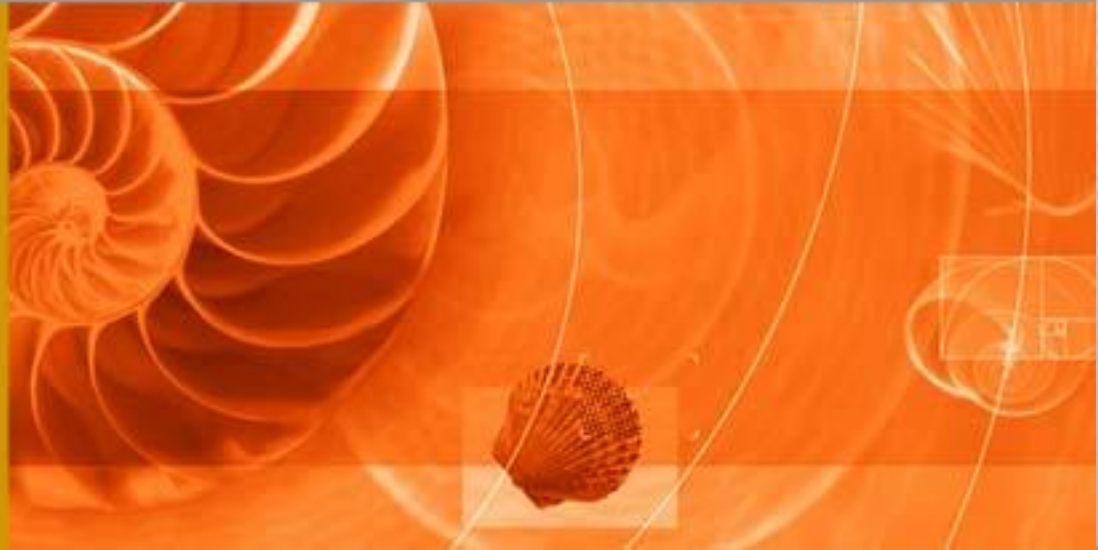


Fundamentals
of **WEB
DESIGN**



Anchor Tags

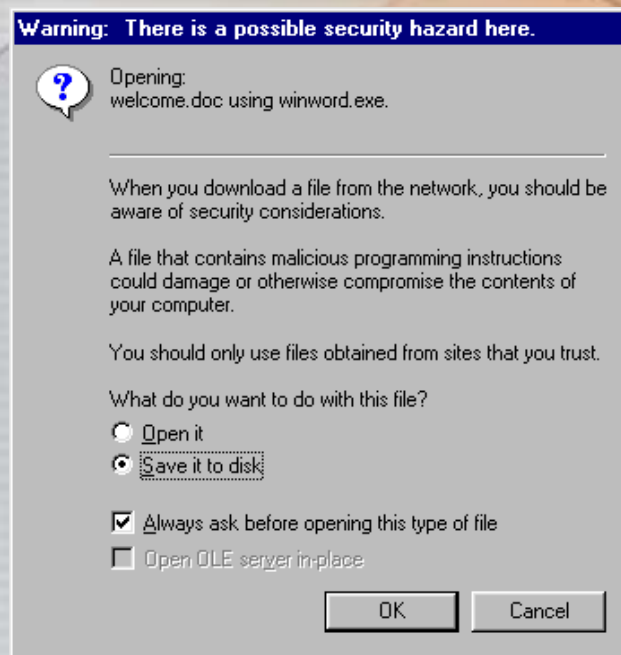
XHTML

Linking

- Linking in HTML makes it possible for visitors to move to another Web page or Web site.
- Most links are connections to other HTML pages, because they are compatible and can be directly executed by the browser.
- Standard HTML files have extensions of either ".htm" or ".html".
- Since filenames are case sensitive on most servers, you should use lowercase text for filenames.

