UNIVERSITY OF DELAWARE.

# *Basic HTML 1*

Information
Technologies

# Overview

This class introduces you to HTML (**H**yper**T**ext **M**arkup **L**anguage), an easy-to-learn language for creating and formatting documents for the World Wide Web. Web documents can include text, images, animation, sounds, and more.

## Prerequisites

To take this class, you must have experience using a browser (e.g., Internet Explorer, Netscape) to view documents on the Web. You must also know how to create and save text files using a text editor or a word processing package and have an *active* UNIX account.

**Note**: This tutorial is designed to be used at the Pearson Hall Training Center (Room 116 Pearson Hall) on PCs running Windows XP. The exercises may not work identically elsewhere.

## UNIX computer accounts

All University of Delaware faculty, staff, and students can obtain an account on the central UNIX server. This account is a privilege granted to you by the University. You must act responsibly when you use it, or you can lose this privilege. If you are uncertain about the proper use of computing resources, read a copy of the *Policy for Responsible Computing* on the University's web site (http://www.udel.edu/ecce/policy.approved.html).

## Conventions used in this document

The following conventions are used throughout the exercises in this document:

### Document Conventions

| Item | Convention | Example |
| --- | --- | --- |
| Keyboard keys | UPPERCASE LETTERS | ENTER |
| Text you can replace | *italicized letters* | *filename* |
| Text you type | `mixed-case letters (typewriter font)` | `gif` |

All exercises are labeled as "Exercise" and are set off from the instructional text by horizontal rules.

## Resources for learning more about WWW and HTML

There are many good online resources with information about preparing documents for the Web, including HTML tutorials, style guides, editors, and other tools. You can find many of them listed at http://www.udel.edu/ideacenter/.

## Class objectives

In this class, you will prepare a document for the Web. When you complete the class, you should:

- be familiar with the basic structure of HTML.
- be able to recognize and identify HTML tags.
- be able to create an HTML document that includes the following elements:

  - basic document-level tags
  - headings
  - paragraph and line breaks
  - lists
  - styles (bold, italics, etc.)
  - horizontal rules
  - images
  - hyperlinks

- be able to publish your document on a Web server using the SSH Secure Shell File Transfer program.

# Introduction

**H**yper**T**ext **M**arkup **L**anguage (HTML) is the language used to create documents for the World Wide Web. A markup language consists of characters or symbols that you insert in a text file to indicate how the text should look when it is displayed or printed. A Web browser allows others to view your work; browsers retrieve Web information and format Web documents.

Designing documents for the Web requires a shift in the way you think about presenting your material. When you prepare a document for the Web, you concentrate on the content and structure of your information rather than on how the information will look on the page (fonts, etc.). In fact, what you put on the Web may look very different on different computers.

On the Web, it is the individual browser and often also the user that control what font will be used to display headings or text, whether something will be bold or italics, and so forth. So when you write text for the Web, don't worry about what font you are using. Instead, think about the content of your document and about the most effective way of structuring your message.

## Planning your Web site

Planning your Web site ahead of time will help you stay organized and present your ideas to your audience in the best possible way. It is helpful to sketch your site on paper so that you have a visual image of how it will look. Each site begins with a home page that can lead to other pages, depending upon how much information you want to convey. Some helpful considerations in planning your site are

1. What is your purpose for doing a Web page? What type of information do you want to provide for people? How can you best organize that information so that people will be able to find it easily?

2. Who is your audience? How should you present your information for the audience you want to reach? Are they interested in quick facts? In getting instructions for registering for classes? In being entertained?

   Once you've identified your audience, you can decide what type of a Web page will appeal to them. Is plain text appropriate or will your audience expect graphics, sound, and animation?

Knowing your purpose and audience ahead of time will guide your decisions about structuring your Web site.

## Setting up your Web directory

For people to see a Web site, its files must be placed on a Web server. At the University of Delaware, a UNIX Web server named "udel.edu" holds individuals' Web files. The "www.udel.edu" UNIX Web server holds official University Web files. To allow the "udel.edu" server to find your Web files, you must place them in a directory on your account on Copland called "public_html."

If you have never created a public_html directory, follow the directions below to do so.

### Exercise 1: Setting up a public_html directory

1. In the Applications folder, double-click the "Secure Shell Client" icon. In the dialog box that appears, type your username and click "Connect." If you see a question about saving your "host key" to the local database, answer "No." In the next dailog box, type your password and click "OK."

2. Create your public_html directory and give it the permissions necessary to display web pages. At the UNIX (%) prompt, type

   ```
   source  /www/htdocs/learn/usered/html-setup
   ```

3. Press the ENTER key.

   In addition to your public_html directory, you now have two shortcut commands (type the command at the UNIX % prompt):

   * webpublish--If you create a subdirectory of your public_html directory, you must make the files it contains available for readers. To do so, log into Copland, change to the new directory using the "cd" command, then type "webpublish" at the UNIX prompt.
   * webdiskusage--You can find out how much space your files occupy in your home directory by typing this command, then pressing the ENTER key. For information about quotas, read the IT Help Center disk quota information.

