



Technology Training
January-February 2003



Web and Graphics Tools Dreamweaver MX

Presented by Northwest ISD
In conjunction with ESC XI

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Technology Training January-March 2003



Schedule

- ❖ Pre-Workshop – Story Boards and Site Design
- ❖ January 14/15 – Overview and Adobe Photoshop
- ❖ January 28/29 – Macromedia Flash MX
- ❖ February 11/12–Macromedia Freehand 10
- ❖ **March 4/5 – Macromedia Dreamweaver MX**



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Information Design

- ❖ Message – What do you want to say
- ❖ Audience – Who are you trying to reach
- ❖ Purpose – What do you want them to do with it
- ❖ Background – Why you are here
- ❖ Structure – How it is organized

Information is defined as the stuff on a page. Usually there is an innate organization to this “stuff”.

Does the information to be contained on a site have a hierarchy, I.e. some concepts and ideas are more important or critical than others?

Can the information be organized into equal junks in importance?

Must the information be displayed in a “building block” fashion, I.e. concept #1 must be learned before concept #2 before concept #3?

How the information you intend to display can be organized determines what type of web page or site you will create.



Presentation Design

- ❖ Navigation – Flash MX/Photoshop
- ❖ Color Scheme – Photoshop/Freehand/Dreamweaver
- ❖ Font Selection – All
- ❖ Graphics – Photoshop/Freehand/Dreamweaver
- ❖ Layout – Dreamweaver/Freehand
- ❖ Multimedia Effects – Flash MX/Freehand

How you want your page to look is partially determined by the information that you are trying to display. However, there are as many ways to create a page as there are people creating pages!

Basic areas to include:

A top logo region

 Show the owner/creator and the basic intent of the site

A top or left navigation area

 Displays the available information on the site and allows the user a way to access it

A “body” area where most content and information is displayed

Optional parts:

A top navigation area that contains important, but not critical, links to other functions, such as contacts, help, etc.

A bottom bar that contains copyrights and direct contact information

Before you create.....you need

- ❖ A storyboard image or graphic
- ❖ Element list
 - ❖ Navigation
 - ❖ Pictures
 - ❖ Page List or overview
 - ❖ Content blocks
- ❖ An audience checklist
- ❖ Development and Maintenance Timeline

Inspiration 6.0 is one way to develop a visual representation of your page or site. Most people have an easier time working with a visual view of a page than a written narrative.

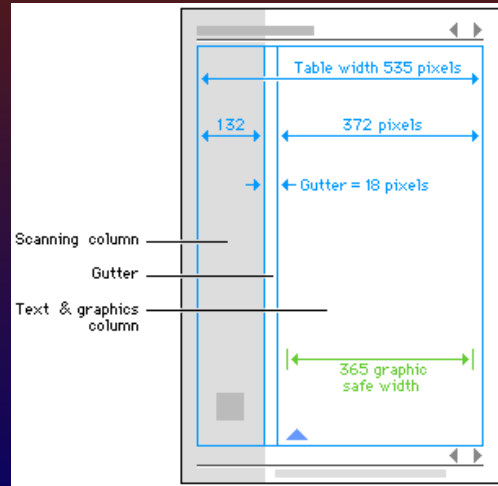
Pencil and paper still work, even in the 21st century! Create a drawing of your page and site structure. This will be the equivalent of the mental map that you are asking your viewers to build as they click through your site. If you don't understand the structure of your creation, don't expect your site visitors to understand it either

SIMPLIFY, SIMPLIFY, SIMPLIFY!

Storyboard Image (complex)

Storyboards are for the designer's use....
**IN THIS CASE,
YOU!**

They can be as complex
as the one on the right
OR



Storyboards are an integral part of the development process.