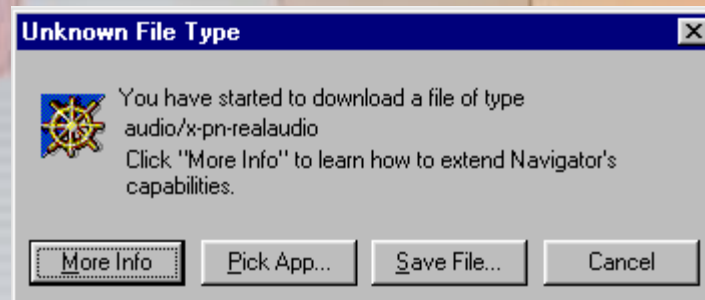
Handling Non-HTML File Types

- If the browser is familiar with the requested file type, but requires the execution of an application before the linked file can be viewed, a message box like the one below is likely to appear asking whether to save the file or open it with the application.



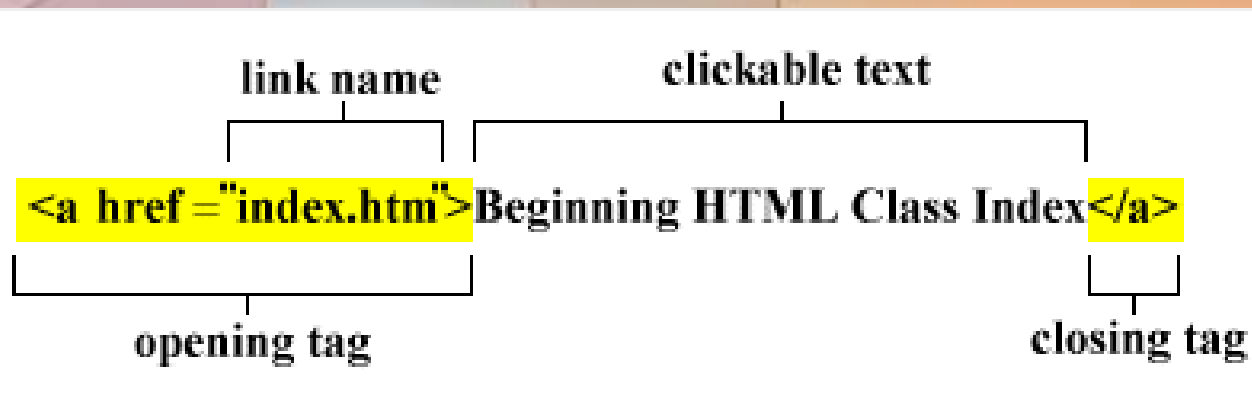
Linking to Unknown File Types

- If the browser is not familiar with the requested file type, a message box should appear asking whether to save the file or choose the needed application.



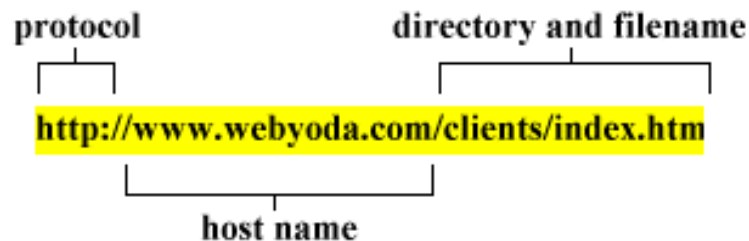
Basic Link Syntax

- You use the anchor tag `<a>` to link to:
 - a file
 - the URL of a file
 - to another location within the same file.
- To create a link in HTML, you must set the "href" attribute to the desired location (link name) and enter clickable text that will activate the linking process.



Basic URL Link Syntax

- "URL" stands for Uniform Resource Locator.
- A URL is basically a virtual street address for a location on the Internet.
- It consists of three parts:
 - the protocol
 - the domain (or host) name
 - the directory and/or filename.
- Most protocols are separated from the rest of the URL using "://".



URL Protocols

- The URL protocol indicates the type of resource being accessed. The most common protocols are shown below. Note that "mailto" does not use slashes.

```
file:// - For accessing your local system.  
http:// - For accessing a WWW server.  
ftp:// - For accessing an anonymous FTP server.  
mailto: - For sending Email.
```

URL Host Names

- The URL host name indicates the Internet server where the information is stored. You may see the same host name using different protocols.