4. Click the Minimize (underscore) button at the top right of the window to minimze it.

## HTML tags

Before you write an HTML document, decide how you will structure it. What will the major heading be? How many subordinate headings will you have; how much text will you include; will you use lists, and so on. You'll present your structure to your audience through special codes called HTML tags.

HTML documents consist of text, images, and HTML tags for labeling each element. Tags come in pairs (i.e., a beginning tag and an ending tag) and are enclosed by angle brackets (the "less than" and "greater than" signs). The format for an HTML tag is

> *<tag name>*text*</tag name>*

Note that the ending tag name is preceded by a slash (/). It is important to include the ending tag with its slash character. Otherwise, the rest of your document will have the properties of the tag you forgot to finish.

## Preparing an HTML document

In this class, you will prepare an HTML document for viewing on the Web. The procedure for preparing any Web document is

1. Type your text in a text editor: use Notepad in Windows, TextEdit on the Macintosh, or pico in UNIX. If you use a program like Microsoft Word, you **must** save your file as a text file before you can use it on the Web. (A text file contains only text; it does not contain any formatting codes [for layout, headings, etc.].)

2. Save the file as a text file.

3. View the Web page you've created in your Web browser.

In the following exercise, you will begin your HTML file. The same HTML tags are used for every browser.

---

**Exercise 2: Creating an HTML file**

1. To start Notepad,

   A. Click the "Start" button.

   B. Highlight "All Programs."

   C. Highlight "Accessories."

   D. Click "Notepad."

   E. From the "Edit" menu in NotePad, select "Word Wrap." (If "Word Wrap" is already checked, you need do nothing.)

---

2. Type the following text. Press the ENTER key at the end of each line:

```
<html>
<head>
<title>
Preparing a Document for the World Wide Web
</title>
</head>
<body>
<h1>Preparing a Document for the World Wide Web</h1>
</body></html>
```

3. From the "File" menu, select "Save." When the "Save As" dialog box appears, click the down arrow next to the "Save In:" box. Click (C:), then double click "Scratch." Give your file the name

    ```
    index.html
    ```

4. Open the browser. In the Applications folder, double-click the "Netscape" icon.

5. From the File Menu, select "Open File."

6. Select the drive or folder where your HTML file is located.

7. Select the name of the file you want to open:

    ```
    index.html
    ```

8. Click "Open." Your HTML file will appear in the browser window.

9. Return to your text editor (Notepad) by clicking its name in the Taskbar at the bottom of the screen.

**Note**: As you continue to create the document, check its appearance often. To do this:

1. Save the changes that you've made.

2. From the appropriate menu or toolbar in your browser, select "Reload current page" to view the changes.

There is no need to close either the editor or the browser as you work.

The file you have just created contains the essential elements of every HTML file:

* Every HTML file name has two parts, separated by a period. The first part is any name you want to give the file. The second part must be "html."

* Every HTML file begins and ends with the <html> and </html> tags. The <head> section of your document contains its title (and may contain other preliminary information). Information in the <head> section is meant for the browser and is not generally displayed on the screen (except for the <title> which appears in the browser window at the very top of the screen).

    Text and images that you want to see displayed on the screen go into the <body> section of your document.

## Naming your home page

Most Web sites contain multiple files that are linked to a "home page" (your main or introductory page). The most efficient way to handle a home page is to give it the name

    **index.html**

The advantage to naming your home page "index.html" is that most browsers will display the "index.html" file if no specific HTML filename is given. Thus, people searching for your personal Web page on the "udel.edu" Web server only have to know your username to be able to find your files, and people on the University's central Web server only have to know the name of the directory in which your files reside. They do not have to remember an HTML filename to get to your information.

## Headings

The organization of your document depends upon your effective use of headings to produce manageable sections. There are six heading levels in HTML, numbered 1 through 6, from most important to least important:

    <h1>Heading level 1</h1>          most important
    <h2>Heading level 2</h2>
    <h3>Heading level 3</h3>
    <h4>Heading level 4</h4>
    <h5>Heading level 5</h5>
    <h6>Heading level 6</h6>          least important

Headings are usually larger and bolder than regular HTML text. However, do not assume that the way each heading appears on your computer screen will be the

way it looks on every computer. Each browser can define how the headings look, and the user can often change settings too. For this reason, use headings to show how your information is organized logically. This means that you would use a level 3 heading after a level 2 heading and not before.

The first heading of a document—which often repeats the text used for the title—should use an <h1> tag. Most documents use only one <h1> tag. Headings are automatically followed by a blank line.

## Paragraphs

To indicate paragraphs in HTML, use the <p> and </p> tags.

1.  The paragraph tag (<p>) indicates breaks between paragraphs by inserting a blank line between them on the browser page.

2.  Blank lines in your text file are ignored. Only a <p> tag produces a blank line on the browser page.

3.  Tabs and multiple spaces are collapsed into one space.

4.  Word wrapping can occur anywhere in your text document and doesn't affect the appearance of your browser page. In other words, you could type whole paragraphs or your entire HTML document on one line and still have the page nicely formatted in the browser. (This isn't recommended because it makes editing the text difficult.)

