



Web Design Bootcamp

Saturday & Sunday, March 8 & 9, 10am-4pm

Gilbert Guerrero,

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Web Design Instructor

<http://www.gilbertguerrero.com>

Workshop Schedule

- Saturday, March 8
Day 1: Concepts
- Sunday, March 9
Day 2: Execution

Survey Forms

Pick up survey forms. To be collected later...

Who am I?

- Gilbert Guerrero
- UC Berkeley, Mathematics
- Web Designer, 10 years
- Instructor, DVC
- Multimedia Artist (computers, video, web)

Introductions

- Your name
- What you do
- Why you are here

No Paper!

- Presentation download

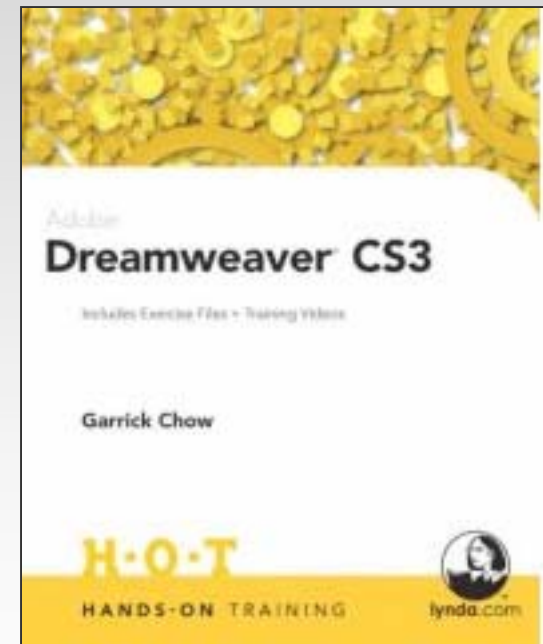
<http://gilbertguerrero.com/bootcamp>

- Links in this workshop

<http://del.icio.us/chiliberto/webdesign+workshop>

Reference: Text book

- Adobe Dreamweaver CS3 Hands-On Training
- by Garrick Chow





Day 1: Concepts

Agenda (Day 1)

- A Brief History
- HTML Basics
- CSS Basics
- 12noon - Lunch Break, 50 min
- Images for the Web
- Site Design and Layout
- Search Engine Optimization (SEO)

A Brief History

■ The Internet

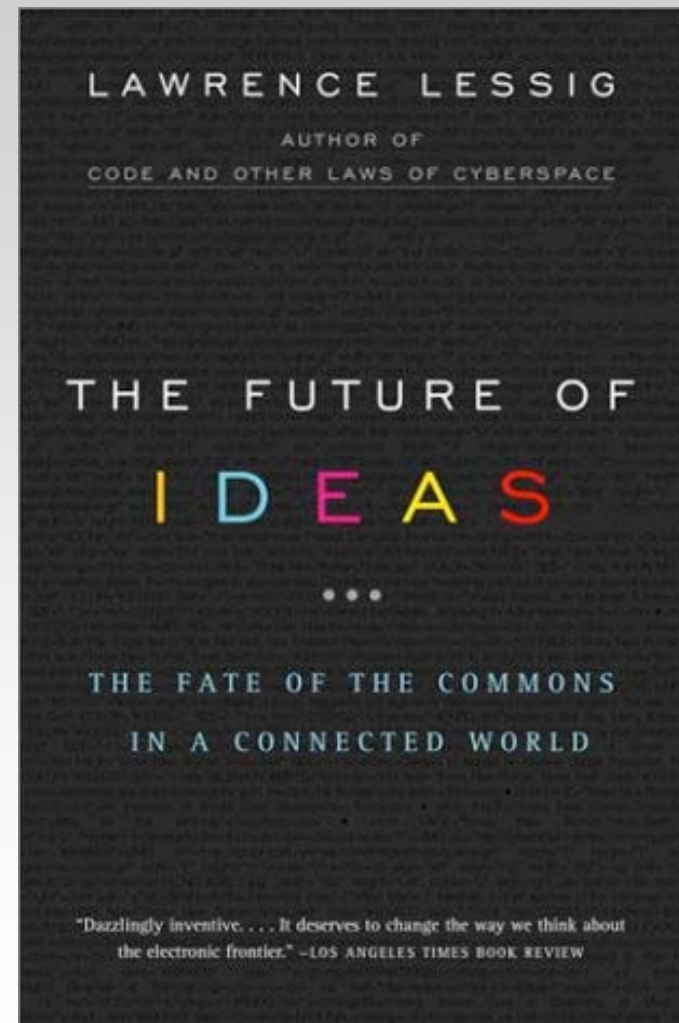
- AT&T
- Advanced Research Projects Agency (ARPA)
- TCP/IP & the birth of the Internet

