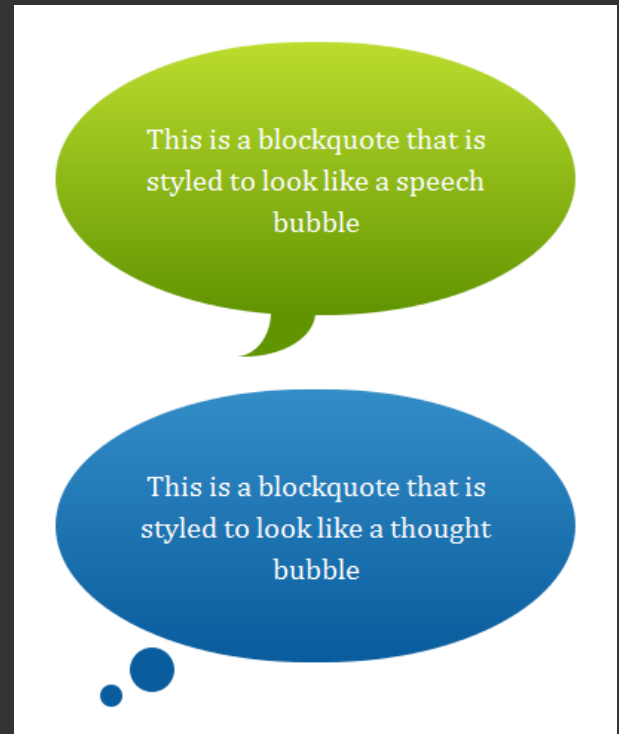
What Position Are You Seeking?

Do you have any concerns or specific challenges about your job search?

Message

If you have a resume, please attach it. (Maximum filesize 2mb, you can upload more than one file if you like.)

BROWSE

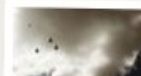




# box-shadow



Medaljceremoni vid Armémuseum. Foto: Anders Lindell



CSS3 Button

No Images!

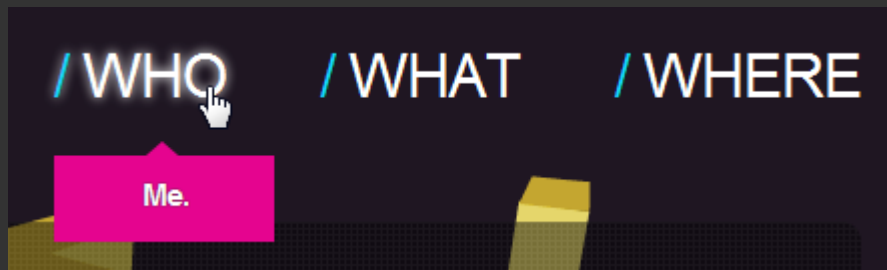
I have  
rainbow  
borders!

# text-shadow

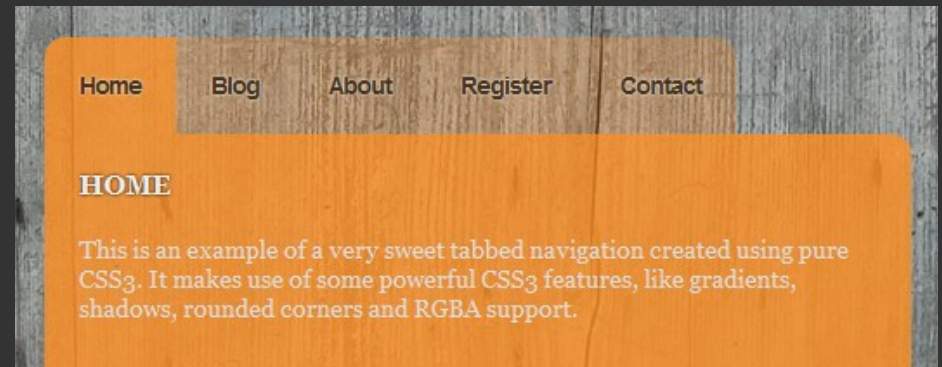
## Ventures

When you see the *Made For Humans* label it signifies an original, hand crafted idea or product — created by Crushers (that's us), sometimes hand in hand with our mighty family of strategic partners.