5.  To include short lines in your Web document with no extra spaces between lines (for example, lines in a mailing address or a poem), use the line break <br /> tag.

To see how the paragraph and line break tags work in HTML, complete the following exercise:

### Exercise 3: Adding paragraphs

1.  In your "index.html" file, between the </h1> and the </body> lines, type the following as it appears here, including the blank line. To make your text file easy to edit, press the ENTER key at the end of each line.

```
<p>
Creating HTML pages takes planning,
but the results are worthwhile.

Imagine the excitement of having your Web page seen by
people all over the world.
</p>
```

*Exercise, continued*

```
<p>
Keep your Web pages to a few screens each.
You can link information together, so don't worry about
including everything at once.
</p>
<p>
Remember that readers do not always find
your home page first.
A link from somewhere else can lead them to
the middle of your information,
so try not to use words like
<br />
back<br />
forward<br />
previous<br />
next
<br />
to indicate navigation on your pages.
</p>
```

2.  Save your text file.

3.  In the browser window, click "Reload current page" to see the text you have added.

---

You might prefer to leave blank lines between paragraphs in your HTML text file to make it more readable as you're editing, but that's optional. Remember that you will see blank lines on the browser screen only if you include a <p> tag.

## HTML lists

After headings, lists are the next most important way of organizing information for your viewers. Lists are useful for creating tables of contents, step-by-step instructions, outlines, glossaries, etc. The most common HTML lists are

| Type of list | Appearance on page |
| --- | --- |
| Ordered lists <ol> | numbered |
| Unordered lists <ul> | bulleted |
| Definition lists <dl> | a term followed by a definition |

**Note**: You can include a <br /> tag within a list item to move text to the following line. The same indentation will be preserved, but no new bullet or number will be produced.

## Ordered lists

Ordered lists (<ol>) number their items sequentially. Tags for an ordered list are

```
<ol>
    <li>List item 1</li>
    <li>List item 2</li>
    <li>List item 3</li>
</ol>
```

The list begins and ends with the ordered list tags <ol> and </ol>. Each item in the list is indicated by a "list item" <li> tag. This pattern is the same for most lists with only the tag for the type of list changing.

The ordered list tags above would produce the following when you view your HTML document in a browser:

1. List item 1
2. List item 2
3. List item 3

## Unordered lists

Unordered lists (<ul>) use bullets to indicate items. Tags for an unordered list are

```
<ul>
    <li>List item 1</li>
    <li>List item 2</li>
    <li>List item 3</li>
</ul>
```

The unordered list begins and ends with the tags <ul> and </ul>. Each item in the list is indicated by a list item tag.

The unordered list tags above would produce the following in your HTML document:

• List item 1
• List item 2
• List item 3

## Definition lists

Definition lists (<dl>) are a little different from other lists because they use an additional tag. Tags for a definition list are

```
<dl>
    <dt>Definition term</dt>
        <dd>Definition</dd>
    <dt>Definition term</dt>
        <dd>Definition</dd>
</dl>
```

The list begins and ends with the definition list tags <dl> and </dl>. There are separate tags for the definition term <dt></dt> and for the definition itself <dd></dd>. The definition term consists of a single line, while the definition can contain multiple lines or paragraphs.

Definition lists are useful for glossaries and for any situation where you want to set off one element (the definition term) and expand upon it (the definition).

The definition list tags above would produce something like the following in your HTML document:

Definition term
    Definition
Definition term
    Definition

You can "nest" lists and types of lists (put one inside the other). Nesting is another way to show the organization of your material.

The next exercise gives you practice using HTML lists.

## Exercise 4: Building a list

1. In your "index.html" file, type the following text just above the </body> tag:

```
<p>
Following are some HTML features to help you build a
great page:
</p>
<h2>HTML structural elements</h2>
    <ol>
        <li>Formatting tags</li>
```

*Continued on next page*

*Exercise, continued*

```
                        <ul>
                            <li>Heading tags</li>
                            <li>Paragraph tags</li>
                            <li>List tags</li>
                        </ul>
                </ol>
```

2.  Save your file and then click "Reload current page" in the browser to view it.

**Note**: You'll continue the ordered list in the next exercise.

## Customizing the look of your lists

The challenge in using lists and nested lists is to begin and end each list in the proper place. Failure to do so results in errors that become immediately apparent when you view your Web document. One way to keep things straight for yourself is to indent successive lists so that like elements are under each other. Notice that Web browsers indent nested lists, making the structure clear.

How lists appear depends upon the browser being used and upon how the individual user has set up the browser. For example, the bullet that appears in a bulleted list might be a filled-in circle on one computer, an open circle on another, and a square on a third. Some browsers put definitions on separate lines, some do not. As the author, your concern is to indicate only what kind of list is being presented.