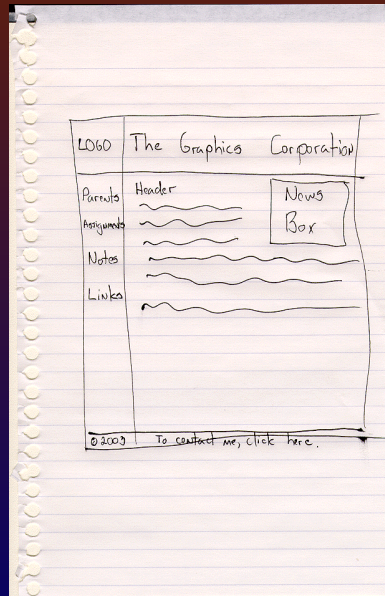
Most of the storyboards that I create are built on napkins – the canvas of the geniuses! They are not complicated, but create a base image and layout that is repeated and followed on every page of the site.

If you storyboard is correct, then your page will most probably be correct.

Storyboard Image (simple)

More like this one.

The important point is to start with something written that you can refer to as you move forward!



This is more like the page layout storyboard that I am used to building. Napkins are cheap (paper napkins, only).

This guideline appears simple, but once you start developing, the options become more numerous as the page progresses. Without a clear image up front, it is easy to become bogged down in repairing completed pages instead of building new ones to expand the site.

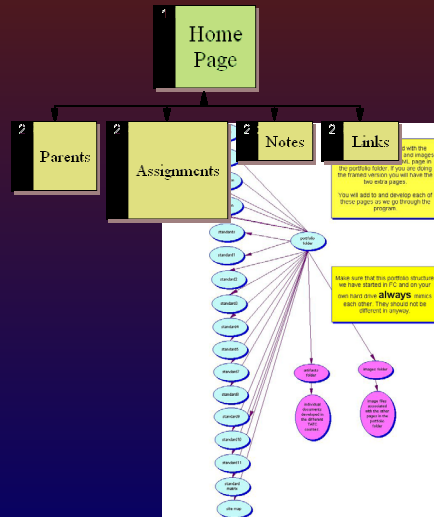
Site Storyboard (complex)

Contains a graphic display of how the pages on a site relate.

Sample created with Inspiration 7

Useful for:

- Remembering where you are when developing
- Displaying the mental map that you are requiring of users



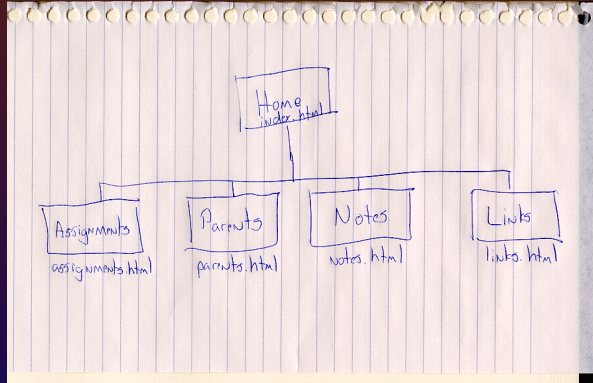
Consideration must be given to the navigation styles and how they relate to your intended audience. A teacher approaches a rubric web site with a pre-conceived idea about the categories, structure, and layout of a site, based on her/his approach to building and using rubrics. A parent, visiting the same site, would have a different view of grading systems and would expect the layout to reflect their “consumer” role in grading.

The site plan/storyboard is the place where you define how pages are organized in relation to each other. Your view of the content that you can provide (information design) is now laid out to show relationships (navigation design).

Site Storyboard (simple)

Anything is better than nothing.

As a developer, thousands of details can distract you from where you need to be during development.



Write it down so that you don't have to remember!

The napkin version of the previous screen.