■ The World Wide Web

- CERN
- Tim Berners-Lee
- A new public resource and the W3C

Reference: Book

- ***The Future of Ideas,***
by Lawrence Lessig



Other Apps on the Internet

- Email
- Chat/IM
- iTunes
- Peer-to-Peer File Sharing
- Voice over IP, Skype

HTML Basics: XHTML 1.0

- Structure derived from XML
- Strict Rules
 - Lower case tags
 - Attributes in quotes
 - Closing tags and empty tags
- HTML is design to format text and include images
- Anything else: plugins

HTML Basics: Basic Tags

- `<p></p>` *paragraph*
- `
` *line break*
- `Go to DVC`
anchor tag
- `` *image*
- `<h1>Page Title</h1>` *headlines*
- `List items` *lists*

Open Dreamweaver

Create a new page and code along...

Reference: Online Book

- Web Style Guide, by Patrick Lynch and Sarah Horton
- <http://webstyleguide.com/>



HTML Basics: Layout tables

```
<table>
```

```
  <tr>
```

```
    <td></td>
```

```
    <td></td>
```

```
  </tr>
```

```
</table>
```

HTML Basics: Frames

```
<frameset>
```

```
  <frame src="top.html" name="topframe" />
```

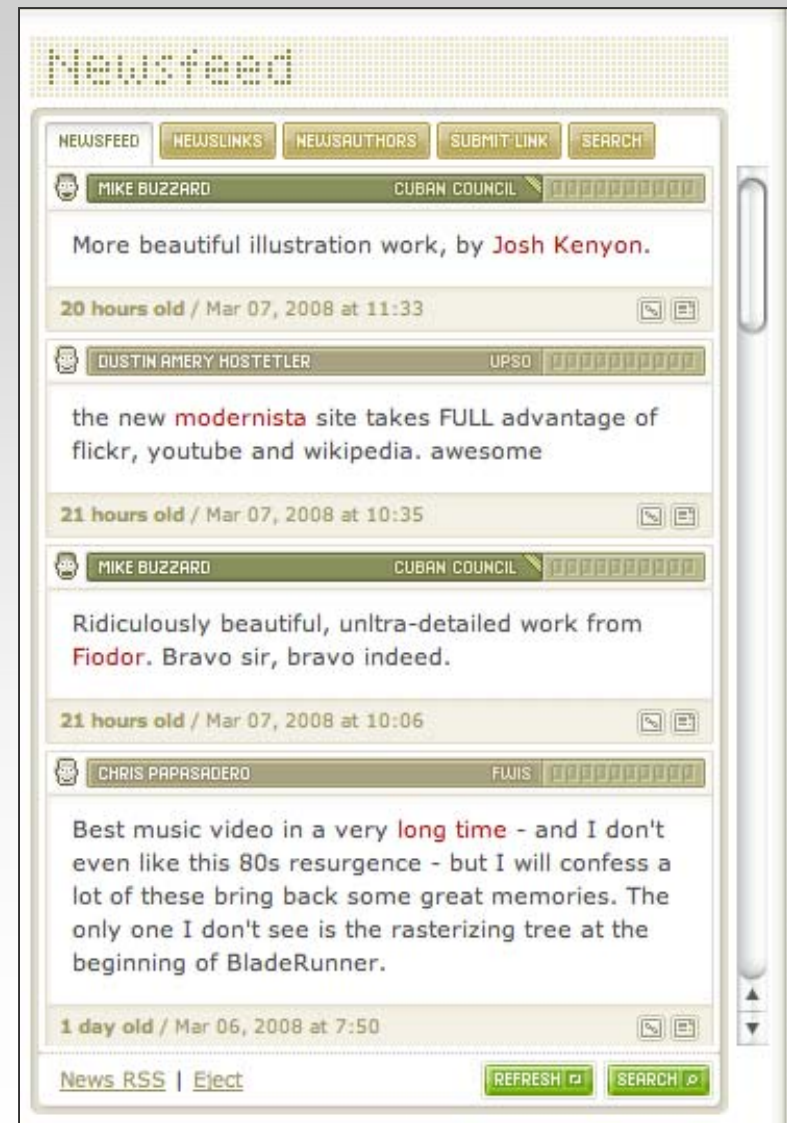
```
  <frame src="middle.html" name="middle" />
```

```
</frameset>
```

HTML Basics: iframes

```
<iframe  
  src="newsfeed.html">  
</iframe>
```

- <http://k10k.net>





5 minute break

Semantic encoding

- `` ``
Emphasis, Stronger emphasis. These are known as **Idiomatic Elements**.
- `<i></i>` `` Bold, Italic. These are **Typographic Elements**. They help to add visual style to a page, but do not show meaning.