<http://www.elktech.org>

<ftp://www.webyoda.com>

<mailto:sstephenson@burlesonisd.net>

- Visit Elktech's Web site

- Visit WebYoda's FTP site

- Email Mr. Stephenson

URL Directory and Filename

- The URL directory and filename indicate the location of the linked file or other form of information on the host.

<http://www.elktech.org/calendar.htm>

<http://www.elktech.org/Web/Web.htm>

<ftp://www.webyoda.com/images/mastercard.gif>

URL Default Filenames

- If you fail to specify a directory and filename, the default file will usually be retrieved.
- On most servers, the default file is named index.htm or index.html, but some servers use default.htm or default.html.
- In theory, the host server can be configured to use any filename as a default, but the names above are recommended.
- All of the following examples achieve the same results.

<http://www.elktech.org>

<http://www.elktech.org/>

<http://www.elktech.org/index.htm>

About Link Colors

- The <body> tag has attributes to control the link color for your document's visited, unvisited and active links.
- By setting these attributes, you insure that all visitors will see your links in the color theme you intend.
- A visitor won't notice a change if his browser's default link colors are the same as the color settings you use, however you should set these attributes in all your HTML documents.
- If you don't, the link colors will be controlled by the default color settings of the visitor's browser.

```
link - The color of an unvisited link.  
vlink - The color of a visited link.  
alink - The color of a link being clicked on.
```

Link Colors

- This example demonstrates how link color attributes work.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Using Link Colors</title>
</head>
<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<a href="lesson04-01-vr-a.htm">Visited Link</a><br />
<a href="none.htm">Unvisited Link</a>
</center>
</b>
</body>
</html>
```

Linking to Local Files

- The simplest type of link is a link to an HTML file within the same Web site or directory.
- In this example, notice that only the word "View" is clickable. It will start out blue, briefly turn red while you click it, and turn purple after you visit the linked site.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>View the HTML Color Palette</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<b>
<br />
<center>
<a href="colorpalette.htm">View</a> the HTML color palette.
</center>
</b>
</body>
</html>
```

Linking to Images

- You can create a link to an image file on the same Web site or directory by using the name of the image as the link name.
- Because the image is in a subdirectory, you must include the directory name "images" in the link name.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>View Some Graphics</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<b>
<center>
<a href="images/aquarium.gif">View</a> my virtual fish tank.
<br />
</center>
</b>
</body>
</html>
```

Static Links Versus Relative Links

- Static links use the entire Web address to specify how to link to a local page, whereas relative links assume the same site, and are relative to the directory the current page is in.
- Relative links are preferred mainly because the links will work locally, while you build your pages, or on the Web once they are uploaded.
- If the site name ever changes, the relative links will not need to be updated, whereas the static links will.
- Look at the examples below to get a better understanding of the differences in syntax.

Static Link = <http://www.elktech.org/webdesign.htm>

Relative Link = [webdesign.htm](#)

Static Link = <http://www.elktech.org/images/elk.gif>

Relative Link = [images/elk.gif](#)

Linking to Documents

- When linking to document types that the browser can't display, the browser will generally load the correct application or plug-in for viewing the document.
- The most basic document type is a "txt" file (ASCII file).
- When you link to a text file, some browsers like Netscape will display the contents of the text file.
- Internet Explorer, however, treats the file as an HTML file and displays the results of any HTML code within the file.

Linking to Documents

- In this example, notice that the clickable text has non-clickable text on either side.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>View a Text File</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<b>
<center>
View the <a href="defaults.txt">defaults.txt</a>
file for this course.
</center>
</b>
</body>
</html>
```

