

HTML-Intro ii

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Chapter 1

HTML-Intro

1.1 A Beginner's Guide To HTML

This is a primer for producing documents in HTML, the markup $\ \hookleftarrow$ language used by the World Wide Web.

Acronym Expansion

What This Primer Doesn't Cover

Creating HTML Documents

The Minimal HTML Document Basic Markup Tags

Titles

Headings

Paragraphs

Linking to Other Documents

Relative Links Versus Absolute Pathnames

Uniform Resource Locator

Anchors to Specific Sections in Other Documents

Anchors to Specific Sections Within the Current Document

Additional Markup Tags Lists

Unnumbered Lists

Numbered Lists

Definition Lists

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Nested Lists Preformatted Text Extended Quotes Addresses Character Formatting Physical Versus Logical: Use Logical Tags When Possible Logical Styles Physical Styles Using Character Tags Special Characters Escape Sequences Forced Line Breaks Horizontal Rules In-line Images Alternate Text for Viewers That Can't Display Images External Images, Sounds, and Animations Troubleshooting Avoid Overlapping Tags Embed Anchors and Character Tags, But Not Anything Else Check Your Links A Longer Example For More Information Fill-out Forms Style Guides Other Introductory Documents

1.2 Acronym Expansion

Additional References

```
Acronym Expansion

WWW

World Wide Web (or Web, for short).

SGML

Standard Generalized Markup Language -- this is a standard for describing markup languages.

DTD
```

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Document Type Definition -- this is a specific markup language, written using SGML.

HTMT.

HyperText Markup Language -- HTML is a SGML DTD. In practical terms, HTML is a collection of styles (indicated by markup tags) that define the various components of a World Wide Web document.

1.3 What This Primer Doesn't Cover

What This Primer Doesn't Cover

This primer assumes that you have:

at least a passing knowledge of how to use NCSA Mosaic or some other Web browser a general understanding of how Web servers and client browsers work access to a Web server for which you would like to produce HTML documents, or that you wish to produce HTML documents for personal use

1.4 Creating HTML Documents

Creating HTML Documents

HTML documents are in plain (also known as ASCII) text format and can be created using any text editor (e.g., Emacs or vi on UNIX machines). A couple of Web browsers (tkWWW for X Window System machines and CERN's Web browser for NeXT computers) include rudimentary HTML editors in a WYSIWYG environment. There are also some WYSIWIG editors available now (e.g. HotMetal for Sun Sparcstations, HTML Edit for Macintoshes). You may wish to try one of them first before delving into the details of HTML.

You can preview a document in progress with NCSA Mosaic (and some other Web browsers). Open it with the Open Local command under the File menu.

After you edit the source HTML file, save the changes. Return to NCSA Mosaic and Reload the document. The changes are reflected in the on-screen display.

1.5 The Minimal HTML Document

The Minimal HTML Document

Here is a bare-bones example of HTML:

<TITLE>The simplest HTML example</TITLE> <H1>This is a level-one heading</H1> Welcome to the world of HTML. This is one paragraph.<P> And this is a second.<P>

Click here to see the formatted version of the example.

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HTML uses markup tags to tell the Web browser how to display the text. The above example uses:

the <TITLE> tag (and corresponding </TITLE> tag), which specifies the title of the document the <H1> header tag (and corresponding </H1>) the <P> paragraph-separator tag

HTML tags consist of a left angle bracket (<), (a ''less than'' symbol to mathematicians), followed by name of the tag and closed by a right angular bracket \hookleftarrow (>).

Tags are usually paired, e.g. <H1> and </H1>. The ending tag looks just like the starting tag except a slash (/) precedes the text within the brackets. In the \leftrightarrow example,

<H1> tells the Web browser to start formatting a level-one heading; </H1> tells the browser that the heading is complete.

The primary exception to the pairing rule is the $\langle P \rangle$ tag. There is no such thing \leftrightarrow as $\langle P \rangle$.

NOTE: HTML is not case sensitive. $\langle \text{title} \rangle$ is equivalent to $\langle \text{TITLE} \rangle$ or $\langle \text{TiTlE} \rangle$.