You can exercise *some* control over how lists are numbered or over what kinds of bullets are used by including modifiers with your HTML list tags. These modifiers are called "attributes," and they indicate exactly how the tag is to be modified. For example, the "type" attribute, used with a list tag, allows you to specify different numbering or bullet schemes. Attributes, in turn, can have "values" that further define them. Thus, if you give the "type" attribute a value of "A," your ordered list will appear with capital letters. Values should be enclosed in quotation marks. Similarly, other HTML tags have associated attributes and values that let you control how your page looks. Directions for using the "type" attribute with list tags follow:

**Ordered  lists**

Tag: <ol type=*"type of numbering you prefer"*>
| type="1" | for numbers (default) |
| type="A" | for capital letters |
| type="a" | for lowercase letters |
| type="I" | for capital Roman numerals |
| type="i" | for lowercase Roman numerals |

**Unordered  lists**

Tag: <ul type=*"type of bullet you prefer"*>
type="disc"                                    for a solid round bullet
type="circle"                                  for a hollow round bullet
type="square"                                for a hollow square bullet

# Writing HTML with style

Another way to set off text in your Web documents is through the use of styles
like bold, italics, and so on. To indicate that text is to have a certain style,
enclose it in tags that define the style:

    <b>bold text</b>                          **bold text**
    <i>italic text</i>                              *italic text*
    <tt>typewriter text</tt>                `typewriter text`

Styles can be combined with each other. To combine styles, nest one style within
another.  For example,

    <b><i>bold italics</i></b>                  ***bold italics***

The next exercise continues the ordered list and lets you see the effects of the
style tags on the text they surround.

---

**Exercise 5: Using style tags**

1.  In your "index.html" file, type the following text just above the </ol> tag:

```
<li>Style tags</li>
   <ul>
       <li><b>Bold text</b></li>
       <li><i>Italic text</i></li>
       <li><tt>Typewriter text</tt></li>
   </ul>
```

2.  Save your file and then click "Reload current page" in the browser to view it.

---

## Other ways of setting off text

### Preformatted text

If you have text for which you want to retain line breaks and spacing within lines, use the HTML preformatted text tags:

    &lt;pre&gt;preformatted text&lt;/pre&gt;

Preformatted text is useful if you want to include a poem where spacing is an important element, a computer program, directions for using commands, etc.

Preformatted text appears in fixed-width characters (typewriter text) with lines and spaces as you typed them. Below is an example of how preformatted text would appear in your text file:

    &lt;pre&gt;
There was an old woman who lived in a shoe.
She had so many children, she didn't know what to do.
She gave them some broth without any bread.
She spanked them all soundly and put them to bed.
&lt;/pre&gt;

Here's how it would appear on your Web page:

```
There was an old woman who lived in a shoe.
She had so many children, she didn't know what to do.
She gave them some broth without any bread.
She spanked them all soundly and put them to bed.
```

### Long quotations

To indicate long quotations in HTML, use the "blockquote" tag:

&lt;blockquote&gt;&lt;p&gt;This is for long quotations.&lt;/p&gt;&lt;/blockquote&gt;

Within the blockquote tags, include the tags you would usually use for formatting text (&lt;p&gt;&lt;/p&gt;, &lt;b&gt;&lt;/b&gt;, &lt;i&gt;&lt;/i&gt;). How the blockquote appears depends upon the browser with which it is viewed. Some browsers indent the quote while others italicize it. You can use multiple paragraphs within the blockquote tags.

### Horizontal rules

To separate major sections of your HTML page or to divide text from graphics, use a horizontal rule tag:

    &lt;hr /&gt;

This tag has no text associated with it and stands alone. It will insert a rule completely across your HTML page.

You can add attributes to the <hr /> tag to change its appearance and increase the graphic interest of your page.

The "width" attribute defines the width of the rule in pixels. You can also define the width as a percentage of your screen. The "size" attribute defines the height of the rule in pixels. The tags look like this:

<hr width="n" /> where "n" is the number of pixels.
<hr width="n%" /> where "n" is the percentage of the screen you want
   your rule to occupy.
<hr size="n" /> where "n" is the number of pixels high your rule should be.

**Note**: The pixel is a very small unit. Try this exercise to get an idea of how large to  make your measurements:

---

**Exercise 6: Adding a horizontal rule**

1.  Just above the </body> tag in your document, type the following:

    ```
    <hr width="640" size="10" />
    ```

2.  Save and reload your document.

---

# Including images in an HTML file

One of the most exciting features of the Web is that it allows you to include images in your document. Images that are viewed within the browser page are called "inline images." To create an inline image:

■   Convert your photograph or other image to "gif" or "jpg" format. Scanning software and other software programs allow you to do this easily.

■   It is possible to include images located anywhere on the Web in your documents; however, it is easiest to store the images in the same directory or folder as your text file.

■   Filenames for images are case-sensitive. This means that "sunset.gif" is not the same as "SUNSET.gif."