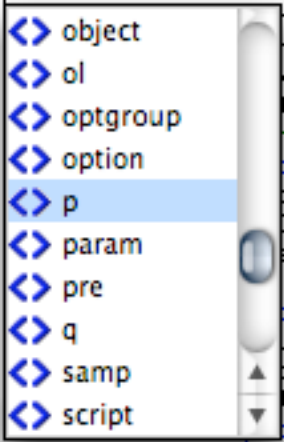
Dreamweaver and Code

- Format code
- Manage files and assets
- Upload files

Dreamweaver Auto Completion

- In code view, start typing and use the arrow keys to choose your tag.

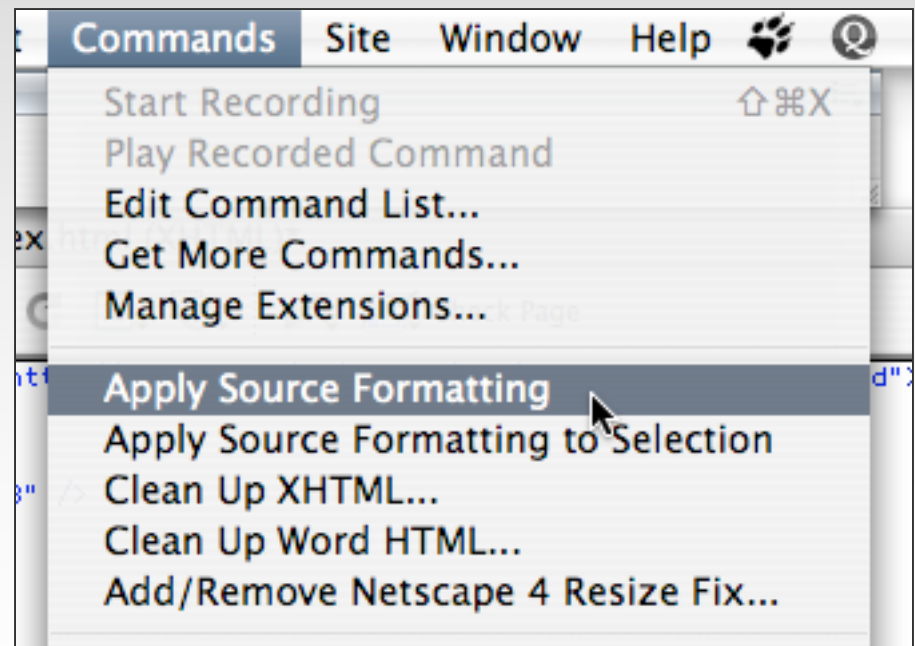
```
25 <table width="100%" border="0" id="content">
26 <tr>
27 <td><h2>Welcome</h2>
28 <p>
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
```



The screenshot shows the Dreamweaver auto-completion feature in action. A dropdown menu is displayed over the code editor, listing various HTML tags. The 'p' tag is highlighted, indicating it is the current selection. The background code shows an HTML table with a heading and a paragraph tag.

Dreamweaver Auto Formatting

- Code can be formatted and cleaned up
- Cleans up messy code that you may have inherited



Reference: HTML Cheatsheet

- HTML Cheatsheet -

http://webmonkey.com/webmonkey/reference/html_cheatsheet/



Lunch Break: 50
minutes

CSS Basics

- Cascading Style Sheets
- Separation of Presentation from Structure
- Inline, Embedded, Linked

Open the Group Project files in “Materials”
See a full stylesheet and web pages using CSS.

CSS Basics: Stylesheets

- Rules
- Selectors
- Declaration blocks
- Declarations

```
h1 {  
    font-size: 3.6em;  
    letter-spacing: 0.2em;  
    margin: 0px;  
    padding: 0px;  
    color: #CCCCCC;  
    white-space: nowrap;  
}
```

