Objectives

- Describe the differences between computer hardware and software.
- Review pictorial relationships between folder and file structures.
- Create and modify HTML documents using a simple text editor (Notepad).
- Begin developing basic HTML code for Stage I Web site.

Microcomputer Systems

- People - the user
- Hardware
- Software
- Texts (documentation/procedures)
- Data/information

Hardware Components

- Processing
- Input
- Output
- Secondary Storage
Processing
- Microprocessor - Central Processing Unit
- Binary Notation

Information stored in bits, bytes, kilobytes, and megabytes
- bit smallest unit - either a 1 or 0
- byte contains 8 bits
- kilobyte represents 1024 bytes (usually round to 1000)
- Megabyte represents 1000 kilobytes
- Gigabyte represents 1000 megabytes

Bits, Clockspeed, Processors

CPU
- Bits
  - Standard is now 32 bit
- Clock Speed
  - measured in millions of cycles per second
- Processor Type
  - Intel (Pentium II - MMX - 333MHz)
  - Motorola (G3 - 300 MHz)

Memory
- Random Access Memory (RAM)
- Read Only Memory (ROM)

Input Devices
- Keyboard
- Mouse
- Tablet
- Light Pen
- Scanners
- Touch Screens
- Touch Pads
- Voice Recognition
Output Devices

- Monitors
  - Monochrome (obsolete)
  - Color
- Printers
  - Ink Jet
  - Laser
  - Plotter
- Projection Units and Panels

Secondary Storage

- Floppy Drive
  - 3.5"
- Hard Disks
- CD-ROM drives
- Tape Drives
- Removable Drives

More on Directory Structures

Root Directory D:\

Sub-directory LASTNAME

Sub-directory GRAPHICS

Files
  - index.html
  - sample.pdf
  - menu.html
  - bluepin.gif
  - aggie.gif
  - myface.jpg

Folders
  - lastname
  - graphics

Pathname

- The pathname combines the directory structure and filename so you can locate your document
- D:lastname/index.html is the pathname for the file on the previous slide
  - The pathname locates the drive, the directories and the filename for the document
  - Need all three to locate your document

What is HTML?

HyperText Markup Language
What are HTML tags?

- A WWW browser displays a page it reads from a text file, and looks for special codes or "Tags" that are marked by the < and > signs.
- The general format for a HTML container tag is:
  - `<tag name>string of text</tag name>`

What are HTML tags?

- As an example, the title for a section may use a header container tag that looks like the following:
  - `<h3>What are HTML tags?</h3>`
- This tag would tell a WWW browser to display the text "What are HTML tags?" in the style of header level 3.

Some Tag Types

- HTML tags may tell a WWW browser to:
  - `bold` the text
  - `italicize` text
  - make it into a header
  - have it be a link to another document
  - or any number of other things

How Tags Work

- The first part of the tag `<tag name>` turns the tag on.
- The ending part of the tag, `</tag name>`, contains the '/' slash character.

How Tags Work

- This '/' slash tells a WWW browser to stop tagging the text. Many HTML tags are paired this way.
- If you forget the backslash, a WWW browser will continue the tag for the rest of the text in your document, producing undesirable results.
Creating a HTML Document

- Open your text editor
- Create your HTML document
  - Head - not displayed with body
  - Body
- Save the HTML document with the extension of .htm or .html

Creating a HTML Document

- Display your HTML document in WWW browser window
- Check your work and modify as necessary
- Place it on the Web

HTML Level 1

- Headings - Six Levels Deep <H1>, <H2>,..., <H6>
- Line Breaks and new Paragraphs <BR> and <P>
- Different text styles <B>, <I>

HTML Level 1

- Lists <UL>, <OL>
- Graphics and File Formats <IMG SRC="file">
  - Inline Images

HTML Level 1

- Linking it with Anchors <A HREF="location">
  - Links to Local Files <A HREF="pathname">
  - Links to the World - Internet sites <A HREF="url of site">
  - Links to Sections of a Page <A HREF="#codeword">
  - HyperGraphic Links <A HREF="location"><IMG SRC="file">
HTML Level 1 continued

- Preformatted Text <PRE>
- Special Character Sets &lt; and &gt; for < and >
- Descriptive Lists <DL>
- Address Footers <ADDRESS>
- E-mail Links <A HREF="mailto:email_address">

### HTML Level 1 Examples

```html
<TITLE>The Title of the Page</TITLE>
<H1>First level header</H1>
<HTML>All of your file goes here</HTML>
<HEAD>What you are not going to see on the page</HEAD>
<BODY>What you are going to see</BODY>
<UL>Unordered List
  <LI>first item
  <LI>second item
</UL>
```

### HTML Level 1 Examples

- <A HREF="units/unit.html">Links to files on the same driver</A>
- <A HREF="url">Links to other Web sites</A>
- <A HREF="#name">Link to another section of the same file</A>
- <A NAME="name">That section from above</a>
- <A HREF="mailto:g-wingenbach@tamu.edu">Dr. Wingenbach’s e-mail address</a>

### Other Tags

- What type of tags will you need in your Stage I Web site project?
  - Check the Bare Bones Guide [http://werbach.com/barebones/barebones.html#general](http://werbach.com/barebones/barebones.html#general)
  - Structural Definition
  - Presentation
  - Positioning
  - Etc.

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**El Fin**

See you next week!