■ The tag for inline images is

&lt;img src="*filename*.gif" alt="*alternate text*" /&gt;   or
&lt;img src="*filename*.jpg" alt="*alternate text*" /&gt;

In this tag, "img" indicates that you are including an image, and "src=" identifies the image ("*filename*.gif" or "*filename*.jpg"). Be sure to include the quotes around the filename.

The "alt" tag is used to include text that describes the image. Alternate text makes Web content accessible to people with disabilities and to those whose browsers do not display graphics.

■ You can place graphics either on their own lines on your Web page or include them right in your text.

To include a graphic on a line by itself (for example, before or after a heading), type the image tag in the appropriate place.

If the image occurs in the middle of text and you want extra space around the image, include paragraph &lt;p&gt;&lt;/p&gt; tags before and after the image tag.

You can place images right in your text by typing the image tag as part of a paragraph. Suppose in the text you've already typed, you want to put a spider web next to your first heading, "Preparing a Document for the World Wide Web." In your HTML file, immediately after the &lt;h1&gt; tag, you would type

&lt;img src="spid.gif" alt="spider in a web" /&gt;

The entire line would look like this:

&lt;h1&gt;&lt;img src="spid.gif" alt="spider in a web" /&gt;Preparing a Document for the World Wide Web&lt;/h1&gt;

In the next exercise, you will include an inline image on your Web page.

---

**Exercise 7: Including an image**

1. In your HTML file, immediately after the &lt;h1&gt; tag, type the following:

```
<img src="spid.gif" alt="spider in a web" />
```

2. Save the changes you've made to the file.

3. In your Web browser, click "Reload current page" to view the image.

---

If you type the image tag as above, the bottom of the image is aligned with the baseline of your text (this is the default). Your image would look similar to the one below:

# Preparing a Document for the World Wide Web

You can align the top of the image with the top of your text by using the following options in your "img" tag:

    <img align="top" src="spid.gif" alt="spider in a web" />

Your page would look similar to this:

# Preparing a Document for the World Wide Web

You can align the center of the image with the baseline of your text by using the following options in your "img" tag:

    <img align="middle" src="spid.gif" alt="spider in a web" />

Your page would look similar to this:

# Preparing a Document for the World Wide Web

You can also have text flow around images by aligning the image to the left or right of the page. The tags would look like this:

<img align="left" src="spid.gif" alt="spider in a web" />
   (image on the left; text to the right of it)
<img align="right" src="spid.gif" alt="spider in a web" />
   (image on the right; text to the left of it)

In the next exercise, you will add an "align" attribute to the "img" tag and see how it changes the look of your document.

**Exercise 8: Changing image placement**

1. In your HTML file, add align="left" to the image tag you've already created. The tag should look like this:

   ```
   <img align="left" src="spid.gif" alt="spider in a web" />
   ```

2. Save the changes you've made to the file.

3. In your Web browser, click "Reload current page" to view the image.

# Hypertext links

What makes hypertext "hyper" is its ability to link to other information. This can be information in the same document, in another of your site's documents, or from documents anywhere in the world. It can be text, graphics, sounds, movies, and more. Links appear on your Web page as highlighted (and sometimes, underlined) text.

To create a link, you use the "anchor" tag. Anchors mark the beginning and end of a hypertext link. The tag looks like the one below:

<a href="*filename*.html">Interesting Web sites</a>

■ The first part of a link contains the opening anchor tag. In the tag

• "a" indicates the anchor.

• "href" (**H**ypertext **Ref**erence) indicates a link **to** another object (text, an image, etc.).

• The filename indicates the object being referred to. Instead of a filename, you can include a URL (an Internet address) that names a resource somewhere else on the Internet.

■ The text after the opening tag (in the above example, "Interesting Web sites") will appear highlighted on your page.

■ The link ends with the closing anchor tag </a>.

**Note**: Be sure that you don't leave a space between your text and the closing anchor tag or press ENTER before typing the closing anchor tag. Doing so will cause a blank underlined space after your linked text.

## Links to other documents in the same directory (folder)

The easiest hypertext links are to other documents in the same directory (folder) as the document you are creating. For example, suppose you have discovered that certain characters will not work as regular text in your Web documents because they are part of HTML tags (e.g., "<" and ">").

In your page on preparing documents for the Web, you might want to add a link to a document named "special.html" that shows how you can use special characters in your Web documents. At the appropriate place in your text, you would type

<a href="special.html">Special characters</a>

On your Web page, "Special characters" will be highlighted and clicking those words will take you to another document about using special characters.

The next exercise will allow you to create a link to another HTML document. In addition, the link will be part of the list of HTML structural elements you have already begun.

## Exercise 9: Linking to a document in the same directory

1.  In your HTML file, above the </ol> tag, type

    ```
    <li><a href="special.html">Special characters</a></li>
    ```

2.  Save the changes to your HTML file.

3.  In your Web browser, click "Reload" to view the page.

4.  Click the "Special characters" link to see the page you have linked to.

**Note**: You can find many more references for special characters listed at http://www.hotwired.lycos.com/webmonkey/reference/special_characters/.