An example of a CSS rule

CSS: Selectors - applying styles

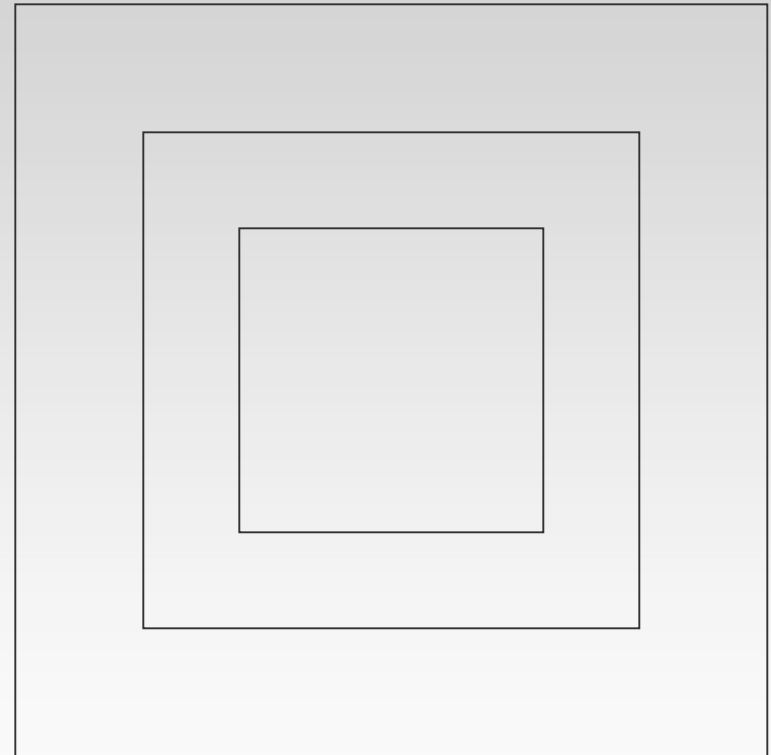
- **Type** (or XHTML elements) – can be any tag
 - p, h1, body, etc...
- **ID** - #idname
 - Attributes withing tags, <div id="#footer">.
 - Must be unique.
- **Class** - .classname
 - Attributes within tags, use several times, <p class="highlight">. Be careful of overuse!
- **Pseudo-class** – a:link
 - a:link, a:visited, a:hover, a:active
 - Can use for backgrounds too

CSS: Fonts Sizes

- Fonts can be sized using a variety of units: Pixels (px), Ems (em), Percentage (%), and for printing, Points (pt), Picas (pica), Inches (in), Centimeters (cm), and Millimeters (mm).
- **px** – reliable, easy to manage, but difficult for IE users to resize. This is a major obstacle to creating *Accessible Web* sites.
- **em** or **%** - based on default font size within the user's browser. Allows user to resize the fonts on your pages to improve readability.

CSS Basics: Box Model

- Margins
- Padding
- Overlapping boxes





5 minute break

CSS: Background images

- Repeating images
- Rounded corners



<http://nosoproject.com>

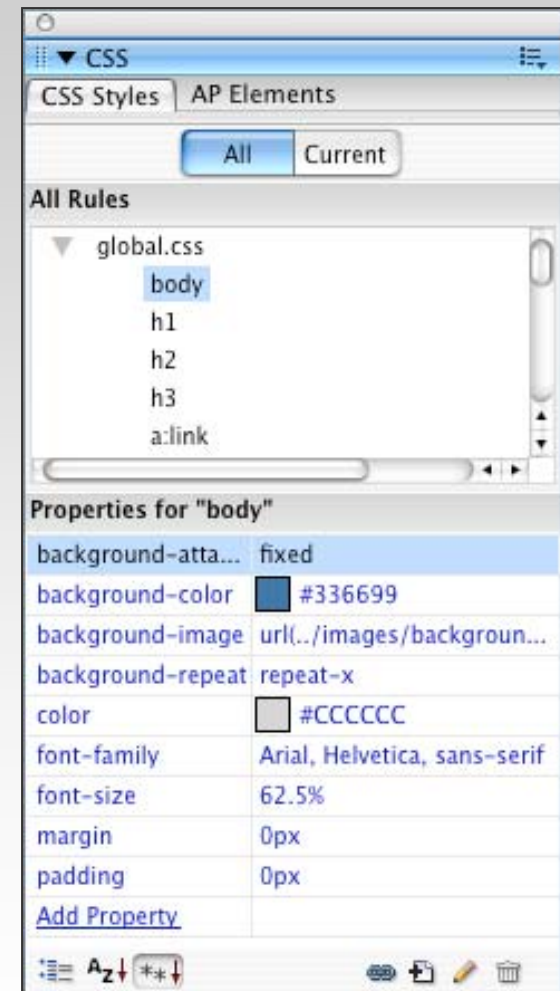
CSS: Absolute positioning

- From top left
- Can be placed anywhere, over objects

```
#logo {  
    position: absolute;  
    top: 100px;  
    left: 500px;  
    z-index: 50;  
}
```

Dreamweaver CSS Panels

- Easy to apply
- Easy to edit
- Easy to find



Resource: Web Dev Plugin

- Firefox Web Developer Add-on



- <https://addons.mozilla.org/en-US/firefox/addon/60>

Images for the Web

- GIF
- JPEG
- PNG
- Photoshop “Save for Web & Devices...”
- Resolution: 72 ppi
- Text graphics

End of Day 1...