## Inset Typography



# RGBA and HSLA





# @font-face

**You're not  
cookie cutter.**

NEITHER ARE  
**WE.**

We craft compelling, one-of-a-kind  
resumes that get you noticed.

Our unique resume writing approach has helped thousands of  
people take their careers to a new level.

[Find out how we do it.](#) →



**any questions?  
consult our FAQ**


You've got questions? We've got the  
answers! Just ask. And don't worry: there's  
no such thing as a dumb question.

[go to FAQ >](#)

**THE MIXTAPE**

**“DON'T TRY TO BE  
ORIGINAL, JUST TRY  
TO BE GOOD.”**

—Paul Rand paraphrasing Ludwig Mies van der Rohe's quote:  
“I don't want to be interesting. I want to be good.”



Av sex månader återstår nu blott tre veckor  
och alla vänliga människor. Jag kommer att s

# 2D Transforms Module

# Transforms

**Why not find out when we release things?**

Name:

Email:

Do you skate?:

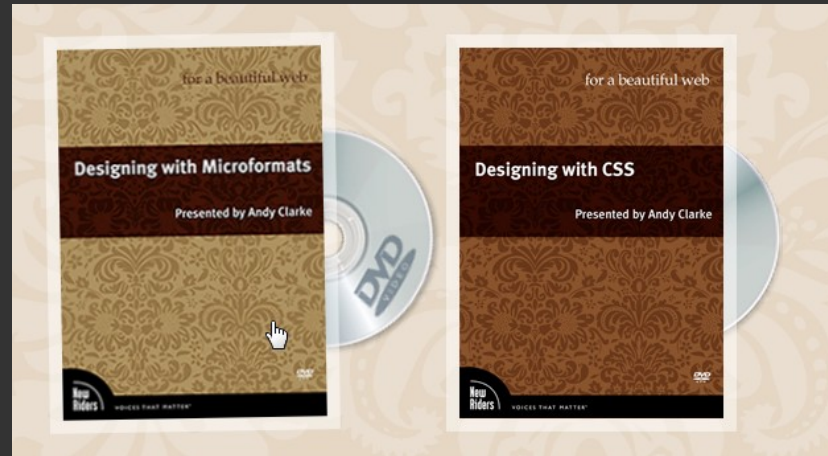
- ☐ Yes.
- ☐ No.
- ☐ Are you kidding me?

Do you design?:

- ☐ Nope.
- ☐ Sometimes.
- ☐ All day long!

Site:

Occasional email newsletters. Your privacy is sacred. You'll never be spammed by us, except to promote ourselves, naturally.



# Benefits of CSS3 *(besides looking cool)*

## Decrease

- development time
- maintenance time
- page loading time

## Increase

- usability
- accessibility
- adaptability across devices
- search engine placement



# Reduced development and maintenance time

- Less images, Flash, JavaScript
- Streamlined markup

# Increased page performance

- Smaller file sizes
- Fewer HTTP requests

Reducing the number of HTTP requests...is the **most important** guideline for improving performance for first time visitors.

Yahoo! Exceptional Performance Team,  
<http://developer.yahoo.com/performance/rules.html>


# Better search engine placement

- Google **may** make speed ranking factor
- Real text instead of image or Flash text

# Increased usability

- Real text
- Optimized styles based on device capabilities

# Real-world example




THE UNIVERSITY OF NORTH CAROLINA  
**HIGHWAY SAFETY  
RESEARCH CENTER**

sign up for  
email updates

search

Safety InformationResearch LibraryNews RoomAbout UsWeb SitesNewsletterLinksHow You Can Help



Celebrating **over 40 years** of excellence in Highway Safety Research


skip movie

### HSRC PROJECT AREAS

For over 40 years, the University of North Carolina Highway Safety Research Center has conducted interdisciplinary research aimed at reducing deaths, injuries and related societal costs of roadway crashes.

- Alcohol Impairment
- Driver Behavior
- Occupant Protection
- Pedestrian and Bicycle Safety
- Roadway Design and Traffic Safety
- Young Drivers

### LATEST NEWS



**Directions** winter 10

**New Clearinghouse helps transportation professionals select road safety improvements**

Transportation professionals now have a new resource to help them identify, implement and evaluate cost-effective roadway safety improvements. The UNC Highway Safety Research Center (HSRC), with funding from the U.S. Department of Transportation Federal Highway Administration, has established the Crash Modification Factors (CMF) Clearinghouse, a central Web-based repository of Crash Modification Factors, or CMFs. The CMF Clearinghouse is located at [www.CMFclearinghouse.org](http://www.CMFclearinghouse.org).