Not all tags are supported by all World Wide Web browsers. If a browser does not support a tag, it just ignores it.

1.6 Basic Markup Tags

Title

Every HTML document should have a title. A title is generally displayed separately from the document and is used primarily for document identification in other contexts (e.g., a WAIS search). Choose about half a dozen words that describe the document's purpose.

In the X Window System and Microsoft Windows versions of NCSA Mosaic, the Document Title field is at the top of the screen just below the pulldown menus. In NCSA Mosaic for Macintosh, text tagged as <TITLE> appears as the window title.

1.7 Basic Markup Tags

Headings

HTML has six levels of headings, numbered 1 through 6, with 1 being the most prominent. Headings are displayed in larger and/or bolder fonts than normal body text. The first heading in each document should be tagged <H1>. The syntax of the heading tag is:

<Hy>Text of heading </Hy >

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where y is a number between 1 and 6 specifying the level of the heading.

For example, the coding for the "Headings" section heading above is

<H3>Headings</H3>

Title versus first heading

In many documents, the first heading is identical to the title. For multipart documents, the text of the first heading should be suitable for a reader who is \leftarrow already

browsing related information (e.g., a chapter title), while the title tag should $\ensuremath{\hookleftarrow}$ identify

the document in a wider context (e.g., include both the book title and the chapter \leftarrow title,

although this can sometimes become overly long).

1.8 Basic Markup Tags

Paragraphs

Unlike documents in most word processors, carriage returns in HTML files aren't significant. Word wrapping can occur at any point in your source file, and \leftarrow multiple

spaces are collapsed into a single space. (There are couple of exceptions; space following a <P> or <Hy> tag, for example, is ignored.) Notice that in the bare- \hookleftarrow bones

example, the first paragraph is coded as

Welcome to HTML.
This is the first paragraph. <P>

this line break and starts a new paragraph only when it reaches a <P> tag.

Important: You must separate paragraphs with <P>. The browser ignores any indentations or blank lines in the source text. HTML relies almost entirely on the tags for formatting instructions, and without the <P> tags, the document becomes one large paragraph. (The exception is text tagged as '`preformatted,'' which is explained below.) For instance, the following would produce identical output as ← the

first bare-bones HTML example:

<TITLE>The simplest HTML example</TITLE><H1>This is a level one heading</H1>Welcome to the world of HTML. This is one paragraph.<P>And this is a second.<P>

However, to preserve readability in HTML files, headings should be on separate lines, and paragraphs should be separated by blank lines (in addition to the $\ensuremath{< ext{P}>}\ \leftarrow$ tags).

NCSA Mosaic handles $\ensuremath{^{\text{P}}}$ by ending the current paragraph and inserting a blank line.

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The difference is that the </P> closing tag can always be omitted. (That is, if a browser sees a <P>, it knows that there must be an implied </P> to end the \leftrightarrow previous

paragraph.) In other words, in HTML+, <P> is a beginning-of-paragraph marker.

The advantage of this change is that you will be able to specify formatting $\ensuremath{\hookleftarrow}$ options

for a paragraph. For example, in HTML+, you will be able to center a paragraph by coding

```
<P ALIGN=CENTER>
This is a centered paragraph. This is HTML+, so you can't do it yet.
```

This change won't effect any documents you write now, and they will continue to look just the same with HTML+ browsers.

1.9 Linking to Other Documents

Linking to Other Documents

The chief power of HTML comes from its ability to link regions of text (and also images) to another document. The browser highlights these regions (usually with color and/or underlines) to indicate that they are hypertext links (often \leftarrow shortened to

hyperlinks or simply links).

HTML's single hypertext-related tag is <A>, which stands for anchor. To include an anchor in your document:

- 1. Start the anchor with <A . (There's a space after the A.)
- 2. Specify the document that's being pointed to by entering the parameter
 HREF="filename" followed by a closing right angle bracket: >
- 3. Enter the text that will serve as the hypertext link in the current document.
- 4. Enter the ending anchor tag: .