Elements List

Using the simple storyboard as a starting point, I need:

- ❖ A logo
- ❖ Four navigation buttons
 - ❖ Parents
 - ❖ Assignments
 - ❖ Notes
 - ❖ Links
- ❖ Content Specific to:
 - ❖ The body area
 - ❖ News oriented
- ❖ An email address

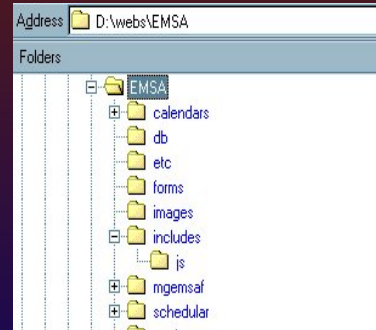
An Element List contains everything that you will need to build your page. It is similar to the “props list” used in msot high school plays/

It includes:

- Electronic items
 - Graphics
 - Images
 - Navigation Elements
 - Logos
- Content Items
 - Documents (converted and unconverted)
 - Writing schedules
- Permissions for graphic and non-graphic items
- Email addresses
- External links
- A maintenance schedule that includes all elements and the responsible party

Web Site Structure

- ❖ Web sites are tree-like, with branches for each type of element or information
- ❖ ROOT = the bottom of the tree
- ❖ Subdirectories can be referenced:
 - ❖ relatively (images/image.jpg)
 - ❖ Fully-qualified (<http://www.emsasoccer.org/images/image.jpg>)
 - ❖ From ROOT (/images/image.jpg)
- ❖ Generally, subdirectories can reflect
 - ❖ type (images, JavaScript, includes)
 - ❖ information design (books, library, newspapers)
 - ❖ both



A web is not really a web in the physical sense, but a tree.

ROOT or / always refers the bottom of the tree.

The links between pages do NOT have to follow the tree structure.

Sometimes it makes sense to organize subdirectories based on common data, such as Lesson Plans (lessonplans), Notes (notes), and Grading System (grading). Other times, it may make more sense to put data into common “piles” based on saved format or type, such as subdirectories called word, pdf, excel, and text.

Analyze the content, documents, and elements that are needed on your elements list to help you decide how to build your directory structure.

HTML

H-T-M-L = HyperText Markup Language

- ❖ **Hyper** allows the person viewing the World Wide Web page to go anywhere, any time they want.
- ❖ **Text** Real, honest to goodness English letters.
- ❖ **Mark up** Write in plain English and then mark up what you wrote.
- ❖ **Language** the language is plain English.

HTML is a text-based language. There are no compilers, assemblers, or bit-tweaking involved in writing HTML.

Most web development can be done with a text editor and an idea; Dreamweaver automates the easy tasks and provides it own complication: it makes very hard things easy to create. This complication is fine when everything works, but sometimes it does not.

Be sure to create documents using both the design and source windows. Become familiar with what Dreamweaver inserts into an HTML page when you perform simple actions, such as carriage returns and spacing.

Basic HTML Points

- ❖ HTML is written in text format and saved as .htm or .html
- ❖ Commands in HTML are called **TAGS**
- ❖ Tags are **ALWAYS** surrounded by angle brackets
- ❖ Tags usually occur in pairs surrounding the material they affect
- ❖ End TAGS begin with a /.
- ❖ Tags are embedded - first on . . . last off.
- ❖ Tags often have optional attributes that allow more specific actions.
- ❖ Tags are **NOT** case-sensitive (Valid: <A>, <a>, <A>)

Sample HTML Page

Minimum Required TAGS:

```
<HTML>  
  <HEAD>  
    <TITLE>Hello Page</TITLE>  
  </HEAD>  
  <BODY>  
    HELLO!  
  </BODY>  
</HTML>
```

Well-formed describes a document which contains valid HTML tags. The HTML tags requiring close tags contain them and the HTML tags that do not have end tags do not have them.

Well-formed HTML contains

<HTML> opening tag with closing tag @ end of document


<HEAD> tag, containing a <TITLE> tag and any other server instructions, with a closing tag before the <BODY> tag.

<BODY> that contains the content displayable within the browser window. As a general rule, if content is outside of the body tag, it will not be displayed or be displayed incorrectly. The <BODY> tag should have a closing tag prior to the closing <HTML> tag.

That is all that is required to create a basic page.