## Links to other Internet resources

You can link to other resources anywhere on the Internet by creating a hypertext reference to a URL (**U**niform **R**esource **L**ocator—the Web's addressing system). For example, suppose you know that there is a site that contains information about creating Web pages as well as tutorials to help you do so. You might want to add the Internet address to your Web page. To do this, you would type

<a href="http://hotwired.lycos.com/webmonkey/">Webmonkey: Web Developer's Resource</a>

Notice that the entire URL for Webmonkey is included between the quotation marks. In your text, "Webmonkey: Web Developer's Resource" will be highlighted and clicking the text will take you to the Webmonkey home page.

The next exercise will allow you to create a link to an Internet resource.

## Exercise 10: Linking to Internet resources

1.  In your HTML file, after the </p> tag that follows the line, "to indicate navigation on your pages," type

    ```
    <p>
    The <a href="http://hotwired.lycos.com/webmonkey/">
    Webmonkey: Web Developer's Resource</a> provides
    tutorials for HTML and other Web programs. There is
    plenty of information available to help you become an
    expert spinner of Web documents.</p>
    ```

2.  Save the changes to your HTML file.

3.  In your Web browser, choose "Reload current page" to see the link to the Webmonkey site.

4.  Click the highlighted "Web Monkey: Web Developer's Resource" to see what categories of information are offered.

5.  Click the "Back" button on the navigation toolbar to return to your page.

# Avoid the "click here" trap

When someone looks at your HTML file, the first thing they will notice is the highlighted text that indicates information you have linked to. If readers see five or six occurrences of "click here" on your page, they may not be motivated to read through the text to discover what yet another "click here" refers to. A more

useful practice is to choose one or two key words that will lead your reader to the important information directly. Thus having "<u>Bill of Rights</u>" highlighted (highlighted text indicated here by underlining) on your page is much more useful than "<u>Click here</u> for the Bill of Rights."

# Signature

To identify your home page to its viewers, include a signature block at the bottom of the page with contact and copyright information. The signature would look something like this:

> Copyright © 2003 University of Delaware
> <u>Comments or questions</u>

Include the signature as the last element of your page before the </html> tag. Signatures are often preceded by an <hr /> tag.

In the following exercise, you will put a signature on your page. Substitute your own e-mail address for the italic address in the "mailto" on the following page.

---

**Exercise 11: Adding a signature**

1.  In your "index.html" file, type the following just above the </body> tag:

    ```
    <p>
    Copyright &copy; 2003 University of Delaware<br />
    <a href="mailto:your_username@udel.edu">Comments or
    questions</a></p>
    ```

2.  Save the changes to your file.

3.  In your Web browser, click "Reload" to see the copyright and the "mailto" link on your page.

---

# Page Source

One of the best ways to learn HTML is to look at how other people have put together their Web pages. Most browsers allow you to look directly at the HTML tags for a particular document. For example, one of the choices from the Netscape "View" menu is "Page Source." When you choose "Page Source" from the "View" menu, you will see a window that contains the text as well as the HTML tags for the document you are viewing. You can then compare particular sections of the finished document with the HTML version to learn how the document was created.

In the next exercise, you will view the source of the document you have created.

**Exercise 12: Viewing the document source**

1. From the browser's "View" menu, choose "Page Source."

2. Compare what you see on your Web page with the text in the Source window.

3. To close the "Page Source" window, click the "X" in the upper-right corner of the window.

4. To exit Notepad, choose "Exit" from the "File" menu.

# Using the SSH Secure Shell File Transfer program to publish and manage your Web files

For other people to be able to see your Web page, you must move it to a Web server. Files you move to your Copland public_html directory can be viewed on the University's "udel.edu" Web server. To move your files to your UNIX public_html directory, you will use the SSH Secure File Transfer program.

You can use the SSH Secure File Transfer program to publish new files and to copy or remove existing files. (This program is available from the UD Software Download web site <http://udeploy.udel.edu>). To use SSH Secure File Transfer, you must know where your files reside, both on your computer's hard disk and in your UNIX home directory.

On a Windows XP system, a simple way to find a file is to click the "Start" menu in the taskbar, select "Search," then "For Files or Folders." Select "All files and folders" from the left window pane. Type the name of the file you are looking for in the box and choose "Search." Another way to find files is to navigate through directories (also called folders).

In the following exercise, you will use SSH Secure File Transfer to upload your Web page to your public_html directory on the udel.edu Web server.

### Exercise 13: Using the SSH File Transfer window to transfer files

The SSH File Transfer window allows you to transfer files from your desktop computer to a remote computer and from a remote computer to your desktop computer. You can transfer text files, graphics files, and files created by applications such as Microsoft Word.

1.  Click the SSH Secure Shell Client desktop icon in the taskbar at the bottom of the Windows screen to maximize its window.