Here is an sample hypertext reference:

```
<A HREF="MaineStats.html">Maine
```

This entry makes the word ''Maine'' the hyperlink to the document MaineStats.html, which is in the same directory as the first document. You can link to documents in other directories by specifying the relative path from the \hookleftarrow current

document to the linked document. For example, a link to a file NJStats.html located in the subdirectory AtlanticStates would be:

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```
<A HREF="AtlanticStates/NJStats.html">New Jersey</A>
```

These are called relative links. You can also use the absolute pathname of the $\ \ \$ file if you wish. Pathnames use the standard UNIX syntax.

1.10 Linking to Other Documents

Relative Links Versus Absolute Pathnames

In general, you should use relative links, because

- 1. You have less to type.
- 2. It's easier to move a group of documents to another location, because the relative path names will still be valid.

However, use absolute pathnames when linking to documents that are not directly related. For example, consider a group of documents that comprise a user manual. Links within this group should be relative links. Links to other documents (\hookleftarrow perhaps a

reference to related software) should use full path names. This way, if you move $\ \hookleftarrow$ the

user manual to a different directory, none of the links would have to be updated.

1.11 Linking to Other Documents

```
Uniform Resource Locator
```

The World Wide Web uses Uniform Resource Locators (URLs) to specify the location of files on other servers. A URL includes the type of resource being $\,\,\hookleftarrow\,\,$ accessed

(e.g., gopher, WAIS), the address of the server, and the location of the file. The syntax is:

scheme://host.domain[:port]/path/filename

where scheme is one of

file

a file on your local system, or a file on an anonymous FTP server http

a file on a World Wide Web server

gopher

a file on a Gopher server

WAIS

a file on a WAIS server

news

an Usenet newsgroup

telnet

a connection to a Telnet-based service

The port number can generally be omitted. (That means unless someone tells you

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```
otherwise, leave it out.)
```

For example, to include a link to this primer in your document, you would use

NCSA's Beginner's Guide to HTML

This would make the text ''NCSA's Beginner's Guide to HTML'' a hyperlink to this document.

For more information on URLs, look at

WWW Names and Addresses, URIs, URLs, URNs, written by people at CERN A Beginner's Guide to URLs, located on the NCSA Mosaic Help menu

1.12 Linking to Other Documents

Links to Specific Sections in Other Documents

Anchors can also be used to move to a particular section in a document. Suppose $\ensuremath{\hookleftarrow}$ you

wish to set a link from document A and a specific section in document B. (Call \leftrightarrow

file documentB.html.) First you need to set up a named anchor in document B. For example, to set up an anchor named ''Jabberwocky'' to document B, enter

Here's some text

Now when you create the link in document A, include not only the filename, but $\ensuremath{\hookleftarrow}$ also

the named anchor, separated by a hash mark (#).

This is my A HREF = "documentB.html#Jabberwocky">link to document B.

Now clicking on the word '`link'' in document A sends the reader directly to the words '`some text'' in document B.

1.13 Linking to Other Documents

Links to Specific Sections Within the Current Document

The technique is exactly the same except the filename is omitted.

For example, to link to the Jabberwocky anchor from within the same file (Document B), use

This is Jabberwocky link from within Document B.

1.14 Additional Markup Tags

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```
Additional Markup Tags
```

The preceding is sufficient to produce simple HTML documents. For more complex documents, HTML has tags for several types of lists, preformatted sections, $\,\hookleftarrow\,$ extended

quotations, character formatting, and other items.

Lists

HTML supports unnumbered, numbered, and definition lists.

1.15 Additional Markup Tags

Unnumbered Lists

To make an unnumbered list,

- 1. Start with an opening list tag.
- Enter the tag followed by the individual item. (No closing tag is needed.)
- 3. End with a closing list tag.

Below an example two-item list:

```
<UL>
<LI> apples
<LI> bananas
</UL>
```

The output is:

apples bananas

The $\langle \text{LI} \rangle$ items can contain multiple paragraphs. Just separate the paragraphs with the $\langle \text{P} \rangle$ paragraph tags.

1.16 Additional Markup Tags

Numbered Lists

A numbered list (also called an ordered list, from which the tag name derives) is identical to an unnumbered list, except it uses instead of . The items $\ \leftarrow$ are

tagged using the same tag. The following HTML code