Linking to a Web Site

- To create a link to a Web site, you use a URL with the HTTP protocol.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Visit WebYoda</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<a href="http://www.webyoda.com">Visit</a> WebYoda.
</center>
</b>
</body>
</html>
```

Linking to a Web Site

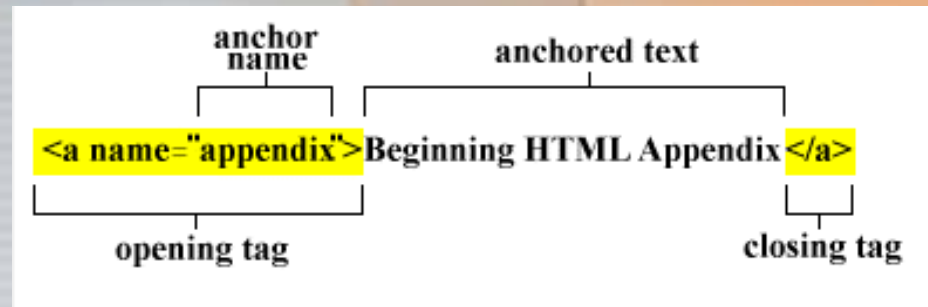
- Add the filename and/or directory name to the end of the URL to link to a particular page on a Web site.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>About WebYoda</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<a href="http://www.webyoda.com/about.htm">About</a> WebYoda.
</center>
</b>
</body>
</html>
```

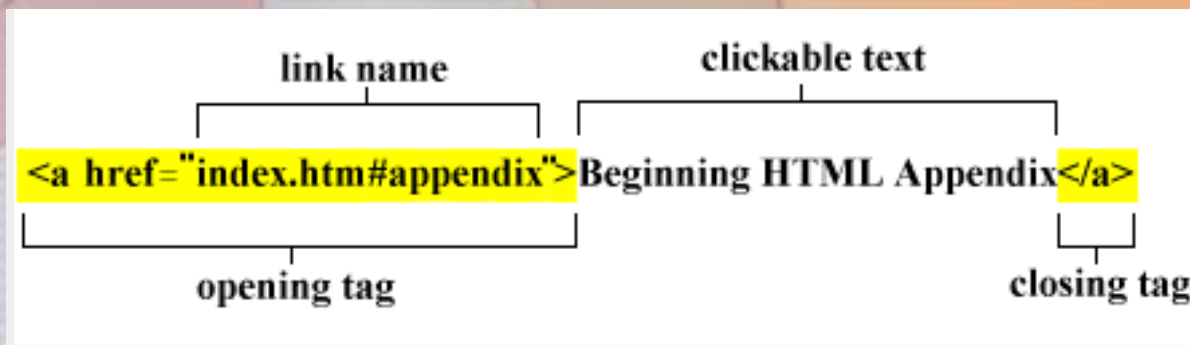
Basic Anchor Syntax

- By default, a link points to the top of a destination file. But the browser will scroll to any point in a document if you use the HTML anchor tags (`<a>` ``) to put a marker in the destination file.
- To create the anchor, set the "name" attribute to a reference name (anchor name), and include some file text between the `<a>` and `` tags to mark the position of the anchor.
- When the link is executed, the document will load with the anchored text at the top of the browser window.



Basic "Link Within" Syntax

- Linking to a position within a document requires the same syntax as a standard link, with the addition of a pound sign "#" followed by the anchor name.



Linking Within The Same File

- In this example, the three links at the top of the file point to three separate locations farther down within the same file. Notice when the first two links are visited, the link destination appears at the top of the browser, whereas the third link does not display at the top of the browser. This is because the browser ran out of file to display. The third link could be forced to show up at the top of the browser by padding the bottom of the file with `
` tags.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Linking within the same file</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<h2>Linking within the same file</h2>
Visit <a href="lesson04-07-vr-b.htm#link1">Link #1</a>.<br />
Visit <a href="lesson04-07-vr-b.htm#link2">Link #2</a>.<br />
Visit <a href="lesson04-07-vr-b.htm#link3">Link #3</a>.<br />
<br />
<br />