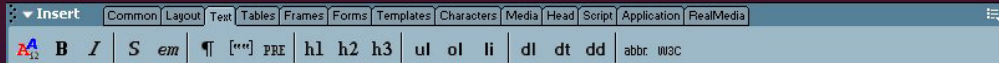


Build Hello.html

- ❖ Open Dreamweaver MX
- ❖ Select File | New
- ❖ Pick Basic Page from the General Tab
- ❖ Click on Create
- ❖ Add the text “Hello Page” between <TITLE> & </TITLE>
- ❖ Add the text “Hello!” between <BODY> & </BODY>
- ❖ Save file as Desktop | hello.html
- ❖ Click on the Browser Icon () in Dreamweaver.

Insert Bar – Text

One of the most important parts of Dreamweaver.



Using the Text tab, select Hello! with the cursor and perform/preview the following actions.

Refresh the browser after every update.

Change to Heading 1 (h1)

Change the color to Red (leftmost button)

Make the text bold (S)

Emphasize (*em*) the text.

Also, use the properties bar at the bottom of the page to change other options. Make sure that you have Hello! Highlighted.

The Insert bar is the main collection of HTML tags, objects, and actions in Dreamweaver. It is organized by “type of action”, such as Text, Templates, Tables, and Common actions (my favorite).

Start with the Common Tab as a default.

Lists

- ❖ Two types of lists:
 - ❖ Both types use the `` tag to display list elements
 - ❖ Bulleted (unordered list ``)
 - ❖ Circle
 - ❖ Disc
 - ❖ Square
 - ❖ Numbered – (ordered list ``)
 - ❖ Arabic
 - ❖ Lower Alpha (a,b,c)
 - ❖ Upper Alpha (A,B,C)
 - ❖ Lower Roman (i,ii,iii)
 - ❖ Upper Roman (I,II,III)

Lists are similar to the lists available in most word processing programs, only simpler.

Unordered lists (UL) use bullets or circles to denote each item in the list.

Ordered lists (OL) use numbers, letters, or Roman Numerals to designate each list item.

For both types of lists, the List Item tag (LI) is used to denote each item in the list. A closed LI tag is optional.

Both of the list tags (OL and UL) must have a closing tag.



List Hello.html

- ❖ Create the following lists on hello.html:
- ❖ List of 3 animals
- ❖ 4 Months in numeric order
- ❖ Roman list of 3 planets
- ❖ List of 4 people you know something other than the default bullet.

```
<HTML>
  <HEAD>
    <TITLE>List of Stuff</TITLE>
  </HEAD>
  <BODY>
    Animals
    <UL>
      <LI>Dog
      <LI>Cat
      <LI>Pig
    </UL>
    <P>
    Months
    <OL>
      <LI>January
      <LI>February
      <LI>March
      <LI>April
    </OL>
    etc.....
  </BODY>
</HTML>
```

Insert Bar – Common: Links



First Section: Link Tools

Link: a reference to another resource

- ❖ Chain Link: a link to another file or web site

``

- ❖ Letter: a link to an email address

``

- ❖ Anchor: a link within the current document

`` goes to

`` within the same page

The Common Insert Bar contains icons and actions that make updating a web site or set of documents EASY.

It contains the three different types of links: external, mail, and internal.



Hello.html + Links

1. Click on the Insert Bar | Common
2. Click on the chain icon (link)
3. Type in a text description that will be displayed on the page
4. Type in a URL and click OK
5. Test in browser
6. Click on the envelope icon (mailto)
7. Enter an email address, Click OK, and test in browser
8. Hit Enter 25 times to scroll the page and click on the anchor icon (name)
9. Enter "stuff" as the name and click OK.
10. Hit enter and type some random text, just for visual affect.
11. Scroll back to the top of the page and click on the chain icon (link)
12. Type "Some Stuff" as the text and #stuff as the URL
13. Click OK and test in the browser.

