

Announcements

- **Term Paper due on Wednesday at the beginning of class**
- **Midterm #2 next Monday**

Organization of Complex Web Site

A complex site typically consists of three separate components:

- 1. HTML – describes structure and content**
- 2. CSS – describes style**
- 3. JavaScript – contains programs that allow user interaction**

Typical file names for a web site:

`page1.html, page2.html, page3.html, page4.html`
`myStyle.css`
`myPrograms.js`

Separating JavaScript

How can we separate JavaScript from HTML?

In Head section:

```
<script src="MyCode.js"></script>
```

For code that must run when page first loads:

- Write a function called `main`
- Use the `onload` attribute for the `body` tag:

```
<body onload="main()">
```

The main function is the preferred place for assigning event handlers to form controls.
(See examples.)

Examples: [SeparateJavaScript.html](#)
[FullSeparatedWebSite](#)

Why separate JavaScript from HTML?

1. Saves time if several pages use the same functions.
2. You can change functionality for several pages by editing one JavaScript file.
3. Once visitor's browser has downloaded .js file, it will not have to repeatedly download this information while on the site.
4. One .js file can link to another, allowing easy re-use of existing functions.

Usability

A measure of how “easy” web site is to use.

Many ways to measure usability:

- 1. Learnability – Can they figure it out?**
- 2. Memorability – Will they remember how it works for future sessions?**
- 3. Errors – How many mistakes will they make, and what is the impact?**
- 4. Efficiency – Can they get things done quickly?**
- 5. User Preference – Is it pleasant to use?**

Usability Tips

1. Make purpose obvious

- Main purpose should “stand out”**
- Use descriptive titles**
- Include meta information for search engines**
- Whose webpage is this? What do we do?**

Usability Tips

2. Make Navigation Simple

- Links should be obvious (not hidden)
- Links should be descriptive
“next” vs. “next: Weather in Maryland”
- Users should always know “where they are”
- Backtracking should be easy

Usability Tips

3. Organize pages logically:

- A. Sequential – pages arranged one after another**
- B. Hierarchical – main page leads to sub-pages, which in turn lead to other sub-pages, etc.**
- C. Web-like – pages are linked to one another based on content**

Usability Tips

4. Use Simple Page Layouts

- **Width should not require horizontal scrolling (Hint: Use percentages for sizes)**
- **Avoid long pages**
- **Reduce images sizes**
- **Purpose for page should be OBVIOUS. Eliminate clutter! (Google is a nice example)**

Usability Tips

5. Keep it Legible

- Use easy to read fonts
- Avoid small text
- Don't use too MANY fonts
- Use appealing colors that are not extreme
- Keep text/background contrast high
- Don't use backgrounds with patterns

Usability Tips

6. Maintain Visual Consistency

- All pages should have same “look and feel”
- Use logos/banners
- Keep page layouts the same
- Use consistent colors/fonts throughout
- Navigation tools should be identical on every page

Usability Tips

7. Help Users Find What they Need

- **Consider a Search Box**
- **Provide clear starting points for major tasks**

Usability Tips

8. Use Visuals Wisely

- **Too many can be overwhelming/confusing**
- **Show examples**
- **Illustrate a process**
- **Users tend to focus on text**

Usability Tips

9. Primitive content is best

- **Avoid animations/flash**
 - People hate them
 - Perceived as “junk”
 - They look like ads
- **Avoid too much text**
 - Nobody will read it all
 - People are browsing/skimming
 - Use bullet items
 - Use meaningful headings / subheadings

Usability Tips

10. Avoid “Sales Pitch”

- **Do not ask for personal information up front**
- **Don’t use trite sales phrases**
 - **“Limited Time Offer”**
 - **“One of a Kind”**
 - **“Cutting edge”**
 - **“Value-added”**
 - **“But wait... there’s more...”**

Usability Tips

11. Use “Inverted Pyramid” Style

- **Important stuff at the top**
 - **Heading**
 - **Summaries**
 - **Overviews**
- **Details at the bottom**
 - **Background info**
 - **Testimonials**
 - **Technical info**

Usability Tips

12. Take “Eye-Tracking Studies” into account



(Next slide...)

Eye Tracking...

The screenshot shows the homepage of The Times Online Edition from Monday, December 1, 2003, at 11:39:17 PST. The page features a search bar, a navigation menu, and several news sections. Overlaid on the page are colorful heatmaps (red, yellow, green, blue) indicating where users' eyes were focused. The most intense focus is on the main headline area, particularly around the 'Sex Offenders On the Loose' and 'Bunker Buster' missiles articles. Other areas of focus include the 'World's fastest couple' article and the '7-day Forecast' at the bottom.

Marriott HOTELS & RESORTS [Click for Rates](#)

The Times
Online Edition · Mon Dec 1 11:39:17 PST 2003

Search: In Today's Chronicle

Sections

- [News](#)
- [Sports](#)
- [Business](#)
- [Technology](#)
- [Entertainment](#)
- [Lifestyle](#)
- [History](#)

AP Wire

- U.S.-Iraq insurgency highly coordinated
- Court to clarify on juror imposing death
- Mideast activists launch symbolic accord
- Activists lead rallies on World AIDS Day

Sex Offenders On the Loose

'Bunker Buster' Missiles Aim at Moon

Troops From Iraq War Can't Donate Blood

Local News

- [Antioch's Scratchy Guy](#)
- [Shared Goals, Shared Building](#)
- [Have Shuttle, Will Travel](#)
- [Documentary Chronicle's Craig's](#)
- [Virtual Community](#)
- [And Cary's Vain Lover Is](#)

Sports

Amorous Athletes

World's fastest couple: Tim Montgomery & Marion Jones

[Roughing the Official](#)

[When Presidents Tee Off](#)

Markets

Dow Jones Industrials

Line chart showing market performance over time.

Index	Value	Change	% Change
DJIA	9,865.20	82.74	+0.85%
Nasdaq	1,976.53	16.27	+0.83%
S&P500	1,066.18	7.98	+0.75%
10yr Treas. Yield	4.40%	+0.08	

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7-day Forecast

Day	Forecast
Monday	Cloudy
Tuesday	Sunny
Wednesday	Cloudy
Thursday	Sunny
Friday	Cloudy
Saturday	Sunny
Sunday	Sunny

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School of Continuing Education

BE THANKFUL FOR EVERYTHING FOR SOON

Usability Tips

13. Use Fast Servers

User perceptions:

0.1 second limit for “instantaneous”

1.0 second limit for “flow is continuous”

10 second limit for “site is functioning”

Usability Tips

14. Strive for Browser Compatibility

[Good luck with that.]