```
<OL>
<LI> oranges
<LI> peaches
<LI> grapes
</OL>
```

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produces this formatted output:

- 1. oranges
- 2. peaches
- 3. grapes

1.17 Additional Markup Tags

Definition Lists

A definition list usually consists of alternating a term (abbreviated as DT) and a definition (abbreviated as DD). Web browsers generally format the definition on a new line.

The following is an example of a definition list:

<DL>

<DT> NCSA

<DD> NCSA, the National Center for Supercomputing Applications, is located on the campus of the University of Illinois at Urbana-Champaign. NCSA is one of the participants in the National MetaCenter for Computational Science and Engineering.

<DT> Cornell Theory Center

<DD> CTC is located on the campus of Cornell University in Ithaca,
 New York. CTC is another participant in the National MetaCenter
 for Computational Science and Engineering.

</DL>

The output looks like:

NCSA

NCSA, the National Center for Supercomputing Applications, is located on the campus of the University of Illinois at Urbana-Champaign. NCSA is one of the participants in the National MetaCenter for Computational Science and Engineering.

Cornell Theory Center

CTC is located on the campus of Cornell University in Ithaca, New York. CTC is another participant in the National MetaCenter for Computational Science and Engineering.

The <DT> and <DD> entries can contain multiple paragraphs (separated by <P> paragraph tags), lists, or other definition information.

1.18 Additional Markup Tags

Nested Lists

Lists can be arbitrarily nested, although in practice you probably should limit $\ \hookleftarrow$ the

nesting to three levels. You can also have a number of paragraphs, each containing \hookleftarrow

а

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```
nested list, in a single list item.
An example nested list:
    <UL>
    <LI> A few New England states:
        <UL>
        <LI> Vermont
        <LI> New Hampshire
        </UL>
    <LI> One Midwestern state:
        <UL>
        <LI> Michigan
        </UL>
    </UL>
The nested list is displayed as
   A few New England states:
      Vermont
      New Hampshire
   One Midwestern state:
      Michigan
1.19 Preformatted Text
Preformatted Text
Use the <PRE> tag (which stands for ''preformatted'') to generate text in a
fixed-width font and cause spaces, new lines, and tabs to be significant. (That is \hookleftarrow
multiple spaces are displayed as multiple spaces, and lines break in the same
   locations
as in the source HTML file.) This is useful for program listings. For example, the
following lines
    <PRE>
      #!/bin/csh
      cd $SCR
      cfs get mysrc.f:mycfsdir/mysrc.f
      cfs get myinfile:mycfsdir/myinfile
      fc -02 -o mya.out mysrc.f
      mya.out
      cfs save myoutfile:mycfsdir/myoutfile
      rm *
    </PRE>
display as
      #!/bin/csh
      cd $SCR
      cfs get mysrc.f:mycfsdir/mysrc.f
      cfs get myinfile:mycfsdir/myinfile
      fc -02 -o mya.out mysrc.f
      mya.out
```

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```
cfs save myoutfile:mycfsdir/myoutfile rm \star
```

Hyperlinks can be used within <PRE> sections. You should avoid using other HTML tags within <PRE> sections, however.

Note that because <, >, and & have special meaning in HTML, you have to use their escape sequences (<, >, and &, respectively) to enter these characters. See the section 'Special Characters' on page 10 for more information.

1.20 Extended Quotations

Extended Quotations

Use the <BLOCKQUOTE> tag to include quotations in a separate block on the screen. Most browsers generally indent to separate it from surrounding text.

An example:

```
<BLOCKQUOTE>
I still have a dream. It is a dream deeply rooted in the
American dream. <P>
I have a dream that one day this nation will rise up and
live out the true meaning of its creed. We hold these truths
to be self-evident that all men are created equal. <P>
</BLOCKQUOTE>
```

The result is:

I still have a dream. It is a dream deeply rooted in the American dream.

I have a dream that one day this nation will rise up and live out the true meaning of its creed. We hold these truths to be self-evident that all men are created equal.

1.21 Adresses

Addresses

```
The <ADDRESS> tag is generally used to specify the author of a document and a means of contacting the author (e.g., an email address). This is usually the last 
item in a file.

