Planning Your Web Site

Planning on a Macro Level – The Overall Site

Making information and resources available on the World Wide Web (WWW) has become an important and vital aspect of the working world, not only in Texas schools, but also around the globe. The convenience of having information that can be accessed at any time on any day has now become an expectation for computer users with Internet access. For developers and content providers in the Educational Web Site Design and Development, this expectation can limit the development time for Web Sites, as well as integrating the necessary improvements that are required over time.

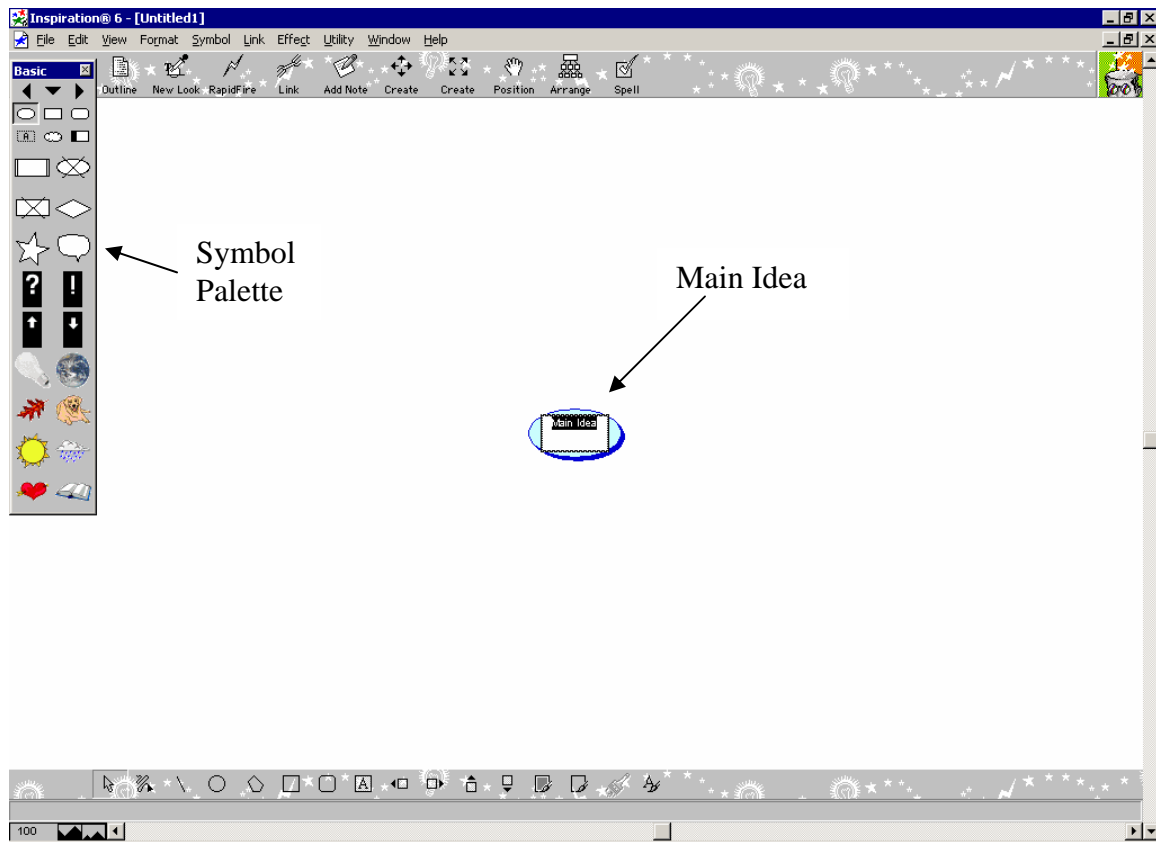## Building a Map Using Inspiration Software

Inspiration Web site Logo

In this class, you will be using concept-mapping software called Inspiration to design the framework of your site. The software is user friendly and allows the developer to graphically depict the organization of the site, as well as provide a map to follow during construction. For each of the parts that follow, you will put new parts into your map. This is not a class in how to use Inspiration, but you will get a good introduction to using this software with a purpose, in that you should construct a map of the Web Site that you are planning to build. Inspiration software is available on the Web and can be accessed at the following URL: http://www.inspiration.com/

Classroom Practice with Inspiration

Begin by double clicking on the Inspiration shortcut on your desktop. When you launch the program, you will see a blank page with a Main Idea waiting to be entered. Inspiration has two main views or environments: Diagram view and Outline view. In planning you Web Site, you may want to work exclusively in the Diagram view in order to create a pictorial map of your site. In effect, you will be creating a concept map of your site. A concept map is a hierarchical diagram used to represent the relationships between concepts. It is normally organized from the most general topics to more specific items. For purposes of this class, the arrangement of the objects in your diagram should be a visual representation of the Web structure that you will be building.