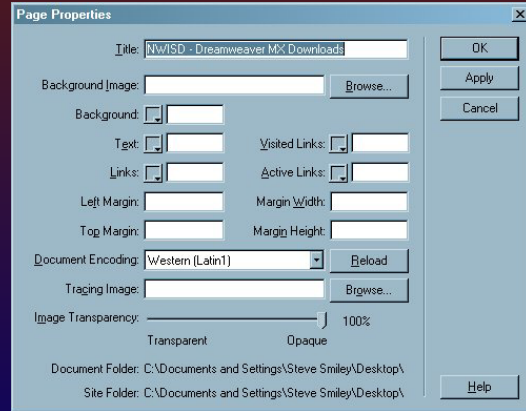
Page Properties Changes

On the hello.html page, right-click and select Page Properties (last option)

Perform/preview the following actions using hello.html.

Refresh the browser after every update.

- ❖ Background
- ❖ Text
- ❖ Margins



We will work with links next.

Page properties control the overall look and feel of your document.

Hello.html + Page Changes

- ❖ Right click on hello.html and select Page Properties (last option)
- ❖ Change the background color and all of the link colors
- ❖ Test in browser to see effects.
- ❖ Find an image on your hard drive.
- ❖ Add it as the background image.
- ❖ Test in browser.
- ❖ Use Ctrl-Z to undo the mess you just made.

Insert Bar – Common: Tables



Second Section: Table/Table Layout Tools

Table: a set of rows and columns (can be embedded within each other)

- ❖ Table: Dialog to create a table where the cursor resides when pushed.
- ❖ Layout Table: a “fake” table used by Dreamweaver to create a page layout

Web design secret

Tables are the ONLY way of insuring page layout across all browsers. Internet Explorer and Netscape Navigator have different (and conflicting) methods of layout tags; they do not mix easily.

Tables are the layout tool for HTML pages. Tables can be embedded within tables embedded within tables.

A table is a set of rows and columns. Each column can have a width and height; each row can have a height. A cell is an intersection of a row and a column.

Cells can be combined, split, or manipulated to place a single piece of text or an image at a specific place on the screen.

Tables

Formats section of web page into columns and rows

Border	adds a border on the perimeter of a table also adds grid lines between the cells of the table
Cell-Spacing	specifies space between cells in a table
Cell-Padding	specifies space from the data in cell to cell edge
Caption	adds cell either above or below table for caption
Heading format	formats contents of cell as bold & centered
Width	specifies the desired width of a table in pixels or % of window pixels = specified width, % adjusts with width of viewing window
Table Height	desired height of table in pixels or % of window
Background	formats background of table cell with solid color or image
Cell-spans	choose number of columns or rows wide for cells

Tables have options at each level of their structure.

Tables can have the options contained on the slide.

Table Rows have their own set of options, such as height and number of rows to span.

Table cells (TD) have all of the options of the table and table row to use, as well as color, merging, and borders.

Hello.html + a table

- ❖ Click on the Insert bar | Tables
- ❖ Click on the table icon
 - ❖ 3 rows, 2 columns, cellpadding = 2, cellspacing = 2
 - ❖ Use the mouse to modify column widths and row height, if desired
- ❖ Enter text in each of the cells on the first two rows and test in browser.
- ❖ Select the 3rd row.
- ❖ Right-click and select Table | Merge Cells
- ❖ Enter some text as a footer for the table and center it (right-click and select Align | Right)
- ❖ Test in browser

Insert Bar – Common: Graphics



Third Section: Images and Objects

- ❖ Image: inserts an image within the web page.
 - SRC: URL of the image to be displayed
 - ALT: displayed when a page is displayed in text mode or when the mouse is left over an image (browser-dependent)
 - HEIGHT: (Optional) Height of the image in pixels
 - WIDTH: (Optional) Width of the image in pixels
 - BORDER: default value is 1; set to 0 if the image is a link
 - ALIGN: All sorts of variations
- ❖ Image Placeholder: Rarely used; creates a formatted area to put an image before the image is loaded by the browser
- ❖ Fireworks HTML: PNG/HTML code created by Macromedia Fireworks
- ❖ Flash: inserts a Flash animation
- ❖ Rollover Image: Easy way to create an image that changes when the mouse moves over it.
- ❖ Navigation Bar: more on this later

Graphics are used everywhere on the internet.