- Presentation download

<http://gilbertguerrero.com/bootcamp>

- Links in this workshop

<http://del.icio.us/chiliberto/webdesign+workshop>

Survey Forms

Please fill out the survey forms and turn them in before leaving. Thank you!



Thank You



Web Design Bootcamp (day 2)

Sunday, March 9, 10am-4pm

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Agenda (Day 2)

- JavaScript Basics
- Getting Online
- Forms and Transactions
- 12noon - Lunch Break, 50 min
- Search Engine Optimization (SEO)
- Site Design and Content
- Testing, QA, & Usability
- Blogging and Multimedia

JavaScript Basics

- Client-side processing
- Scripts
- Functions
- Object Oriented Programming (OOP)

JavaScript: Dynamic text

```
<script type="text/javascript">  
  var a = 2;  
  var b = 3;  
  var c = a + b;  
  document.write("a plus b is "+ c +".");  
</script>
```

- Many examples -

http://www.w3schools.com/js/js_examples.asp

Document Object Model (DOM)

- Allows JavaScript to see and act upon elements in a web page

```
function toggle(obj) {  
    var el = document.getElementById(obj);  
    if ( el.style.display != 'none' ) {  
        el.style.display = 'none';  
    }  
    else {  
        el.style.display = "";  
    }  
}
```

JavaScript Framework

- Prototype eases development of dynamic web applications
- <http://prototypejs.org/>

```
$('message').toggle();
```

Dreamweaver Behaviors

- JavaScript Rollovers
- JavaScript Behaviors

Photography: Gallery





5 minute break

Getting Online

- Free hosting

- Tripod - banner ads

- Cheap hosting

- Dreamhost - 500GB disk space

- Reliability

- Media Temple - 100GB disk space

Dreamweaver FTP

- Fully capable for upload and download

Remote Info

Access:

FTP host:

Host directory:

Login:

Password: Save

Use passive FTP

Use IPv6 transfer mode

Use firewall

Use Secure FTP (SFTP)

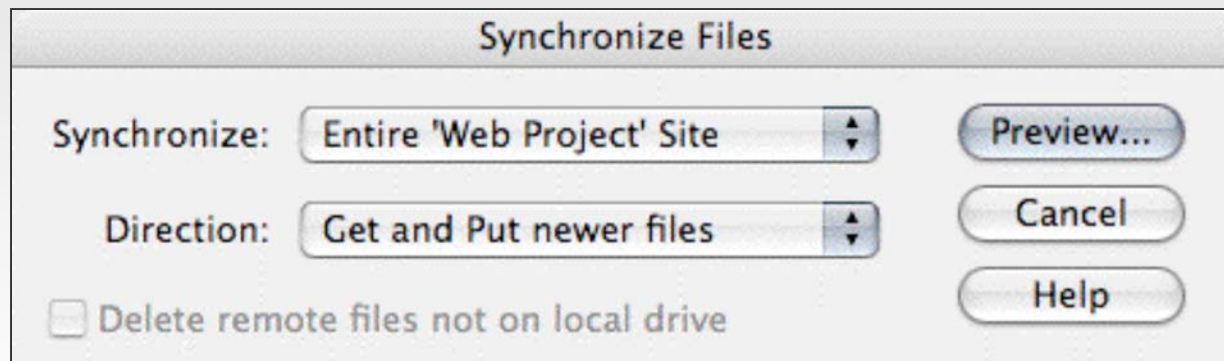
Maintain synchronization information

Automatically upload files to server on save

Check in/out: Enable file check in and check out

Dreamweaver Synchronization

- Synchronize “Get” or “Put” or both
- Selected files only



Forms and Transactions

- Build a **contact form** to avoid spam
- Copy and paste **PayPal** code into Web pages to create shopping pages
- **Captchas** to prevent spam

Contact Form

Contact Us

Your name

Your email address

Subject of your message

Your message

Send

Cancel



PayPal Shopping Cart

holiday bazaar

Teas by Kathleen

Home

Cards by Rebecca
Teas by Kathleen
Pins by Susan
Magnets by Gilbert

Who we are
How to buy
Contact us



[View Cart](#)



Kathleen's teas are made only of the finest herbs and essences, supplied by [Rainbow Grocery](#), a collectively run, worker owned market in San Francisco dedicated to providing natural, organic, vegetarian food and environmentally conscious products. Each tea bottle has a unique label created by Kathleen!



