Creating Web Pages

Getting Started
Overview

- What Web Pages Are
- How Web Pages are Formatted
- Putting Graphics on Web Pages
- How Web Pages are Linked
- Linking to other Files
What Web Pages Are

- Web Pages combine Formatted Text and Pictures
  - HTML
  - GIF
  - JPG
  - PNG
- Web Pages are Files held on a Server and sent to a Client (Browser)
How Web Pages are Formatted

- HTML - Hyper Text Markup Language
- Based on ASCII text and tags
  - Tags indicate how text should be formatted
  - Tags Start with `<` and end with `>`
  - Tags come in Pairs - a start and end tag.
    - End tags use `</` the tag name `>`
  - There are many tags, but you only really need a few to get started.
Basic Document Structure

- `<HTML></HTML>`
  - Should enclose an entire HTML document.
- `<HEAD></HEAD>`
  - Indicates the document header.
- `<BODY></BODY>`
  - Indicates the document body.
Basic Structure Illustration

- Header
- Body

Information about the document

The document
Text

- Text is simply entered into the document.

- Keep in mind that HTML tries to fit the text to the screen - so the space between letters and words varies with the screen used to display it.
A break between lines is created with a “break” tag: `<br>`

Paragraphs are divided by the paragraph tag: `<p>`

Areas are broken up with horizontal rules: `<hr>`
Headings

- Headings come in six different sizes:
  - `<h1>`
  - `<h2>`
  - `<h3>` etc.
- Headings give an easy mechanism for Formatting Reports
Emphasis for your Text

- `<i>` gives italics,
- `<u>` gives underlines,
- `<b>` gives bold,
Positioning Text

- `<Center>`
  - Centers text

- `<Blockquote>`
  - Moves in both margins on text.

- `<Pre>`
  - Tells the browser to leave in all the white space
Structures

- Lists
- Tables
Lists

- Start with the `<OL>` or `<UL>` tag
  - `<OL>` gives numbers.
  - `<UL>` gives bullets.
- Items are identified with the `<LI>` tag
- All other formatting can occur within the list.
Tables

- `<Table>` starts the table.
- `<TR>` starts a table row.
- `<TD>` identifies table data (a cell in a row).
- `<TH>` identifies a table header cell.
- If each row has the same number of cells its easy to lay out a table.
- If they don’t, you need arguments.
Table Arguments

- the colspan=\(N\) argument tells the browser to have this cell count for \(N\) regular cells.
- The rowspan=\(N\) argument does the same for rows.
- Border=\(N\) tells the browser how thick the border lines should be for a table. When \(N=0\) the lines disappear.
- Example: \(<table border=0><tr><td colspan=2>Title</td><th>First</th><td>second</td></tr></table>\)
Putting Graphics on Web Pages

- All web graphics are bitmapped.
- Bitmapped graphics are too large to transmit without compression.
  - JPEG (Joint Photographic Experts Group) compression is used for pictures.
  - PNG or GIF is used for graphics.
    - PNG is better, but isn’t supported by older browsers and/or graphics software.
Inserting Graphics in a Document

- Graphics are inserted using the `<img>` tag.
- Graphics are stored as separate files.
- The graphics source is an argument to the tag.
- Example: `<img src="image.jpg">`
URL’s

- Universal Resource Locators
  - Unique identifier for a thing available to the web.
- Start with a protocol
  - http
  - ftp
- Then a machine name or IP address
- Finally a pathname to a file

http://www.wayne.edu/webhome/Admit.html
How Web Pages are Linked

- URLs are the key to linking
- URLs uniquely identify another file on the Web.
- A link references a URL to find the next page.
The Anchor Tag

- The Anchor tag is used for linking: `<a></a>`
- Anything that goes in between is blue and underlined indicating that it leads to another page.
- The link itself is done using an argument to the anchor.
The HREF argument

- The HREF argument is a hypertext reference link and its value is a URL.

- Example:
  - `<a HREF="http://fleeb.com/index.htm"> Wow </a>`

- Be careful of the file protocol
  - `<a HREF="file:///a|/fleeb.htm">`
  - This refers to a file on a local disk. It does not go out on the internet.
Things to know about Anchors

- The reference is to index.htm - that may be unnecessary.
  - The assumption is that machine names without a file will reference the default file name. (usually either index.htm, index.html, or default.htm)
- References to just file pathnames make the assumption the new page is on the same server.
  - This is useful for creating movable webs.
Linking to other Files

- Other files can be linked to (*.xls, *.doc, *.pdf) if the server knows what they are.
- The Server must know about these file types.
  - Fixing the server so that it knows about them is beyond your control.
- Most of the time servers will know about major file types.
Getting Your Pages On-Line

- Web servers are just computers permanently connected to the Internet and running a special program.
  - The programs are widely available (See tucows.com for some)
- You just copy your files to the computer to put them “on-line”.
- Once they are on the server they will be accessible by anyone in the world.
Server available to you:

- The College of Engineering maintains a student usable web page space.
- Geocities.com and tripod.com will give you some web space for free if you’d like to experiment.
- If you have an internet service provider other than WSU they will likely have space you can use.
Simple web pages are, well, simple.
Attractive, effective web pages are hard.
Knowing about web site development = $
This is a starting point - other sites are available on line to learn more.
Look at web pages as an author - think about how they’ve been constructed - its your best learning tool.