From a “building a web page” view, there are two types:

1. Stand-alone graphics that would look nice in a frame or on your desk
2. Graphic pieces that are used to create the overall look-and-feel of the page including:
 - Table backgrounds
 - Page backgrounds
 - Navigation elements
 - Accents

Image Alignment

Left	puts image on left and wraps following data on right
Right	puts image on right and wraps following data to left
Top	puts image on left, aligns next line at top of image
Abstop	puts image on left, aligns next line at EXTREME top of image
Middle	puts image on left, aligns next line at middle of image
Absmiddle	puts image on left, aligns next line at very middle of image
Bottom	puts image on left, aligns next line at bottom of image
Absbottom	puts image on left, aligns next line at baseline of image



Image Usage

- ❖ GIF and JPG are supported by every browser that displays images
- ❖ GIFs can have transparent areas (remember PhotoShop)

- ❖ PNG is a relatively new format that is supported by all browsers created within the last 18 months

- ❖ Not directly supported:
 - ❖ Vector images of ANY type
 - ❖ BMP, WMF, MOV*, AVI*, EPS*, PSD, FH10, AI, FLA, LIV

* plug-in required



Hello.html + Graphics

C:\Program Files\Macromedia\Flex MX\Samples\Images

1. Select the Insert Bar | Common
2. Click on the Image icon and drag it to your design area
3. Move to the directory above and select one of the available images
4. Test in browser
5. Right-click on the image and modify the alignment. Type some text by the image and see how it is affected by image alignment.

Images can always be resized using PhotoShop or Freehand and sized to 72dpi for web transport.

Insert Bar – Common: Assorted



Fourth Section: Assorted

- ❖ Hard Rule: a line across the page, used to break up vertical text
 - ❖ WIDTH: how wide the line should be across the screen
 - ❖ ALIGN: where the line should exist (left, right, middle)
 - ❖ SIZE: how thick the line should be in pixels
 - ❖ NOSHADE: default line has a shadow; this attribute turns it off.
 - ❖ COLOR: pick one of the available 256
- ❖ DateTime: Inserts a static date and time into the page. This time does NOT update when the page reloads
- ❖ Import Tabular Data: Can import a delimited file into the document as a table

Hello.html + Assorted

- ❖ Drag each of the following onto hello.html:
 - ❖ Hard Rule
 - ❖ Modify width, size, and noshade using code tab
 - ❖ Date and Time (2 versions)
 - ❖ Click on Tabular Data box and examine options

Insert Bar – Comments/Help



Last Section: Comments & Tag Help

- ❖ Comments are NOT visible to the user and will help to remind the maintainers of the page WHY things were done the way that they were.
- ❖ Reference button takes you to a complete language/tag reference for everything supported by Macromedia

Forms

- ❖ Data collectors that require server processing
- ❖ Required elements:
 - ❖ `<FORM></FORM>` - contains all form elements
 - ❖ Action: what to do when the form is submitted (URL to server processing component)
 - ❖ Method:
 - ❖ POST – send form data as a part of the message to the server (safer)
 - ❖ GET – send form data as a part of the URL (easy, but ugly)
 - ❖ SUBMIT buttons can be labeled to contain anything
 - ❖ New browsers allow for processing by the browser, but usage is limited at this time

Forms are a difficult and confusing piece of web development. Most people are not used to the idea of client-server processing.

The browser is a client machine; it does not do a lot of processing locally other than displaying the pretty pictures that you see. When you enter data into a form, the browser dutifully collects it. When you click on the “submit” button on the bottom of a form, the browser is through with its job.

The “submit” button is attached to a server, which actually does something with the data that you entered. The server component is managed by the school district’s technology staff; they will have to provide information to you about what types of forms that you can create and how the data sent will be handled.