For example, the last line of the online version of this guide is
```

```
A Beginner's Guide to HTML / NCSA / pubs@ncsa.uiuc.edu </ADDRESS>
```

The result is
A Beginner's Guide to HTML / NCSA / pubs@ncsa.uiuc.edu

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NOTE: <ADDRESS> is not used for postal addresses. See ''Forced Line Breaks'' on page 10 to see how to format postal addresses.

1.22 Character Formatting

Character Formatting

You can code individual words or sentences with special styles. There are two \leftrightarrow types

of styles: logical and physical. Logical styles tag text according to its meaning, \hookleftarrow while

physical styles specify the specific appearance of a section. For example, in the preceding sentence, the words ''logical styles'' was tagged as a ''definition.'' \hookleftarrow The

same effect (formatting those words in italics), could have been achieved via a different tag that specifies merely ''put these words in italics.''

Physical Versus Logical: Use Logical Styles When Possible

If physical and logical styles produce the same result on the screen, why are $\ \leftarrow$ there

both? We devolve, for a couple of paragraphs, into the philosophy of SGML, which can be summed in a Zen-like mantra: "Trust your browser."

In the ideal SGML universe, content is divorced from presentation. Thus, SGML tags a level-one heading as a level-one heading, but does not specify that the level- \hookleftarrow one

heading should be, for instance, 24-point bold Times centered on the top of a page \hookleftarrow

The advantage of this approach (it's similar in concept to style sheets in many $\ \hookleftarrow \$ word

processors) is that if you decide to change level-one headings to be 20-point left-justified Helvetica, all you have to do is change the definition of the level \leftarrow -one

heading in the presentation device (i.e., your World Wide Web browser).

The other advantage of logical tags is that they help enforce consistency in your documents. It's easier to tag something as <H1> than to remember that level-one headings are 24-point bold Times or whatever. The same is true for character \leftrightarrow styles.

For example, consider the tag. Most browsers render it in bold text. However, it is possible that a reader would prefer that these sections be $\,\,\leftarrow\,\,$ displayed in

red instead. Logical styles offer this flexibility.

1.23 Character Formatting

Logical Styles

<DFN>

for a word being defined. Typically displayed in italics. (NCSA Mosaic is a

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```
World Wide Web browser.)
<EM>
  for emphasis. Typically displayed in italics. (Watch out for pickpockets.)
<CITE>
  for titles of books, films, etc. Typically displayed in italics. (A Beginner's
  Guide to HTML)
<CODE>
  for snippets of computer code. Displayed in a fixed-width font. (The
  <stdio.h> header file)
<KRD>
  for user keyboard entry. Should be displayed in a bold fixed-width font, but
  many browsers render it in the plain fixed-width font. (Enter passwd to
  change your password.)
<SAMP>
  for computer status messages. Displayed in a fixed-width font. (
  Segmentation fault: Core dumped.)
<STRONG>
  for strong emphasis. Typically displayed in bold. (Important)
<VAR>
  for a ''metasyntactic'' variable, where the user is to replace the variable \leftrightarrow
      with
  a specific instance. Typically displayed in italics. (rm filename deletes the
  file.)
```

1.24 Character Formatting

1.25 Special Characters

```
Escape Sequences

Four characters of the ASCII character set -- the left angle bracket (<), the 
right
angle bracket (>), the ampersand (₢) and the double quote(") -- have special 
meaning
```