 [view larger](#)

lavender lemon rose tea

Luxurious, luscious lavender lemon rose tea.

Price: \$10 (USD)

[Add to Cart](#)



 [view larger](#)

lemon ginger mint tea

This is a delicious lemony tea with a hint of mint.

Price: \$10 (USD)

[Add to Cart](#)

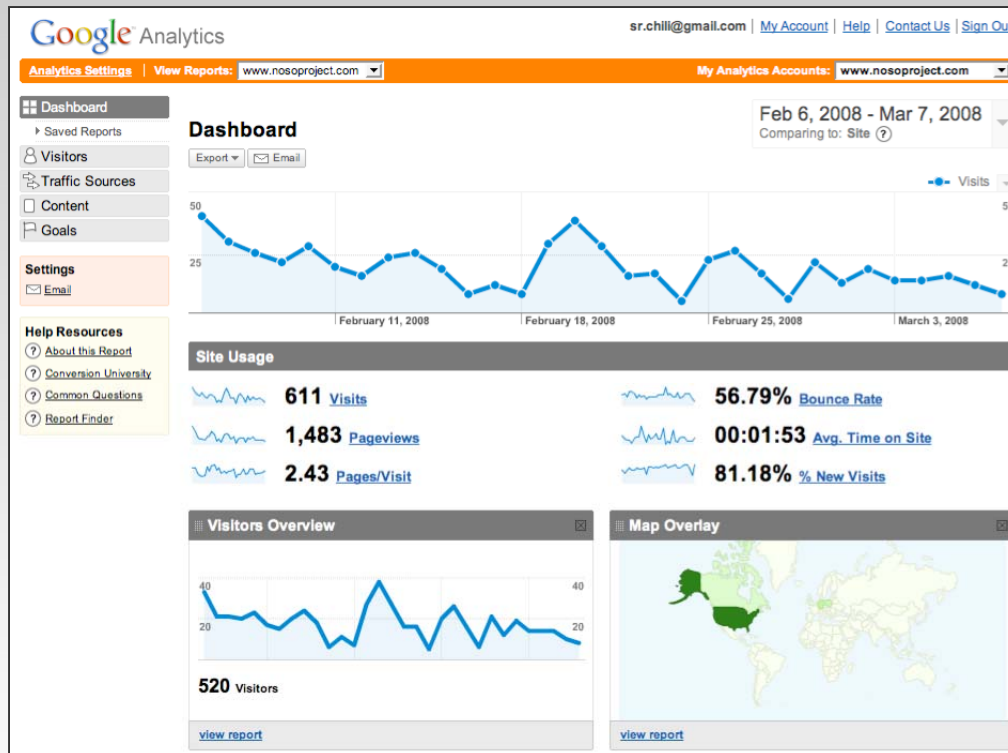


Lunch Break: 50
minutes

Search Engines and SEO

- **Search Engine Optimization (SEO)**
- How Google works
- Links to your site
- Linking to other sites
- Meta data: title, description, keywords
- Site index and navigation

Google Analytics



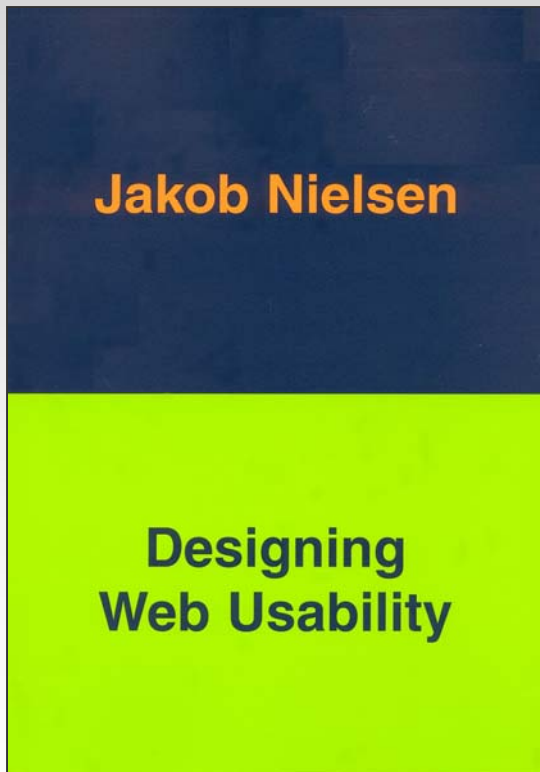
■ <http://www.google.com/analytics/>

Site Structure

- Layout Design
- Information Architecture
- Writing for the Web
- Creating Templates