In the Diagram view, the Main Idea is the starting point for your map. You type the name of the root folder that will be containing all subsequent directories, Web pages, images and other media. From the Main Idea, you will add your connected folders and files for your Web Site. The Symbol palette, located on the far left, contains different libraries of idea symbols that you can add to your diagram.

Introducing the Inspiration Screen

Next, you should type in the name of your root folder into the Main Idea window. Press Shift+Enter to end text entry and select the symbol. For each subsequent part of your diagram you can click into the diagram and type, and a new object will appear in your diagram. Try creating a few additional ideas in your diagram.

In order to link ideas within your diagram, you first select the object you want to link from by clicking on it once. When you do that, the symbol has squares on the ends and diamonds on the sides. You can resize the symbol by grabbing the squares and from the diamonds; you draw the links to another symbol. You can also click into the link, and write a descriptor word for the link if you so desire.
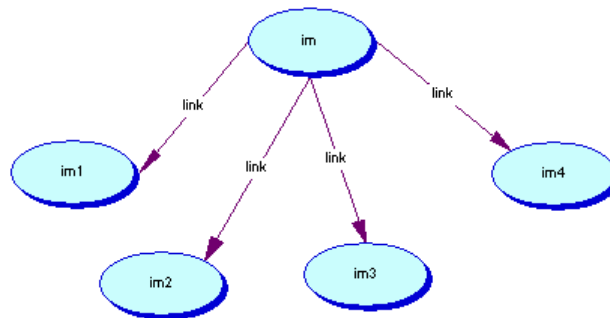
There are a number of features associated with the symbols and the links. You can scroll through the symbol palette to look for symbols that will represent folders and individual files. You can also change the thickness of links or make them form at 90-degree angles. On the menu under "File", there is a choice for "Diagram Properties" where you can set many of the basic features for your diagram. Take a few moments to familiarize yourself with the menu lists and choices that you can make in Inspiration.

Exercise – Working with Inspiration

Using Inspiration, build a map using "Music" as the Main Idea. Identify the sub-levels of music (such as Jazz, Classical, Rock, etc..) and then add artist underneath these levels. Next, connect the ideas with links. Practice with the formatting in Inspiration by changing the properties of the items in your diagram.
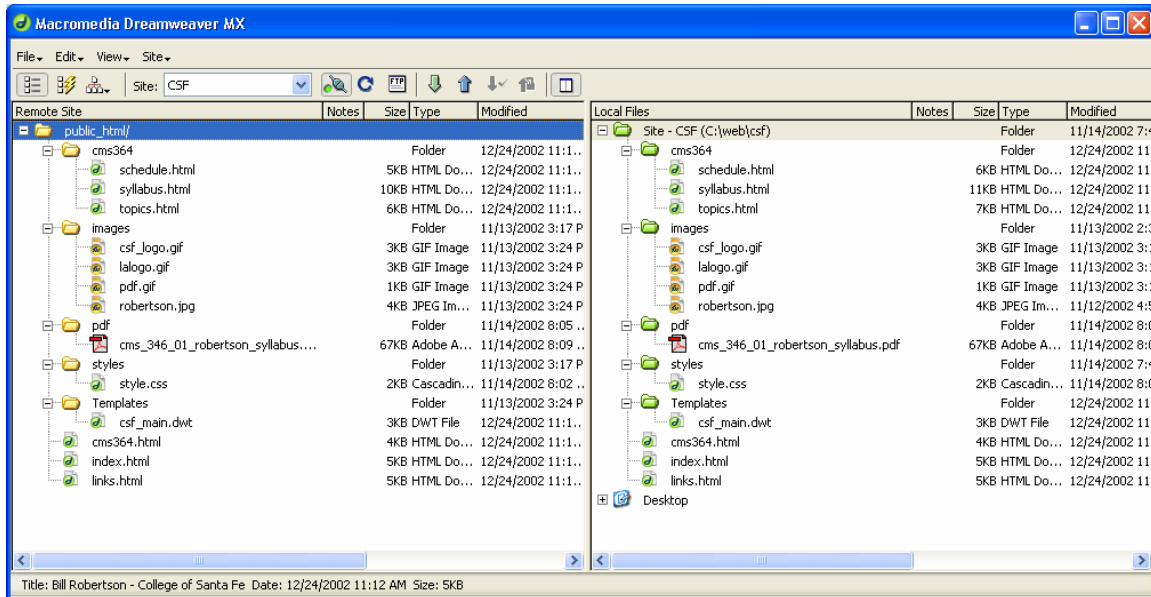
Exercise – Designing Your Web Site

Using Inspiration, create a basic diagram of a Web Site that you are planning to build. Choose different symbols for folders and files, and fill in the text within the symbols. Connect all of your ideas using links.