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```
within HTML and therefore cannot be used "as is" in text. (The angle brackets \leftarrow
used to indicate the beginning and end of HTML tags, and the ampersand is used to
indicate the beginning of an escape sequence.)
To use one of these characters in an HTML document, you must enter its escape
sequence instead:
<
  the escape sequence for <
&at;
  the escape sequence for >
  the escape sequence for &
"
  the escape sequence for "
Additional escape sequences support accented characters. For example:
ö
  the escape sequence for a lowercase o with an umlaut: ö
ñ
  the escape sequence for a lowercase n with an tilde: ñ
È
  the escape sequence for an uppercase E with a grave accent: È
A full list of supported characters can be found at CERN.
NOTE: Unlike the rest of HTML, the escape sequences are case sensitive. You
cannot, for instance, use < instead of &lt;.
```

1.26 Special Characters

Forced Line Breaks

The
 tag forces a line break with no extra space between lines. (By contrast, most browsers format the <P> paragraph tag with an additional blank line to more clearly indicate the beginning the new paragraph.)

One use of
 is in formatting addresses:

National Center for Supercomputing Applications

605 East Springfield Avenue

Champaign, Illinois 61820-5518

BR>

1.27 Special Characters

Horizontal Rules

The <HR> tag produces a horizontal line the width of the browser window.

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1.28 In-Line Images

```
In-line Images
```

Most Web browsers can display in-line images (that is, images next to text) that \leftrightarrow are

in X Bitmap (XBM) or GIF format. Each image takes time to process and slows down the initial display of the document, so generally you should not include too many or overly large images.

To include an in-line image, use

```
<IMG SRC=image URL>
```

where image_URL is the URL of the image file. The syntax for IMG SRC URLs is identical to that used in an anchor HREF. If the image file is a GIF file, then $\ \hookleftarrow$ the

filename part of image_URL must end with .gif. Filenames of X Bitmap images must end with .xbm.

By default the bottom of an image is aligned with the text as shown in this paragraph.

Add the ALIGN=TOP option if you want the browser to align adjacent text with the top of the image as shown in this paragraph. The full in-line image $\ensuremath{\leftarrow}$ tag with the top alignment is:

ALIGN=MIDDLE aligns the text with the center of the image.

1.29 In-Line Images

Alternate Text for Browsers That Can't Display Images

Some World Wide Web browsers, primarily those that run on VT100 terminals, cannot display images. The ALT option allows you to specify text to be displayed when an image cannot be. For example:

```
<IMG SRC = "UpArrow.gif" ALT = "Up">
```

where UpArrow.gif is the picture of an upward pointing arrow. With NCSA Mosaic and other graphics-capable viewers, the user sees the up arrow graphic. \hookleftarrow With

a VT100 browser, such as lynx, the user sees the word ''Up.''

1.30 External Images, Sounds, and Animations

External Images, Sounds, and Animations

You may want to have an image open as a separate document when a user activates a

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link on either a word or a smaller, in-line version of the image included in your document. This is considered an external image and is useful if you do not wish to slow down the loading of the main document with large in-line images.

To include a reference to an external image, use

```
<A HREF = image_URL>link anchor</A>
```

Use the same syntax is for links to external animations and sounds. The only difference is the file extension of the linked file. For example,

```
<A HREF = "QuickTimeMovie.mov">link anchor</A>
```

specifies a link to a QuickTime movie. Some common file types and their extensions are:

File Type Extension Plain text . t x t HTML document .html GIF image .gif TIFF image .tiff XBM bitmap image .xbm JPEG image .jpg or .jpeg PostScript file .ps AIFF sound .aiff AU sound .au QuickTime movie .mov MPEG movie .mpeg or .mpg

Make sure your intended audience has the necessary viewers. Most UNIX workstations, for instance, cannot view QuickTime movies.

1.31 Troubleshooting

Avoid Overlapping Tags

Consider this snippet of HTML:

```
<B>This is an example of <DFN>overlapping</B> HTML tags.</DFN>
```

The word ''overlapping'' is contained within both the and <DFN> tags. How does the browser format it? You won't know until you look, and different browsers

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will likely react differently. In general, avoid overlapping tags.

1.32 Troubleshooting

Embed Anchors and Character Tags, But Nothing Else

It is acceptable to embed anchors within another HTML element:

```
<H1><A HREF = "Destination.html">My heading</A></H1>
```

Do not embed a heading or another HTML element within an anchor:

```
<A HREF = "Destination.html">
<H1>My heading</H1>
</A>
```

Although most browsers currently handle this example, it is forbidden by the $\ \leftarrow$ official

HTML and HTML+ specifications, and will not work with future browsers.

Character tags modify the appearance of other tags:

```
<UL><LI><B>A bold list item</B>
<UL>
<LI><I>An italic list item</I>
</UL>
```

However, avoid embedding other types of HTML element tags. For example, it is tempting to embed a heading within a list, in order to make the font size larger:

Although some browsers, such as NCSA Mosaic for the X Window System, format this construct quite nicely, it is unpredictable (because it is undefined) what \hookleftarrow other

browsers will do. For compatibility with all browsers, avoid these kinds of constructs.

What's the difference between embedding a $\langle B \rangle$ within a $\langle LI \rangle$ tag as opposed to embedding a $\langle H1 \rangle$ within a $\langle LI \rangle$? This is again a question of SGML. The semantic meaning of $\langle H1 \rangle$ is that it's the main heading of a document and that it should be followed by the content of the document. Thus it doesn't make sense to find a $\langle H1 \rangle$ within a list.

Character formatting tags also are generally not additive. You might expect that

```
<B><I>some text</I></B>
```

would produce bold-italic text. On some browsers it does; other browsers interpret only the innermost tag (here, the italics).

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1.33 Troubleshooting

```
Check Your Links
```

When an tag points at an image that does not exist, a dummy image is substituted. When this happens, make sure that the referenced image does in fact exist, that the hyperlink has the correct information in the URL, and that the \leftarrow file permission is set appropriately (world-readable).

1.34 An example HTML document

```
A Longer Example
Here is a longer example of an HTML document:
    <TITLE>A Longer Example</TITLE>
    </HEAD>
    <BODY>
    <H1>A Longer Example</H1>
    This is a simple HTML document. This is the first
    paragraph. <P>
    This is the second paragraph, which shows special effects. This is a
    word in <I>italics</I>. This is a word in <B>bold</B>.
    Here is an in-lined GIF image: <IMG SRC = "myimage.gif">.
    <P>
    This is the third paragraph, which demonstrates links. Here is
    a hypertext link from the word <A HREF = "subdir/myfile.html">foo</A>
    to a document called "subdir/myfile.html". (If you
    try to follow this link, you will get an error screen.) <P>
    <H2>A second-level header</H2>
    Here is a section of text that should display as a
    fixed-width font: <P>
    <PRE>
        On the stiff twig up there
        Hunches a wet black rook
        Arranging and rearranging its feathers in the rain ...
    This is a unordered list with two items: <P>
    <LI> cranberries
    <LI> blueberries
    </UL>
    This is the end of my example document. <P>
    <ADDRESS>Me (me@mycomputer.univ.edu)</ADDRESS>
    </BODY>
```

In addition to tags already discussed, this example also uses the <HEAD> ... </HEAD> and <BODY> ... </BODY> tags, which separate the document into introductory information about the document and the main text of the document. These tags don't change the appearance of the formatted document at all, but are useful for several purposes (for example, NCSA Mosaic for Macintosh 2.0, for example, allows you to browse just the header portion of document before deciding

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whether to download the rest), and it is recommended that you use these tags.

1.35 (More

For More Information

This guide is only an introduction to HTML and not a comprehensive reference. Below are additional sources of information.

Fill-out Forms

One major feature not discussed here is fill-out forms, which allows users to $\ \hookleftarrow$ return

information to the World Wide Web server. For information on fill-out forms, look at

http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/Docs/fill-out-forms/overview.html

Style Guides

The following offer advice on how to write ''good'' HTML:

Composing Good HTML CERN's style guide for online hypert

Other Introductory Documents

These cover similar information as this guide:

How to Write HTML Files Introduction to HTML

Additional References

The HTML Quick Reference Guide, which provides a comprehensive listing of HTML codes

The official HTML specification

A description of SGML, the Standard Generalized Markup Language Dan Connolly's HTML Design Notebook. Dan Connolly is one of the originators of HTML.

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