Computers: Tools for an Information Age

Writing Your Own Web Page: Using HTML and Web Authoring Tools
Objectives

- Identify the hardware and software required to write, test, and execute a web page
- Describe how HTML tags are used to format Web pages
- Discuss the benefits of using Web page authoring software
- Describe how FrontPage can be used to write a web page.
World Wide Web

- Provides multimedia communication over the Internet
- HTML drives the web
  - HyperText Markup Language
  - The language of browsers
HTML: HyperText Markup Language

- **HyperText**
  - Active text
  - Link
  - Clicking causes an action
- **Markup Language**
  - Tags indicate formatting and document structure
  - Source is processed by a program that understands the tags and formats the page
Preparing a Web Page

- Writing vehicle
  - Programming in HTML
  - Authoring software
- Browser
  - Test the code locally
  - Test the code on the server
- Server
  - Test links to other sites
  - Store your published site
Programming in HTML

- Type tags into a text file (Notepad)
- HTML editor
- HTML code must be saved with .html extension
Authoring Software

- **WYSIWYG**
  - "What You See Is What You Get"
- Create web page visually
- HTML code is generated automatically
Preparing a Web Page: Process

- Use writing vehicle to create web site pages
- Test locally using the browser
- Connect to Internet using your browser
- Test the links to other sites
- ‘Publish’ the site to your server
- Test the site by accessing from the server
HTML: Basic Tags

- Tag – tells browser how to display the information provided
- Enclosed in angle brackets < >
- Generally used in pairs
  - Open tag
  - Closing tag – same tag with ‘/’ in front
- Can nest tags
- Tags cannot overlap
HTML: Document Tags

<HTML> … </HTML>
Beginning and end of every HTML document

<HEAD> … </HEAD>
Contains information about the document including the title
that is to appear in the title bar

<BODY> … </BODY>
All content for the page is placed between these tags
HTML: Basic Tags

<html>
  <head>
  </head>
  <body>
  </body>
</html>

If you view this from the browser, you will see a blank page
HTML: Basic Tags

<TITLE> ... </TITLE>
Causes the page title to be displayed in the title bar

Place in the heading section between
<HEAD> ... </HEAD>

```html
<HTML>
<HEAD>
  <TITLE>Test Title</TITLE>
</HEAD>
<BODY>
</BODY>
</HTML>
```
HTML: Basic Tags

Add content between <BODY> … </BODY>

Text Structure Tags

- Headings
- Paragraphs
- Lists
- Images
Creating and Testing

- Open text editor
- Enter basic document tags
  
  `<HTML>`
  `<HEAD> ... </HEAD>`
  `<BODY> ... </BODY>`
  `</HTML>`

- Save as .html (as .htm for older M$ systems)
- Do not close text editor
Open Browser

- Open your browser
- Type file path/name as the URL or use File Open and select the file
- The file name should appear in the URL textbox
- The main window should be blank
- Do not close the browser
Adding a title to the title bar

- Return to the open file in the text editor
- Add a <TITLE> tag inside <HEAD>
- Save
- Return to the browser
- Click refresh or reload button
- Check the title bar (aka welcome banner)
Adding content

- Add one tag at a time to create content
- After each addition
  - Save the file in the text editor
  - Refresh/reload the file in the browser
  - Verify that your entry is correct
HTML Text Tags: *Heading Tags*

- `<H1>` … `</H1>` Largest heading
- `<H2>` … `</H2>`
- `<H3>` … `</H3>`
- `<H4>` … `</H4>`
- `<H5>` … `</H5>`
- `<H6>` … `</H6>` Smallest heading

`<H1>`Theatre Schedule`</H1>`
HTML Text Tags: *Paragraph Tag*

\[<P> \ldots \ </P>\]

- Blank line inserted before the start of the paragraph
- One space between adjacent words regardless of the number of spaces in the source
- *Extra spaces and lines are ignored*

\[<P>Learning HTML is a lot of fun!</P>\]
<BR>
Forces a new line

<P>Learning HTML is a lot of <BR>fun!</P>
Lists

HTML List Tags

<UL> … </UL>
Unordered list (bulleted list)

<OL> … </OL>
Ordered list (numbered list)