Inspiration Basic Diagram Showing Symbols and Links

Site Management

The organization of the site and its management are the fundamental concepts that the developer must understand in order to effectively update, add to or change information that is posted on the WWW. Most importantly, your site should look and feel the same on both your local machine and the server. To reach this end, you will need to construct a plan for your site on your local machine, and then implement this plan (or schematic diagram) as you build the site. At the end, the folder and file structure on both the local and remote sides should match and in effect mirror one another in structure and content.

Macromedia Dreamweaver MX

File Edit View Site | Site: CSF

Remote Site	Notes	Size	Type	Modified
public_html/				
cms364			Folder	12/24/2002 11:1...
schedule.html		5KB	HTML Do...	12/24/2002 11:1...
syllabus.html		10KB	HTML Do...	12/24/2002 11:1...
topics.html		6KB	HTML Do...	12/24/2002 11:1...
images			Folder	11/13/2002 3:17 P
csf_logo.gif		3KB	GIF Image	11/13/2002 3:24 P
lalogo.gif		3KB	GIF Image	11/13/2002 3:24 P
pdf.gif		1KB	GIF Image	11/13/2002 3:24 P
robertson.jpg		4KB	JPEG Im...	11/13/2002 3:24 P
pdf			Folder	11/14/2002 8:05 ..
cms_346_01_robertson_syllabus....		67KB	Adobe A...	11/14/2002 8:09 ..
styles			Folder	11/13/2002 3:17 P
style.css		2KB	Cascadin...	11/14/2002 8:02 ..
Templates			Folder	11/13/2002 3:24 P
csf_main.dwt		3KB	DWT File	12/24/2002 11:1...
cms364.html		4KB	HTML Do...	12/24/2002 11:1...
index.html		5KB	HTML Do...	12/24/2002 11:1...
links.html		5KB	HTML Do...	12/24/2002 11:1...

Local Files	Notes	Size	Type	Modified
Site - CSF (C:\web\csf)			Folder	11/14/2002 7:...
cms364			Folder	12/24/2002 11
schedule.html		6KB	HTML Do...	12/24/2002 11
syllabus.html		11KB	HTML Do...	12/24/2002 11
topics.html		7KB	HTML Do...	12/24/2002 11
images			Folder	11/13/2002 2:...
csf_logo.gif		3KB	GIF Image	11/13/2002 3:.
lalogo.gif		3KB	GIF Image	11/13/2002 3:.
pdf.gif		1KB	GIF Image	11/13/2002 3:.
robertson.jpg		4KB	JPEG Im...	11/12/2002 4:5
pdf			Folder	11/14/2002 8:(
cms_346_01_robertson_syllabus.pdf		67KB	Adobe A...	11/14/2002 8:(
styles			Folder	11/14/2002 7:-
style.css		2KB	Cascadin...	11/14/2002 8:(
Templates			Folder	12/24/2002 11
csf_main.dwt		3KB	DWT File	12/24/2002 11
cms364.html		4KB	HTML Do...	12/24/2002 11
index.html		5KB	HTML Do...	12/24/2002 11
links.html		5KB	HTML Do...	12/24/2002 11
Desktop				

