

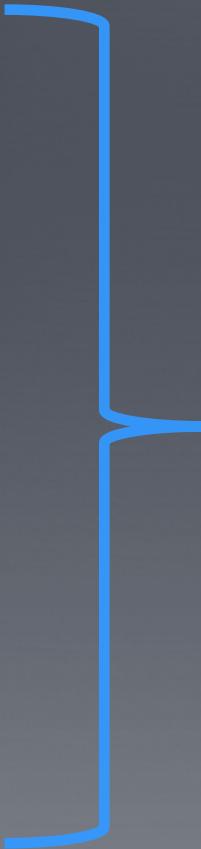
Designing a Site

A Step-by-step Guide



Designing A Web Site: An Overview of Steps

1. Define the purpose
2. Consider the audience
3. Gather Ideas
4. Organize the Ideas
5. Write the Content
6. Organize the Content
7. Determine the Navigation
8. Sketch the Pages



*None of this requires
a Computer!*



An Overview of Steps (Continued)

9. Start up your computer!

10. Build Pages

11. Test

12. Iterate

13. Maintain

14. Archive



Step 1: Define the Purpose

- Why does this site exist?
- What do you hope to achieve with this site?
- What do you believe is the *Goal* of this site?
- Is the goal something that can be achieved with this site?



Step 2: Define the Audience

- Who will be using your site?
- What are the *primary* characteristics of your target demographic?
- What kind of technology will your audience have available to them?
- How will you address users with special needs?
- How will these factors affect your design?



Step 3: Gather Ideas

- If you are working for a client, get a list of the features the client wants
 - You may need to lead the client through a discussion to determine this feature list
- Examine other sites, both competitive and non-competitive, to see if there are ideas you can *adapt*
- Gather friends and colleagues to *brainstorm* ideas
 - List all suggested ideas without being critical
 - Include *off-the-wall* ideas – you may not use them, but they may lead to other ideas you *can* use
- Ask potential users what they might want



Step 4: Organize Your Ideas

- Take all the ideas you gathered in step 3 and start to organize them
 - First, separate the ideas that support the goals of the site from those that do not
 - Hang onto those non-supporting ideas – you may use them later
 - Prioritize those ideas from most important to least important
 - Finally, sort the ideas into categories



Step 5: Write the Content

- Okay... you might use a computer for this! (But, a computer isn't required!)
- Take your ideas from Step 4 and
 - Do your research
 - Gather the information you found
 - Write your content
 - Make sure your content is original and doesn't violate copyright laws
 - Make sure your content is spelled correctly and grammatically correct
 - *Proofread!!!!* Have two other people proofread!
- Remember, the content drives the design, not the other way around. Don't think about presentation when writing content



Step 6: Organize the Content

- Determine the *hierarchy* of your content.
 - The site hierarchy defines how your content will be “chunked” and “layered”
 - Provides the necessary structure for the site
 - Does *not* have to be absolutely rigid (strong, yet flexible)
- You may need to make compromises in your hierarchy
 - Maybe you will need to have the same thing in two different sections – That’s okay!
 - Maybe you can’t perfectly balance each “branch” of the hierarchy so it has the same number of levels – That’s okay too!



Step 7: Determine your Navigation

- How should the information in your site/hierarchy be organized?
 - By category?
 - By date?
 - Alphabetically?
- Draw a conceptual diagram of the navigation
- Determine the critical components for your navigation system
 - More about navigation systems later



Step 8: Sketch It Out!

- Use paper and pencil/crayons/markers – no computers!
- Draw a sketch that represents pages at each level/section of the site
- If you are designing the site for a client, ask the client for feedback
- Collect feedback from colleagues, peers, and potential users
- Repeat this step until you have sketches that accurately reflect your final site design



Step 9: Fire Up Your Computer

- Okay, this isn't a *real* step but it is important to note
- Up until now, you haven't used the computer *at all* for any design work
 - You may have used the computer to collect and author content, but that doesn't count
- Here is where you will actually start using the computer for development of your web site



Step 10: Build Pages

- Here's where the real fun begins!
- Pour your content into the appropriate pages according to the design and hierarchy you've already determined
- Use place-holders for graphical or multi-media elements
- Now, develop your CSS rules to define how the content will be presented based on your design and sketches
- Once you have the site looking the way you want it to, replace the place-holders with appropriate media



Step 11: Test

- Actually, you should be testing throughout the development process
- Here, we want to do end-user and client testing to identify problem areas and areas for improvement
- You also want to test the site using various browsers and platforms to ensure that the presentation is consistent
- While you're at it, check download times – are your images too big for the bandwidth your target audience has?
- Finally, test for accessibility for those users with special needs



Step 12: Iterate

- Gather the results of your tests from Step 11
- Now, go back to step 10 and update your site to reflect the information you gathered during your tests.
- Keep repeating steps 10 and 11 until you have the site you want!