2.  On the Toolbar, click the File Transfer Window button:



You will see a window similar to the one below:
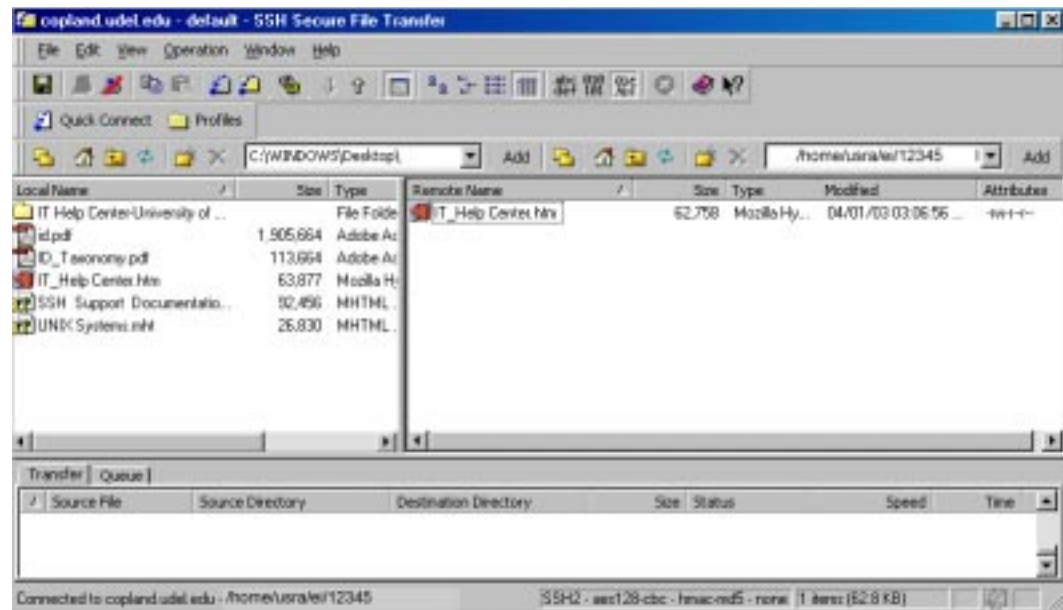


**Local Name**
The Local Name pane on the left side of the window lists the files and folders on your computer and enables navigation very similar to that in Windows Explorer. Files can be dragged from your computer (Local Name) to the server (Remote Name) or from the server to your computer.

*Continued on next page*

**Remote Name**
This area displays directories and files in your home directory on the
UNIX server. You may also view other server directories and files as
needed.

**File Transfer Status and History**
The status of each uploaded or downloaded file will appear on the
Transfer tab. All actions are displayed in an exportable history list. The
Queue tab displays files ready for upload or download.

3.  In the Remote Name window pane, double-click the "public_html" folder.

4.  Click the ![abc def] (ASCII) button. (This mode is used for files that contain
    only text or program source code. Examples are files that end with .html,
    .htm, and .txt.)

5.  In "Local Name" pane, select the "Scratch" directory, then select the
    **index.html** file by clicking the file name. Hold the CRTL key down and
    select the **special.html** file. Release the CTRL key and mouse button
    when you have selected your files.

6.  Click the highlighted group of files and drag the selection to the "Remote
    Name" window pane.

    Release the mouse button and observe the file transfer. If a file name in the
    destination folder is the same as one you are transferring, you will be
    asked if it is OK to replace it. You will see the progress of the transfer on
    the Transfer tab at the bottom of the screen. The file will be listed in the
    desired location if the transfer was successful.

7.  Click the ![010 101] (Binary) button. (This mode is for files that contain
    formatting codes such as files produced by word processing, spreadsheet,
    or graphics programs. Examples are Microsoft Word, Microsoft Excel,
    .gif, and .jpg files.)

    **Note**: If you are unsure of the format of the files you want to transfer, use the
    ![01c %ef] (Auto) button.

8.  Click the **spid.gif** file and drag it to the "Remote Name" window pane.
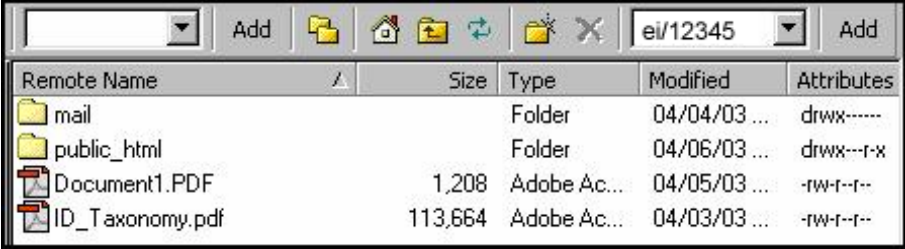
**Note**: If you do not see your file in the target location, click the Refresh button  .

---

To transfer files from the server directory to your local computer, follow the directions above, dragging the selected files from the right to the left window pane.

# How to set file and folder permissions (attributes)

If you are uploading a file that others will view on the web, you must ensure that web users will be able to see the pages. Even though people may type the correct web address to view your site, they will not be able to see the material without permission. The attributes for a file or the folder it is in must be set correctly on the server to give this permission.

Attributes are shown to the far right of the file or folder name. Use the scroll bar at the bottom of the file window to reveal the attributes column.



