Hypertext Markup Language

HTML is the language of Web pages

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<html>
<head><title>Writer's Anecdotes</title></head>
<body bgcolor="white" text="black"><font face="Helvetica">
<img src="AWA.gif">
<table>
<tr>
<td><a href="hdt.html">Thoreau</a></td>
<td><a href="ed.html">Dickinson</a></td>
<td><a href="hwl.html">Longfellow</a></td>
<td><a href="lma.html">Alcott</a></td>
<td><a href="sc.html">Twain</a></td>
<td><a href="wf.html">Faulkner</a></td>
<td><a href="rf.html">Frost</a></td>
<td><a href="eh.html">Hemingway</a></td>
<td><a href="js.html">Steinbeck</a></td>
</tr>
</table>
<h2>Steinbeck</h2>
<p>Steinbeck traveled to Russia several times, but never mastered the language. Traveling with photographer Robert Capa in 1947 he wrote, "...I admit our Russian is limited, but we can say hello, come in, you are beautiful, oh no you don't, and one which charms us but seems to have an application rarely needed, 'The thumb is second cousin to the left foot.' We don't use that one much."</p>
</body>
</html>
All HTML files use the same structure:

```html
<html>
  <head>
    <title>Name of Page Goes Here</title>
    Heading content goes here
  </head>
  <body>
    Body content goes here
  </body>
</html>
```
First HTML Web Page

This HTML produces this result

```html
<html>
  <head>
    <title>First Web Page.</title>
  </head>
  <body>
    Web page.
  </body>
</html>
```
The Source

The HTML code producing a page is the source...which can always be viewed
HTML Must Be Text

Word processors (recall Chap. 2) insert formatting tags, confusing browsers

- **Create source in** TextPad, etc.
- **Save in** HTML or txt format
- **Save with file extension** .html

Avoid Confusion
Tags for Various Structures

**HTML provides tags for common formatting needs:**

- `<title>` page title
- `<p>` paragraph
- `<h1>`–<h8> headings get smaller w/ greater number
- `<hr>` horizontal line
- `<i>` italics
- `<b>` bold

**Some Tags Take Attributes:**

- `<font` face = "helvetica" color = "white" `>`
- `<p` align = "right" `>`
- `<body` bgcolor = "white" text = "black" link = "red" `>`
Illustrate the Process
Illustrate the Process

<html>
<head><title>Party Time</title></head>
<body bgcolor="white">
  <h2>I'm thinking ...</h2>
  <h1>I need downhill skiing!!!</h1>
</body>
</html>
Images are encoded two ways:

- **GIF** -- Graphics Interchange Format -- is for diagrams and simple drawings
- **JPEG** -- Joint Photographic Experts Group -- is for high resolution photos, complex art

- The encoding is given in the file extension

- **Image tags for placing images**

  `<img src="writers.gif">`

  - **tag**
  - **attribute name (source)**: `src`
  - **path name to file**
Illustrate the Process
Illustrate the Process

<html>
<head><title>Party Time</title></head>
<body bgcolor="black">
  <font color="white">
    <h2>I'm thinking ...</h2>
    <h1>I need downhill skiing!!!</h1>
    <hr>
    <img src="ski.jpg">
  </font>
</body>
</html>

I'm thinking ...

I need downhill skiing!!!
File Structure

The path must say how to reach the file

• When the file is in the directory as the web page, just give the file name, ski.jpg
• If the file is in a subdirectory, say how to navigate to it, pix/ski.jpg
• If the file is in a superdirectory, move up using dot-dot notation, ../ski.jpg

The most common reason that an image is not displayed is the path is wrong ... check!
Illustrate
The file is accessed from the same directory, from a subdirectory and from the containing directory.
Summary

Web pages are written in HTML

- The files must be text
- The file extension must be .html

Tags enclose content like parentheses

- Control look with attributes on tags

Use a change-and-test process

Images have two formats and explicit paths