Form Element Types

Adds input elements to the web page

Text box	single line box for text input
Number box	single line box for numeric input
Password box	single line box for text input: displays * for each character typed
Textarea	text box for freeform/ multiple line text input
Checkbox	displays box for multiple-choice input (More than 1 choice allowed)
Radio button	displays circle for multiple-choice input (1 choice allowed)
Select box	displays pull-down menu for multiple-choice response (1 or more choices allowed) Multiple <OPTION> tags provide choices
Button	displays button (JavaScript/VBScript)
Reset	displays button; resets form values to default
Submit	displays button to send response to server

Form.html – Form Creation

1. Create a new file and save As Desktop | form.html
2. Add a header – your choice – followed by a hard rule
3. Click on the Forms Insert Bar and add a form tag
4. Click on the Common insert Bar and insert a table with 5 rows and 2 columns; right-align the left column and left-align the right column
5. Using the Source Code window, ensure that the opening <FORM... tag is before the TABLE and the close </FORM> is after the table
 1. Cut and paste if not in correct place.
6. Create the following fields on your form:
 1. Name (text input)
 2. age range (select with at least 4 ranges) – use code window to add options
 3. Skinny (radio button Y/N)
 4. Hobbies (checkbox with at least 4 choices)
7. Merge Row 5 cells and add a submit button
8. Save document, test, and verify form with the instructor.

Frames

formats the web page window into multiple "panes" to display multiple pages on one screen.

Advantages:

- ❖ Common look-and-feel for navigation and layout
- ❖ Easy to create and maintain

Disadvantages:

- ❖ Linking into a specific page of a framed site is not possible
- ❖ Initial page load requires at least three pages, rather than the one page in a non-framed site.

Frames are common occurrences on Intranets and were very popular on the Internet during the late-90's.

The biggest disadvantage to frames is that a site visitor cannot link directly to a single page embedded within your site. If you know your audiences needs and wants completely, then this may not be an issue. On the Internet, however, the general populace may have a different idea about what information is important on your site and may want to access it directly.

A framed site would prevent this type of interaction.

HEAD section

- ❖ Controls how the page is handled and perceived by the Internet as a whole.
- ❖ Available TAGS:
 - ❖ <TITLE> - Required by HTML specification
 - ❖ In reality – Optional
 - ❖ META: content section required
 - ❖ Name (keywords, description, stuff)
 - ❖ **Title:** Formats the text to appear in the window's title bar
 - ❖ **Author, Keywords, Description, Meta tags** specify text internal to the source code to document the page and to be used by search engines.
 - ❖ HTTP-EQUIV: Refresh
 - ❖ <META HTTP-EQUIV="Refresh"
content="2;URL=http://www.northwestisd.edu/">



Testing

Before publishing the web site, check each page

- ❖ in both Netscape and Internet Explorer
- ❖ at all 3 common screen sizes
 - ❖ 640 x 480
 - ❖ 800 x 600
 - ❖ 1024 x 768
- ❖ on more than one brand of monitor (preferably one older one)
- ❖ on both PC and MAC

Sites

Easy to maintain

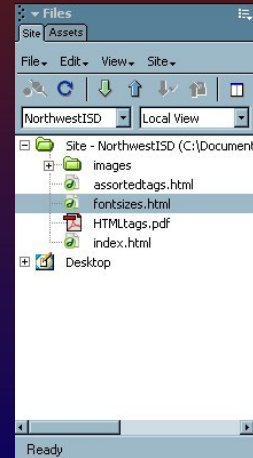
Allows for a self-contained view of a specific web site (tree)

Lists the assets used, and available files

To create a new site:

1. Click on the Site menu of the Files panel
2. Select New Site
3. Follow the prompts using the Basic tab

Once your site is created, start building it out.