Title: Bill Robertson - College of Santa Fe Date: 12/24/2002 11:12 AM Size: 5KB
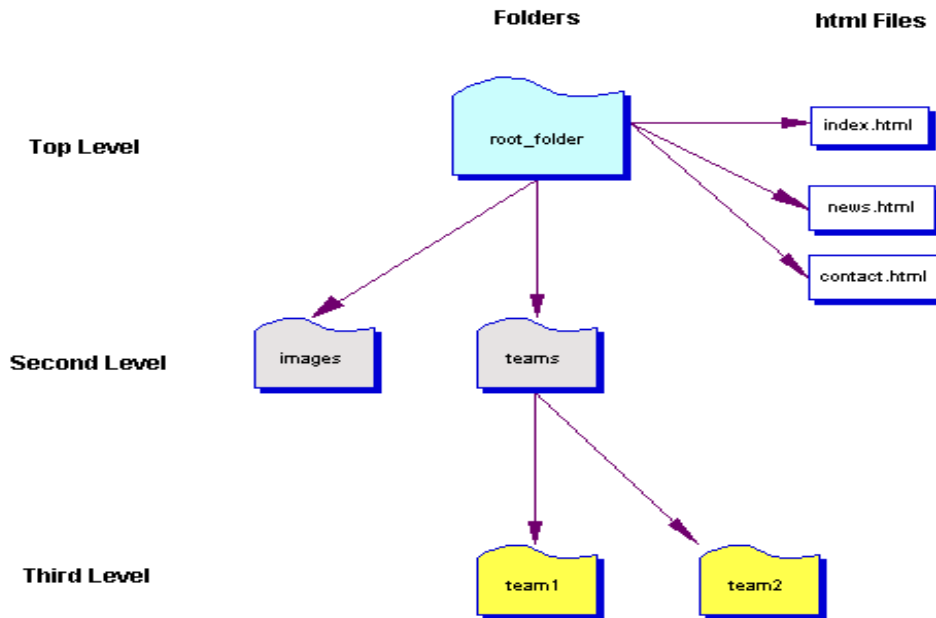
File/Folder Organization

This process should begin with a sketch (on whiteboard or on paper) of what the basic files and folders on the Web Site will be. It is also good practice to name the files and folders in a short and easily understood manner. All folders and files must be contained within a single folder, called the "root folder". This is the highest level of the site, and all files and other folders (sub-folders or sub-directories) must be contained within this root folder. As for individual html pages, they should end in a format recognized on the Web (.htm, .html, shtml, .stm). All the folders and files should also be in lowercase and without spaces. For instance, the root folder could contain the first page (or home page) of a Web Site, which by convention is often entitled "default.htm or default.html (at UTEP) whereas on other machines, the first page is often entitled "index.htm", "index.html".

Revise your map from exercise one to reflect an organization of folders and files that follow the above suggestions. To change the text in a symbol, double click on it. This will allow you to edit it. You may want to find the symbols for folders in the symbol palette, and use smaller boxes of a different shape for files. You can also change the fill colors of the symbols to help you better visually represent the hierarchy or organization of your site.
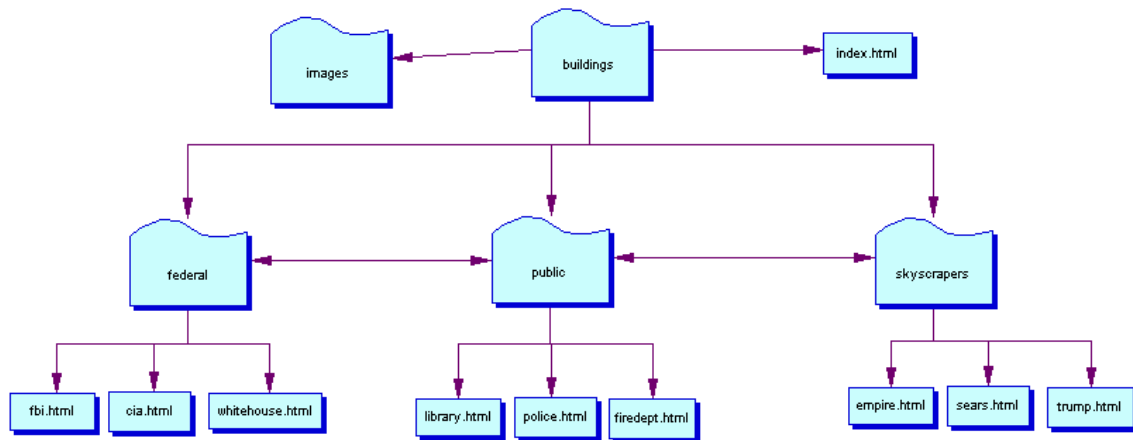
Basic Web Site Design

Basic Web Page design showing Directory (Folder) structure and page location

Exercise – Building a Site Map

From the following list, construct a diagram of a Web Site using Inspiration. Use links to connect the folders and the files. You may want to use the symbol palette located in Process called Flowchart 2 as it has a number of objects that look like folders. You can also distinguish between the pages and the folders using different symbols, colors or fonts.