Reference: Person

■ Jakob Nielsen, Usability Expert



Book

A screenshot of the 'Alertbox' website on useit.com. The page has a yellow header with the site name and a search bar. The main content area is white and features the title 'Alertbox: Current Issues in Web Usability'. Below the title, it identifies the author as Dr. Jakob Nielsen, principal at Nielsen Norman Group. The page lists a 'Current Column' with one article: 'Company Name First in Microcontent? Sometimes!' from March 3, 2008. There is a section for an 'Email Newsletter' with a sign-up form and a privacy policy. A 'Previous Columns' section lists several articles with their dates, including 'Top-10 Application-Design Mistakes' (Feb 19, 2008), 'User Skills Improving, But Only Slightly' (Feb 4, 2008), 'Usability ROI Declining, But Still Strong (January 22, 2008)', '10 Best Intranets of 2008' (Jan 7, 2008), 'Web 2.0 Can Be Dangerous' (Dec 17, 2007), 'Intranet Information Architecture (IA) (November 26, 2007)', 'Long vs. Short Articles as Content Strategy' (Nov 12, 2007), 'High-Cost Usability Sometimes Makes Sense' (Nov 5, 2007), and 'Generic Commands' (Oct 29, 2007).

<http://www.useit.com/alertbox/>

Designing Layouts

- Fixed width vs. Liquid layout
- Elastic layouts (em)
- Targetting screen size

http://webmonkey.com/webmonkey/99/41/index3a_page2.html?tw=design

Design Exercise

Open a screenshot of a web page in Photoshop. Color code the content, navigation, and advertising.

Information Architecture

- Sitemaps and Folder Structure
- Wrong: match your internal org structure
- Right: mirror user tasks or their view of your content

IA Exercise

Sticky notes are an interactive way to figure out your sitemap.

Writing for the Web

- Optimize for online readers who scan text
- Use shorter pages
- Bullets
- Secondary pages for new topics or further reading
- Short link labels
- Do not use “click here”

Templates

- Dreamweaver Templates

- Server Side Includes

```
<!--#include virtual="/directory/nav.html" -->
```

Photoshop Designs

- Design your web pages in Photoshop before turning to code



5 minute break

Testing and QA

- Collect old browsers
- Speed of download times
- Broadband and heavy traffic at lunch or bad server connections
- User attention, .1 sec instantaneous, 1 sec ok, > 10 sec lose users attention as turn to other tasks

Usability and user behaviors

- Testing the Usability of your sites
 - 5 people
 - 30 minutes
 - Observe and Learn
- The back button is the most used button on the screen
- Don't launch new windows

Accessibility

- “The Americans with Disabilities Act of 1990 (ADA) is the short title of United States (Pub.L. 101-336, 104 Stat. 327, enacted 1990-07-26), codified at 42 U.S.C. § 12101 et seq., signed into law on July 26, 1990 by President George H. W. Bush. The ADA is a wide-ranging civil rights law that prohibits, under certain circumstances, discrimination based on disability.”
<http://en.wikipedia.org/wiki/Accessibility>
- Section 508 requires that Federal agencies' electronic and information technology is accessible to people with disabilities.
<http://www.section508.gov>
- Comprehensive Reference:
<http://www.webaim.org/intro/>

Hacks (aka workarounds)

- IE comment code

```
<!--[if IE 5]>
```

```
    <p>Welcome to Internet Explorer 5.</p>
```

```
<![endif]-->
```