Adding Pages

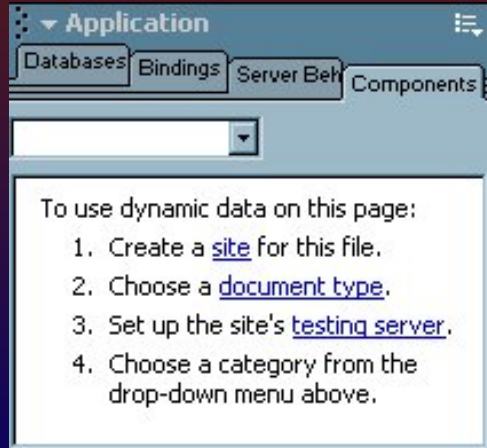
❖ Simple

- ❖ Click on File | New File in the Files Panel
- ❖ A new file will appear in the site window
- ❖ Type in name and hit enter
- ❖ A file is created within the site folder...linkable and ready-to-edit

- ❖ You can also manage folders using the File Menu on the Files Panel

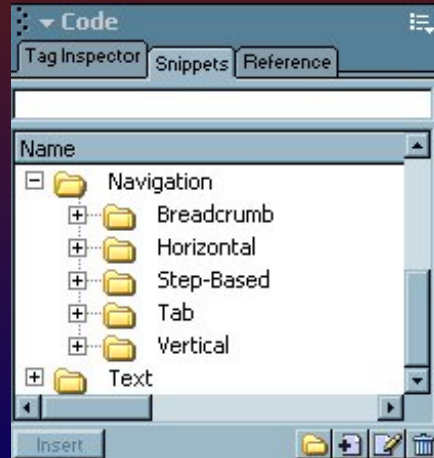
Application Tab

- ❖ Tab dedicated to programming and server-based activities
- ❖ Direct attachments to databases
- ❖ Binding of form fields and table cells to specific database objects
- ❖ Server pre- and post-processing of a page
- ❖ Available components that are usable by a pre-processed HTML page.
- ❖ To find out if a testing server is available/possible, please see your system administrator.



Snippets

- ❖ Shortcuts – built-in
- ❖ Drag any of the snippets to your design area to create a pre-built structure.
- ❖ Saves large amounts of coding; most elements are usable “as is”
- ❖ Disadvantage:
 - ❖ Must be changed by hand
- ❖ Add snippets by right-clicking on the snippets tab and selecting New Snippet





Hello.html + Snippets

1. Click on the Navigation folder within the Snippets panel
 2. Place your cursor in a position on the design area, then double-click a snippet to add it to the selected location
 3. Examine the initial layout and, using the source window, the manual modifications needed to make a snippet work for your site.
- ❖ Explore for 10 minutes



References

Complete reference materials are built-in to Dreamweaver

Access tag references using the Tag Reference Button on the
Insert bar | Common

OR

Use the Reference tab of the Code window for a complete
list of available references.

The TAG/OBJECT dropdown selects the desired topic; Description will show a list of
available options for the selected topic



Local Resources

Images reside all over the lab computers.

❖ Starting Places:

- ❖ C:\Program Files\Common\Microsoft Shared\ClipArt
- ❖ C:\Program Files\Common\Microsoft Shared\Themes
- ❖ C:\Program Files\Macromedia\.....Sample directories for each product
- ❖ C:\Program Files\Adobe\.....Sample directories for Photoshop

Hint: Freehand can read WMF files and save them as GIFs



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Building Your Web Pages

You have an idea and 1 ½ hours to implement it.

If you have a question,
check the references first,
then ASK!

Images are where you find them.



Templates

- ❖ Templates allow for the creation of an editable document that can be used as the basis for an entire site and be applied after the page has been created.
- ❖ Advantages:
 - ❖ Consistent Look-and-Feel across pages
 - ❖ Common library for menus and navigation
 - ❖ Easy to maintain and change
- ❖ Disadvantages:
 - ❖ Can be complex to build

Templates should only be created after a user has solid HTML experience and a complete understanding of the Dreamweaver environment. They are very easy to use once created, so they are worth the effort once these skills have been obtained.



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Questions

<http://www.smileydays.com/escxi/nwid/>

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