- Root Folder – buildings with files index.html, resources.html
- Sub-directory – skyscrapers with files: empire.html, sears.html, trump.html
- Sub-directory – federal with files: fbi.html, cia.html, whitehouse.html
- Sub-directory – public with files: library.html, police.html, firedept.html
- Sub-directory – images with files: empire.jpg, sears.jpg, trump.jpg, fbi.jpg, cia. jpg, whitehouse. jpg, library.jpg, police. jpg, firedept. jpg

Basic Design Framework for Web Site in Exercise Two

Basic Design Framework for Web Site in Exercise Three

Folder/Directory

In dealing with Web Sites, a folder is the same thing as a directory, and the address of a site often gives an indication of where information resides. For example, if a Web address is given to you as the following Uniform Resource Locator (URL):

http://utminers.utep.edu/robertson/classes/ted5319/default.htm

You can surmise that the utminers.utep.edu is the domain name of the site, and "/robertson" indicates the root folder (at the top level). Following along, "/classes" is a sub-directory (or sub-folder) inside the "/robertson" folder. Next, "/ted5319" is a sub-directory (or sub-folder) inside the "/classes" folder. The page "default.htm" is the page that is being viewed and it resides in the folder entitled "html".
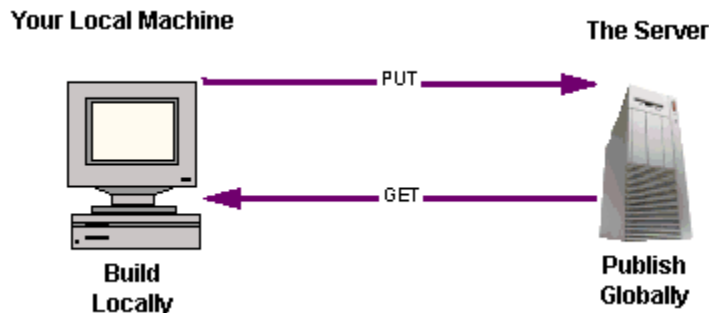
Files and File endings (.htm, .html)

There are a number of file endings that can be used on the Web, and your area may have a specific style that it is using, depending on whether it is supported with server actions (.shtml or .shtml) or is more of a stand alone (.htm or .html). There are also other formats that can be used, but it is best to choose one format and stick with it.

Images/Photos/Graphics

Images and pictures add vitality and life to a Web Site, and as the saying goes, "A picture paints a thousand word". Also important in this are logos for different organizations that are important for emphasizing ownership of given pages on the Internet. As stated previously, all images and photos should reside in a folder that will be accessed to call up pictures to appear in your Web pages. Typically, there are 2 basic formats for images on the Web, Graphics Interchange Format (.gif) and Joint Photographic Experts Group (.jpg or .jpeg). Within your Web page, you may want to utilize another heuristic of design in that .gif is used for graphics and .jpg (.jpeg) is used for photographs.

Local vs. Remote

In the basic sense, the Local System is where you reside, the local machine on which you are operating. It is also the place where most if not all of the development will occur. This is where the root folder and other files and folders contained within it will reside on your local machine. The Remote Site is in effect "the Server" or where the pages reside so that others can see it over the Internet. Within an application like WS_FTP or Dreamweaver's site manager, you can see both the local and remotes sides as you work on and subsequently post pages. A rule of thumb is that "You develop locally and post remotely."
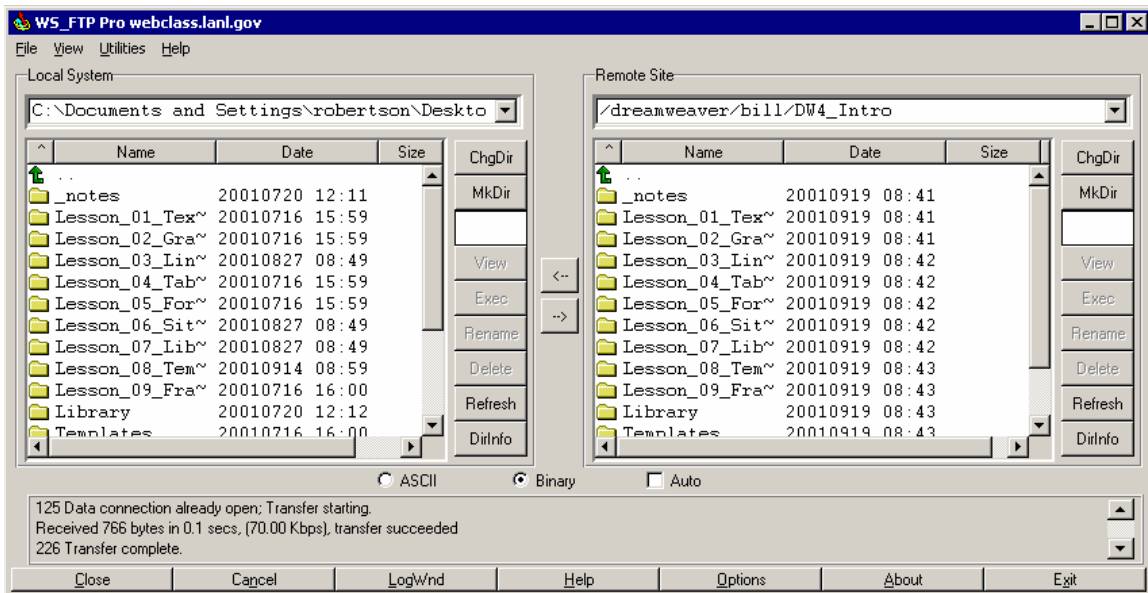