**HSRC News Briefs**

- NC DOTs providing mini-grants to communities
- HSRC participates in annual TRB meeting
- HSRC, SAS\* and SESUG
- HSRC a division reading back in the beginning
- HSRC in the News

### New edition of *Directions* now available

Find out about HSRC's latest research and initiatives in the e-newsletter *Directions*...  
[Read More](#)

The University of North Carolina Highway Safety Research Center: CB# 3430, Chapel Hill, NC 27599  
Phone: 919-962-2202 or (in NC) 800-672-4527 Fax: 919-962-8710

Contact UsSite Map

# Before CSS3

	FF 3.6	IE 8	IE 6
HTTP requests	36	37	47
Loading time <i>seconds</i>	1.5	1.3	3



# The nav bar, before

8 images

Safety Information

*inactive*

Safety Information

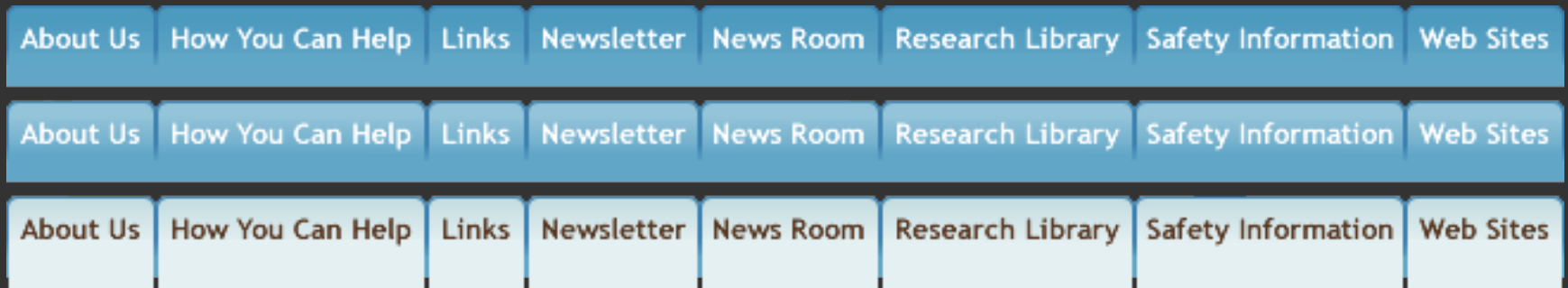
*hovered*

Safety Information

*current page indicator*

# The nav bar, after

1 image



# Before CSS3, optimized

	FF 3.6	IE 8	IE 6
HTTP requests	29	30	33
Loading time <i>seconds</i>	1.3	1.15	2
<i>decrease</i>	↓ 13%	↓ 11%	↓ 33%

# After CSS3

	FF 3.6	IE 8	IE 6
HTTP requests	22	23	24
Loading time <i>seconds</i>	1.1	1	1.5
<i>decrease</i>	↓ 15%	↓ 13%	↓ 25%

# Media query for nav bar

```
@media all and (max-width: 52em) {
```

```
  #swoosh { display: none; }
```

```
  #mainnav { padding: 8px 0; }
```

```
  #mainnav ul { margin: 0; }
```

```
  #mainnav li {
```

```
    margin-left: 12px;
```

```
    padding: 0;
```

```
    border: none;
```

```
    -moz-border-radius: 0;
```

```
    border-radius: 0;
```

```
    background: none; }
```

```
  #mainnav li:hover { background: none; }
```

```
}
```

***English translation:***

*Up to a maximum width of 52 ems, use these styles.*

*Once you get past 52 ems, use the regular styles.*

# Media queries for mobile

```
@media only screen and (device-width: 768px) and  
(orientation: landscape) {
```

```
  /* rules for iPad in landscape orientation */
```

```
}
```

```
@media only screen and (min-device-width: 320px) and  
(max-device-width: 480px) {
```

```
  /* iPhone, Android rules here */
```

```
}
```



# Learn more

Download slides, get links:

[www.zomigi.com](http://www.zomigi.com)

# Questions?

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