

HCI: Web Design

Designing a web site is an example where principles of human-computer interaction should be applied in order to make the site as user friendly as possible and successful.

We will summarize a few principles that are especially important for web sites. Some are specific to web sites design while others could be generalized to other types of applications.

1. Define clearly the purpose of the website.
2. Know your audience and design for that audience.
3. Plan the organization of the site, i.e. the way different pages of the sites are linked together.
The two most frequent organizations are hierarchical (see Figure 1- hierarchical organization) and linear (see Figure 2- linear organization).

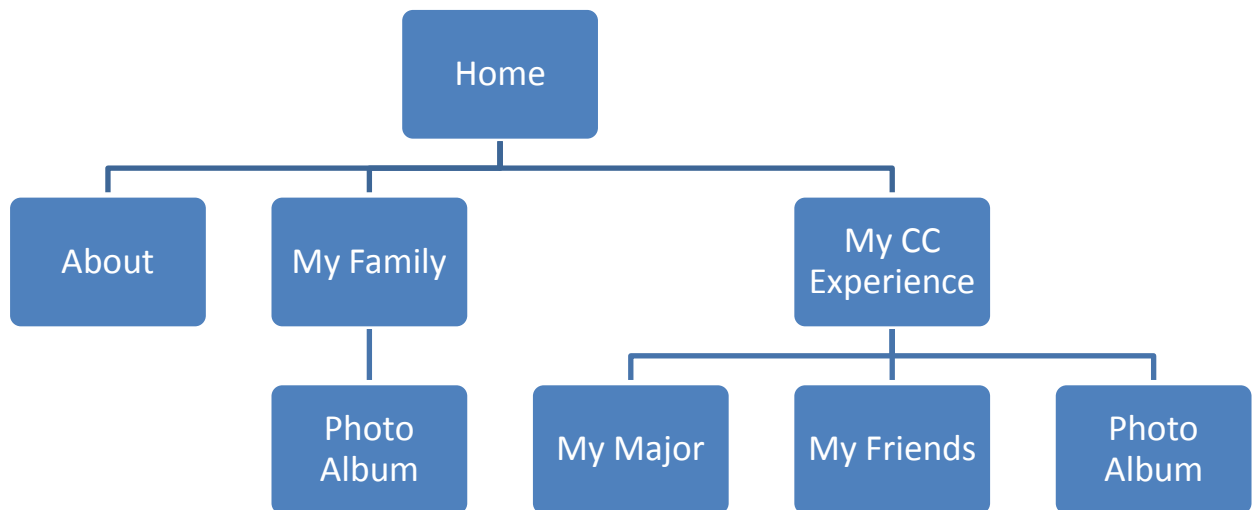


Figure 1- hierarchical organization

Linear organization is mostly used in sites such as tutorials.

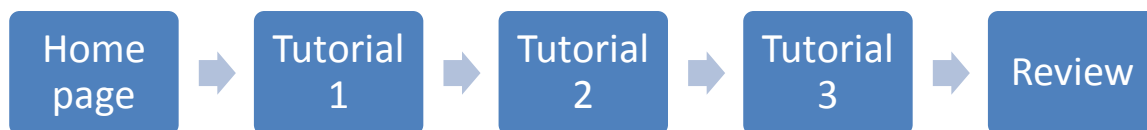


Figure 2- linear organization

4. Provide tools to navigate the web site that are easy to use: for example, links on the side bar and/or top and bottom banners, breadcrumbs for a complex site, search tool, site map.

5. Use short pages (at most three screens in length) and if a page must be long provide tools to navigate through the page, such as table of content at the top, internal links, etc.
6. Visual design: Repeat visual elements throughout the site (across pages) for a consistent look. For example buttons used for links should be the same throughout the site. Use contrast to add interest and draw attention. In particular, font colors and background colors should have a good contrast so that the text is easy to read. Group related items together to create visual groups.
7. Page design: Make sure page load quickly. The home page specially should be small in size (no more than 60 KB). Place important information above the fold, i.e. in part of the page that can be viewed without scrolling. Avoid horizontal scrolling. Use adequate white space to make the elements in your page stand out. Design the web page for its target audience (choice of color, graphics, amount of text, reading level, etc...)
8. Text design: short sentences and bulleted-list are easier to read on the Web than long, complex paragraphs. Use sans serif fonts such Arial and Verdana rather than Serif font such as Times New Roman. Check spelling and grammar.
9. Graphics design: Images and animated items are great to make your web site attractive but beware: they slow down uploading a lot! Keep graphics as small as possible and use only those that are necessary. An alternative to graphics should be offered for those who cannot display them or view them (for example, text only version of the page).
10. Accessibility: this is an important issue of concern for human-computer interaction. The W3C (World Wide Web Consortium) puts together the web standards and part of the standards are accessibility standards. This is a quote from the W3C web site (http://www.w3schools.com/site/site_standards.asp)

Web standards make it easier for people with disabilities to use the Web.

Blind people can use computers that read Web pages for them. People with poor sight can rearrange and magnify standard Web pages. Simple Web standards like HTML 4 and CSS, will make your Web pages much easier to understand by special devices.