Use PUT to move your pages to the server and
GET to move pages from the server to your local machine

Using the Server

The Web runs on a client/server model. You run a Browser (Netscape, Internet Explorer) on your system (the client). It contacts the Web server and requests information or other resources, most commonly done in the form of a URL. The Web server locates and then sends the information to the client, thereby displaying the results.

The server is ultimately where all your pages will reside, yet understand that even after you have made sure that all your links work and all your paths are complete, you will still have to troubleshoot your pages once they are on the server. Again, "Your Web Site is never done," so you can expect things to have to be done regularly to your site, especially as you add, edit or re-post information. File Transfer Protocol (FTP) is the process that you will use, and the software you can use is WS_FTP (PC), Fetch (Mac) or you can use the FTP tool within WYSIWYG software, such as Dreamweaver.

Screen Shot of Local (on left) and Remote Site (on right) Using WS_FTP

Planning on a Micro Level – The Individual Pages

An effective page design is critical to keeping your visitor engaged and informed on your Web site. Too often, people begin to develop the actual page in HTML (Hyper Text Markup Language) without actually planning out how the site will look and feel for the user. In order to build Web pages that are useful and meaningful, a developer will need to spend some time deciding upon the basic page layout, look and feel of each page.

Exercise - Researching of Web Sites

There are many high quality Web Sites built and maintained on the Internet. In the Resources section of this class, there are a good number of basic design constructs as well as understanding on HTML. You should continually look at different Web Sites in order to see what is happening both in content and design.

Here is the URL for the samples page for this class:
http://utminers.utep.edu/robertson/classes/ted5319/samples.htm

Templates

Templates provide a consistent page structure with places for logos, page titles, links, and legal information. These templates are similar to those you may have used in other applications like Microsoft Word or PowerPoint. Laboratory templates give you basic page structure and elements and then you can add your text and graphics to each page. Templates provide you a starting point and promote a consistency across your Web pages that aid visitors.

Templates contain the basic components that will appear within each page, and also are the area where you focus on basic functions that you want within each Web page.

Deciding on Fonts, Colors

This is a very important design basic, and one that will save you a lot of time down the road. For the most part, you will want to use a san-serif font for your Web text. Examples of these are Arial and Helvetica. The reason to use a sans-serif font is that it makes reading text and linked items easy. Another design basic is to make the pages "clean" meaning you want the visitor to be able to read all the text in your pages and get the information they need from your site. You may want to keep your backgrounds light (white, pale yellow, pale blue, etc.) and your text dark (black, blue, etc.). You can also decide on the relative sizes of text too, as you would in working with a Word Processor and establishing formatting within a document. These topics will also help you to understand

where "style sheets" fit into the Web and into the design process. Another rule of thumb is the KISS principal, so in a design sense, less is more.

Exercise – Designing the Web Page Layout

Take a piece of 8 ½ by 11 inch paper and begin to draw what you would like your page to look like in the most basic sense. You would want to include areas that you can use to integrate content and pictures, and it may look more like a bunch of boxes or as we say in Web circles "tables". From looking at other Lab Web pages, you may see elements you want to put into your page, but at this point, don't concentrate on specific, but only on the basic frameworks of your design.

(title Information)	
(navigation) link1 link2 link3 link4	(content)
(Logo)	(footer information including email and date)

Basic Framework For Page Layout To Begin Design Work