Every item in a list is preceded with <LI>
</LI> at end of each item is optional

List contents are indented
HTML Formatting Tags

- Make page more attractive
- Make page more functional
- Style Tags
  - Logical
  - Physical
HTML Formatting Tags: *Logical Style Tags*

Browser dependent

Emphasis Tag

<EM> … </EM>

Usually displays italics

Strong emphasis Tag

<STRONG> … </STRONG>

Usually displays boldface
Physical Style Tags

Tell browser how to display the text

Italics
  <I> … </I>

Boldface
  <B> … </B>

Center
  <CENTER> … </CENTER>
Images

- Use images that are appropriate and attractive
- Use sparingly since they effect download time
  - If possible reduce actual size of image to fit page
Obtaining Images

- Download from a site that offers free images
- Pay to use an image
- Scan an image/document that you own or have permission to use
- Digital camera
- Create original graphics using software
Acceptable image formats vary by browser

Generally acceptable formats are

- GIF
  - Graphics Interchange Format
  - Use for graphics

- JPG (aka JPEG)
  - Joint Photographic Experts Group
  - Use for photographs

- PNG
  - Portable Network Graphics
  - Expected to replace GIF
HTML Image Tag

Inline image
Loaded with HTML code

<IMG>

Attributes:
- SRC
- ALT
- HEIGHT
- WIDTH
- ALIGN
- HSPACE
- VSPACE

例1:
<IMG SRC=”abcpict.jpg”>

例2:
<IMG SRC=”abcpict.jpg” ALIGN=”right” HSPACE=”10”>
HTML Link Tag

Link to

Other sites
Between your own pages
To e-mail

<A HREF=""name">hypertext</A>

<A HREF="http://www.kodak.com">Kodak</A>
<A HREF="johnpage.html">John’s Page</A>
<A HREF="mailto:johnsmith@practice.com">John’s mail</A>
HTML Tags: Background Color / Graphics

Attributes of <BODY>

BGCOLOR=”code”
   Specify color for background of the screen

BACKGROUND=”path/file”
   Tiles the graphic in the file to fit the screen

<BODY BGCOLOR=”green”>
<BODY BGCOLOR=”#00FF00”>
<BODY BACKGROUND=”abcpict.jpg”>
Authoring Software: Microsoft FrontPage

- WYSIWYG
- Generates HTML code

Benefits
- Non-technical users can create their own web pages
- Technical users can insert HTML inside the generated HTML
Getting Started in FrontPage

- Window similar to Office 2000 Windows
- Process to create a web page
  - Select the type of page you wish to create
  - Enter content
  - Format content
  - Add a title
  - Add links and graphics
  - View
Navigation View

- Shows structure of web site
- Visual clue showing how the subpages relate to the main page
Other Views

- **Folders**
  - Lists the files in detail

- **Reports**
  - Provides information of interest to site manager

- **Hyperlinks**
  - Graphics picture of link relationships

- **Tasks**
  - List of items that need to be completed and who is responsible
  - Useful for collaboration
Page Tabs

- Normal tab
  - Viewing the page in WYSIWYG

- HTML tab
  - The HTML code for the page
  - Add your own HTML code to this page

- Preview
  - Page as it will appear viewed by a browser
  - Switch between HTML tab and Preview tab to see the effect of changes as you make them
Estimated Loading Time

- Listed at the bottom of the page
- Try to keep loading time low
- Can be changed to show loading time using different modem speeds
Themes

Unified set of design elements and color schemes that you can apply to a page to give it a consistent and attractive appearance

- Background
- Fonts
- Banners
- Bullets
- Link buttons
Examples of Themes

The venerable Hayes Theater was founded by David and Maria Hayes in 1935 and continues today as a vital part of the community. Seven plays are produced in the spring season and five plays are produced in the fall.

There has been a change to the fall schedule. The new list of plays is as follows:
- The Dining Room
- Sylvia
- The Vanities
- Waiting for Godot
- Uncle Vanya
Page Templates

Predesigned pages that can contain page settings, formatting, and page elements

Columns  Bibliography
Table of contents  FAQ
Searches  Forms for visitors
Guest book  Forms for customers
Page Templates Examples
Frames

- Divides the page into sections
- Each section displays a different web page
- Each section can be updated individually
- Frameset – collection of frames displayed in a single page
Process of building with frames

- Develop each page individually
- Create frameset page
- Establish links