

Chapter 2: How to a Construct Web Site

Organization

- General characteristics of Web sites
- File types
- Directory organization
- Hypertext mark-up language
 - Basics of tags
 - Attributes
 - Special characters
 - Hyperlinks
- Learn by doing example
- Conclusion

General characteristics of Web sites

- Collection of files organized into directories
- On machine with a web server
 - Assume access to site with webmaster
 - Server receives a request for a file
 - Sends the file to the client
 - File typically viewed on client's browser
- Site name
 - `http://engr.louisiana.edu/emgt/faculty/ristroph`
 - `c:\emgt\faculty\ristroph` is a directory on `engr.louisiana.edu`
 - `index.htm` is the default file accessed
- Browsers
 - Microsoft's Internet Explorer
 - Netscapes' Navigator

File Types

- Hypertext markup language (HTML) files
 - ASCII files with formatting codes enclosed in braces
 - .htm or .html
 - Notepad, html editor, export
 - Read with browser
 - <http://engr.louisiana.edu/emgt/faculty/ristroph/NoFile.htm>
- Microsoft office files
 - Save file: myfile.doc or myfile.xls
 - Read with Word or Excel viewer
 - <http://engr.louisiana.edu/emgt/faculty/ristroph/NoFile.doc>
 - www.microsoft.com
- Adobe files
 - .pdf
 - Adobe Acrobat installs a "printer" on existing software
 - Print myfile to pdf printer driver from Word or whatever
 - myfile.pdf
 - Read mydoc.pdf with Adobe viewer
 - <http://engr.louisiana.edu/emgt/faculty/ristroph/NoFile.pdf>
 - www.adobe.com

Directory Organization

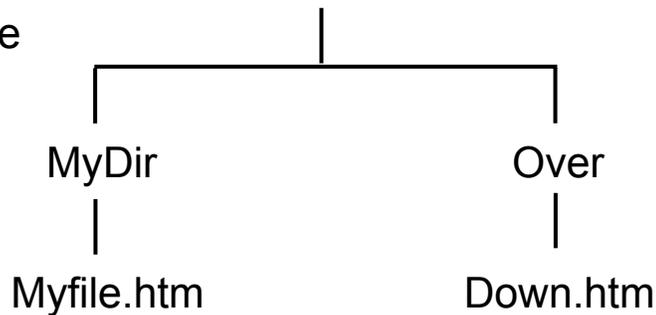
- Plan directory structure in advance
 - Names
 - Subdirectories for specific topics
 - Subdirectories for shared files
- Avoid changes
 - Visitors might not be able to find files
 - Internal hyperlinks must be redone

Hypertext mark-up language

- Typically pairs of tags
 - This is `<i>italics</i>`.
 - This is *italics*.
- Sometimes single tags
 - Insert horizontal rule (line) with `<HR>`
- Tags themselves, like `I` or `HR`, are not case sensitive
- Attributes
 - Additional instructions or information
 - `<P ALIGN = LEFT>`Left align this paragraph. `</P>`
 - ``
- Special characters
 - `<` `>` `&` `#`
 - `<`; `>`; `&`; `#`;
 - ` `; for non-breaking space

Hyperlinks

- Anchor tag
 - `<A> ` pairs designates an anchor
 - Location of a file or a specific place within a file
- Complete reference
 - ... visit `` this site `` to see
 - ... visit this site to see
- Reference to a file in same directory
 - ... visit `` this page `` to see
 - ... visit this page to see
- Relative reference



- From Myfile.htm to Down.htm
- ... visit `` here `` to see
- ... visit here to see

- Location in same file
 - This section discusses ...
 - ❖ This section discusses ...
 - go to other section and ...
 - ❖ go to other section and ...

- Location in another file
 - This section in SameDir.htm
 - ❖ This section in SameDir.htm
 - go to other file
 - ❖ go to other file

Words on Top of Window

Browser's tool bar goes here

Initial Example of an HTML File and the Resulting Browser Display

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>Words on Top of Window</TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
<P>This paragraph has enough text to span several lines of  
the browser's display. Each line can be ended with a  
carriage return in the HTML file, but the browser ignores it,  
other than inserting a space between words.</P>
```

```
</BODY>
```

```
</HTML>
```

This paragraph has enough text to span several lines of the browser's display. Each line can be ended with a carriage return in the HTML file, but the browser ignores it, other than inserting a space between words.

code easier to read. The browser controls the spacing in the display. </P>

```

<OL>
<LI>Ordered item 1 shows different hyperlinks:</LI>
<UL>
<LI><A HREF="linkref.htm">same directory link</A></LI>
<LI><A HREF="../over/down.htm">another directory</A></LI>
<LI><A HREF="http://hi.ho.edu/dir">another machine</A></LI>
<LI><A HREF="mailto:joe@good.edu">email Joe</A></LI>
</UL>
<LI>Ordered item 2 does nothing.</LI>
</OL>
</P>
<P>Here is a blue ball. <IMG SRC="blueball.gif"> In this case, the file containing the picture (blueball.gif) is in the same directory. There also are size and alignment attributes for images.</P>

<P>Click this blue ball: <A HREF="#StartPar"><IMG SRC="blueball.gif" ALT="BlueBall" BORDER="0"></A> It is a hypertext reference to the anchor named StartPar earlier in the document. The ALT text appears instead of the ball if a browser is not displaying images or if the image cannot be found. Setting BORDER to 0 removes the border that would otherwise surround this link.</P>

</BODY>
</HTML>

```

The browser controls the spacing in the display.

1. Ordered item 1 shows different hyperlinks:

- same directory link
- another directory
- another machine
- email Joe

2. Ordered item 2 does nothing.

Here is a blue ball: • In this case, the file containing the picture (blueball.gif) is in the same directory. There also are size and alignment attributes for images.

Click this blue ball: • It is a hypertext reference to the anchor named StartPar earlier in the document. The ALT text appears instead of the ball if a browser is not displaying images or if the image cannot be found. Setting BORDER to 0 removes the border that would otherwise surround this link.

Conclusion

- Organize directories and create files
- Non-HTML files
 - Equations
 - Microsoft Office .doc and .xls
 - Adobe Acrobat .pdf
- HTML files
 - Exports
 - HTML editor
 - Notepad
- Just do it!
 - Getting started is not too hard.