Step 13: Maintenance

- Many times, we develop our sites “our own way”
 - The code seems perfectly rational to us, but may not be to others
- Document your site as much as possible, both internally and externally, to support whoever is charged with maintaining the site
- When designing the site, give some consideration to how the individual site pages will be kept up-to-date



Step 14: Archive!

- Archive multiple copies of the site in multiple locations
- As well as the code, be sure to archive all of the supporting documentation!
- Make sure that *at least* one archive location is as far away from the actual development and server locations as possible
 - If everything is in one building and the building burns down, what happens?



Things to Consider During Site Design

- Normally, we build a site from the “top down”
 - Users, however can enter the site from anyplace – not just the home page
 - Regardless of how the user reaches a page, they should always be able to identify where they are in the site
- If you are building a high-traffic site, you should include an easily found “What’s New” section to update your users about changes
- Give consideration to how the information flows through your site and how the user will move through that information



More Things To Consider During Site Design

- The navigation system and primary content should always be viewable regardless of screen size
 - This normally forces the main content and navigation to be “above the fold” and to the left
 - Remember, responsive design should enable our content to be viewed regardless of device resolution. However, make sure the navigation and content are always visible first!
- Navigation should be clear, simple, and easily understood
 - Fancy may look cool on the page, but it’s not good for navigation!



Even More Things To Consider During Site Design

- Keep your navigation system together – putting one part of it across the top of the screen and another down the side can lead to confusion
- Including an Index or Site Map can improve the usability of your site – improved usability means happier users
- Don't embed a lot of links into your text content – it's distracting and can make links hard to find



Still Even More Things To Consider During Site Design

- Your own Web use can be a great source of information and inspiration
- When you browse the Web, pay attention to the overall design and navigation systems of the sites you visit



Navigation Design

Navigation Systems That Work



Task-oriented Design Practices

- Elements of task-oriented design are seen on many sites; these elements include:
 - Users are able to access support for a specific goal quickly
 - No more than 3 clicks to get to the information one needs (No “deep” information hierarchies)
 - Screens designed for “scanning”
 - Goal-oriented headlines allow the user to skip unnecessary information



Task-oriented Design Practices

- Use navigation devices that answer these two critical user questions:
 - Where am I now?
 - Where can I go?



Task-oriented Design Practices

- Make it easy for the user to backtrack if they made an error.
- “Back” button
- Breadcrumb Navigation
 - See <http://www.ebay.com/electronics/cell-phone-pda>



Audience-Specific

- The Internet public library's teen and youth sections <http://www.ipl.org>
- Effective when different groups want different information
- RIT's website has an audience-specific navigation bar that has different pages for Alumni, Community, Employers, Faculty/Staff, Parents, Students and Visitors



Two Organizational Approaches

- Top-Down
 - Start from the mission, place the content into the structure you devise
 - Deals with ambiguity of *mission* and *goals*
- Bottom-Up
 - Start with the ambiguity of *content*, find a way to improve access to it
 - Used when there is already a lot of existing content



Navigation: Breadth & Depth

- Narrow and deep
 - Lots of clicks to get to content
 - Not many choices per page
- Broad and shallow
 - Easy to get to content, but requires a higher level of decision-making by the user
 - Limit the number of your major organizational categories to between 5 and 7



Types of Navigation

- Global – appear on every page
 - Navigation bars
 - Buttons
- Local (appear in specific sections only)
- Ad hoc (hypertext links within the flow of text)



Final Thoughts On Navigation

- Navigation should look like navigation
- Use consistent, effective, and legible labels
- Consistency: a Global navigation system should appear in the same place on every page
- Find the right balance between breadth and depth
- Consider disability access



And now...

- ICE time!