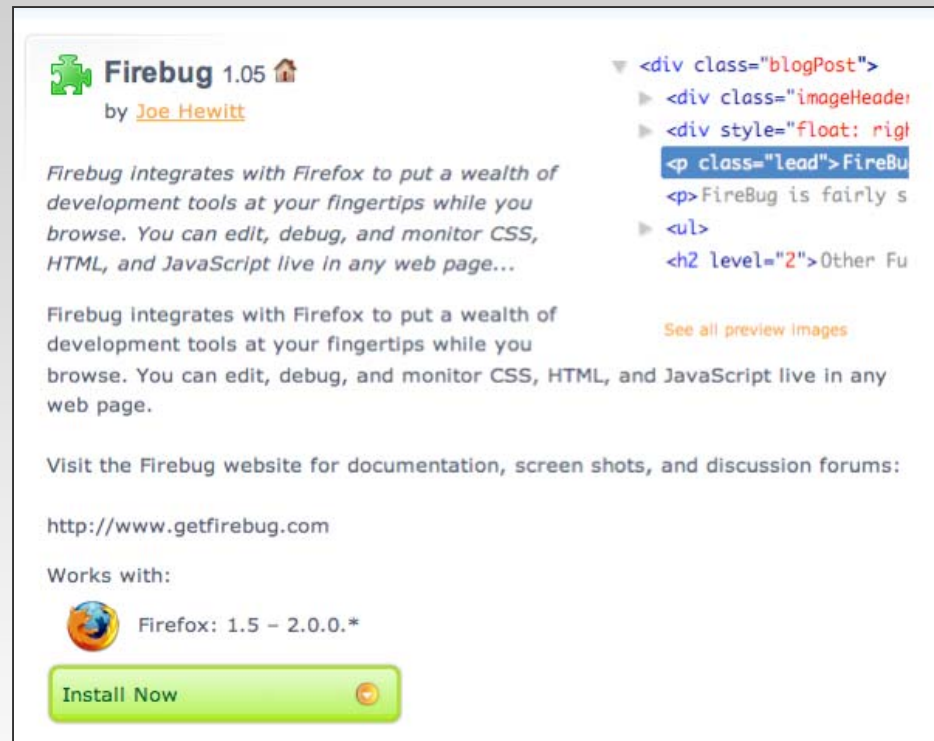
<http://msdn2.microsoft.com/en-us/library/ms537512.aspx>

- IE CSS hacks - avoid them

- Degrading gracefully

Reference: Firefox Add-on

■ Firebug



The screenshot shows the Firefox Add-on Marketplace page for Firebug 1.05. The page features a green puzzle-piece icon, the title "Firebug 1.05" with a home icon, and the author "by Joe Hewitt". A description states: "Firebug integrates with Firefox to put a wealth of development tools at your fingertips while you browse. You can edit, debug, and monitor CSS, HTML, and JavaScript live in any web page...". A second, identical paragraph is present below. A link "Visit the Firebug website for documentation, screen shots, and discussion forums:" points to "http://www.getfirebug.com". Under "Works with:", it shows the Firefox logo and "Firefox: 1.5 - 2.0.0.*". A prominent green "Install Now" button is at the bottom. On the right, a code editor shows HTML snippets: `<div class="blogPost">`, `> <div class="imageHeader`, `> <div style="float: rig!`, `<p class="lead">FireBu`, `<p>FireBug is fairly s`, `> `, and `<h2 level="2">Other Fu`. A link "See all preview images" is also visible.

<https://addons.mozilla.org/en-US/firefox/addon/1843>

Blogging

- <http://www.wordpress.org>



The screenshot shows the WordPress.org homepage. At the top left is the WordPress logo, a stylized 'W' inside a circle. To its right is the word 'WORDPRESS' in a serif font. Further right is a badge that says 'Webware PUBLISHING & PHOTOGRAPHY FINALIST 100 VOTE FOR THIS SITE! 2008 FROM CRIST'. Below the logo and name is a navigation menu with links: HOME, ABOUT, EXTEND, DOCS, BLOG, FORUMS, HOSTING, and DOWNLOAD. A search bar is located on the right side of the page. The main content area is divided into several sections. On the left, there are three columns of links: 'NEW TO WORDPRESS?' with links for 'What is WordPress?', 'Why should I use it?', 'What is a blog?', and 'WordPress Lessons'; 'READY TO BEGIN?' with links for 'Find a web host', 'Download and Install', 'Documentation', and 'Get Support'; and 'RESOURCES FOR PROS'. The central text area starts with 'WELCOME' and a paragraph describing WordPress as a state-of-the-art semantic personal publishing platform. Below this is another paragraph stating 'More simply, WordPress is what you use when you want to work with your blogging software, not fight it.' To the right of this text is a screenshot of the WordPress admin interface for 'Matt's Blog', showing a navigation menu with 'Dashboard', 'Write', 'Manage Cor', 'Write Post', and 'Write Page', and a 'Title' input field. Below the screenshot is the text 'WordPress' admin interface is one of the friendliest around.' Further down, there are three small images representing different WordPress themes. At the bottom, there is a section titled 'WELCOME BACK' with text about returning users, and a yellow banner for a book titled 'Buy the book: The fun and easy way to start blogging with WordPress'.

Multimedia

- Quicktime Video - video podcasting
- Flash Video (FLV) - becoming the new standard
- MP3, streaming radio
- Yahoo Live - <http://live.yahoo.com>

Thank You!

- Presentation download

<http://gilbertguerrero.com/bootcamp>

- Links in this workshop

<http://del.icio.us/chiliberto/webdesign+workshop>



Thank You