**Users**

Files and folders can have three types of users:

**Owner**    The user with full rights to all files and directories within a specific server directory space; this user can change file and folder attributes.

**Group**    A select group of users listed by the owner.

**Other**    All other users; users accessing your pages and directories through the web or the network.

**Attributes**

Files and folders can have the following attributes on the server:

**D**     The listing is a directory.
**R**     The file or folder can be read (viewed).
**W**     The file or folder can be written to.
**X**     The folder can be opened to access files (execute); the user can view web pages in the folder.

**Recommended Attributes**

The following settings are recommended to enable you to share your web pages over the Internet. Verify that that these settings have been applied to your web folder and all files and folders in it.

**Folder Settings**



**File Settings**

Note: If you are part of a group where more than one person will make changes to the web files, click the "Write" check box for the group. The Permission mode will change to 664.

### Exercise 14: Changing Attributes

1. Right-click the file or folder name.

2. Click **Properties**.

3. Click the check box for the desired attribute for the Owner, Group, and Other categories.

4. Click OK.

### How to delete files or folders using the SSH File Transfer program

1. Select a file or folder you wish to delete from either the Local Name or Remote Name window pane.

2. From the **Operation** menu, select **Delete** to delete the file or folder. Alternatively, you can click the red X on the File bar.

3. A **Confirm Delete** dialog box appears, allowing you to confirm that you really want to delete the selected files or folders. Click **Yes** to delete the selected items or **Cancel** to keep them.

## Quit the SSH File Transfer program and view your Web page

In the following exercise, you will quit the SSH File Transfer program and view your Web page on the "copland" Web server:

### Exercise 15: Quitting the SSH File Transfer program and viewing your Webpage

1. On the Toolbar, click the **Disconnect** button to quit the current File Transfer session.

2. From the **File** menu, select **Exit** to quit the SSH File Transfer program.

*Continued on next page*

*Exercise, continued*

3. To view your Web document, in the browser "Location" box, type

   ```
   http://udel.edu/~username/
   ```

   substituting your UNIX username for *username*.

   If you named your file anything other than "index.html," you will have to type the filename after the final slash. Press the ENTER key.

4. Click the X in the upper-right corner to close the browser window.

## Finding your files online

For the "udel.edu" Web server, someone searching for your web page would type

   http://udel.edu/~*username*

where *username* is your UNIX username.

If your files were on the "www.udel.edu" central Web server, someone searching for your Web page would type

   http://www.udel.edu/*directoryname/*

## HTML tags

| | | |
|---|---|---|
| <html> | </html> | placed at the very beginning and at the end of a document |
| <head> | </head> | placed after the <html> tag; the "head" contains general information about the document. Use the </head> tag at the close of the "head" section. |
| <title> | </title> | placed between the head tags. Search engines use the title to find your page. |
| <body> | </body> | placed after the </head> tag and before the final </html> tag. Contains the information that appears on your web page in the browser window. |
| <h#> | </h#> | There are 6 levels of headings, <h1> to <h6>. <h1> often uses the same text as the title. Heading levels indicate the importance of text in your document: |

<h1>heading level 1</h1>          most important level
<h2>heading level 2</h2>
<h3>heading level 3</h3>
<h4>heading level 4</h4>
<h5>heading level 5</h5>
<h6>heading level 6</h6>          least important level

<img src="*image*.gif" />          inserts an image
<img src="*image*.jpg" />

| | | |
|---|---|---|
| <pre> | </pre> | indicates that you want the text between these tags to display as preformatted text—exactly as you designed it |
| <b> | </b> | bold |
| <i> | </i> | italic |
| <tt> | </tt> | typewriter spacing (monospaced) |
| <blockquote> </blockquote> | | sets off a long quotation |

| | | |
|---|---|---|
| `<ul>` | | unordered, bulleted list (without numbers) |
| `<li>` | `</li>` | list item |
| `<li>` | `</li>` | |
| `</ul>` | | |
| | | |
| `<ul type=x>` | `</ul>` | *x* can be "disc" (round solid bullet), "circle" (round hollow bullet) or "square" (square hollow bullet) |
| | | |
| `<ol>` | | ordered list (with numbers) |
| `<li>` | `</li>` | list item |
| `<li>` | `</li>` | |
| `</ol>` | | |
| | | |
| `<ol type=x>` | `</ol>` | *x* can be "1" (for numbers [default]), "A" (capital letters), "a" (lowercase letters), "I" (capital Roman numerals), or "i" (lowercase Roman numerals) |
| | | |
| `<dl>` | | a definition list (a term followed by a definition) |
| `<dt>` | `</dt>` | definition term |
| `<dd>` | `</dd>` | definition |
| `<dt>` | `</dt>` | |
| `<dd>` | `</dd>` | |
| `</dl>` | | |
| | | |
| `<p>` | `</p>` | inserts a paragraph break |
| | | |
| `<br />` | | inserts a line break |
| | | |
| `<hr />` | | inserts a horizontal rule |