<a name="link1">
<h2><hr width="400" />Sample Link #1<hr width="400" /></h2>
</a>
<br /><br /><br /><br /><br /><br />
<br /><br /><br /><br /><br /><br />
<a name="link2">
<h2><hr width="400" />Sample Link #2<hr width="400" /></h2>
</a>
<br /><br /><br /><br /><br /><br />
<br /><br /><br /><br /><br /><br />
<a name="link3">
<h2><hr width="400" />Sample Link #3<hr width="400" /></h2>
</a>
<br /><br /><br /><br /><br /><br />
<br /><br /><br /><br /><br /><br />
</center>
</b>
</body>
</html>
```

Linking to an FTP Site

- Linking to an FTP site requires a URL using the FTP protocol. Unlike WebYoda, not all Web sites have FTP sites. When linking to an FTP site, it is important to use a front slash "/" at the end of the URL to view the root of the FTP site.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>WebYoda's FTP Site</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
WebYoda's <a href="ftp://www.webyoda.com/">FTP Site</a>
</center>
</b>
</body>
</html>
```

Linking to Local Drives

- To link to a local drive, your URL requires the "file" protocol.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Drive C: Directory</title>
</head>
<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<a href="file:///C:/">View</a> Drive C:
</center>
</b>
</body>
</html>
```

Linking to Local Drives

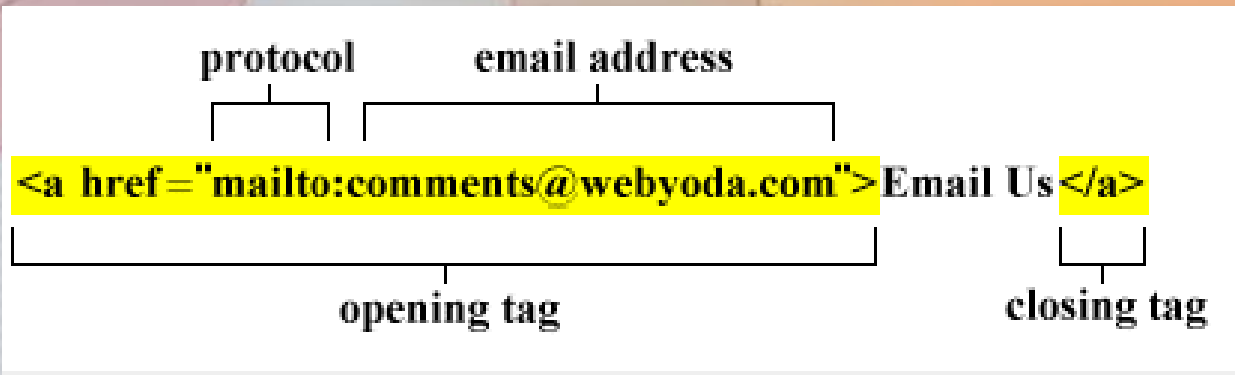
- Be aware that the "file" protocol has falsely scared users into thinking their machines are vulnerable to outside attacks. The "file" protocol is completely safe, runs only locally, and does not send information across the Internet.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Security Sham</title>
</head>
<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<h2>Security Sham</h2>
Beware, I can access your

<a href="file:///c:/bootlog.txt">System Files</a>
</center>
</b>
</body>
</html>
```

Linking to Email

- To create a link that allows your Web site visitor to send Email, your URL requires the "mailto" protocol.
- Unlike most other protocols, the "mailto" protocol uses just a colon ":", not a "://", to separate it from the rest of the URL.



Linking to Email

- The "mailto" protocol is compatible with most browsers and is the easiest way to send Email from a Web site.
- The "mailto" protocol only works as intended when client Email software is set up and defined for the user's computer.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Email WebYoda</title>
</head>

<body bgcolor="#bdbdbd" text="black" link="blue" vlink="purple">
<br />
<b>
<center>
<a href="mailto:comments@webyoda.com">Email</a> WebYoda.
</center>
</b>
</body>
</html>
```


Adding a Title

- Adding the title attribute allows a help balloon to open when you hover over an anchor.

```
<a href="mailto:sstephenson@burlesonisd.net" title="Click here to send an email">Mr. Stephenson.</a>
```

- Email [Mr. Stephenson.](mailto:sstephenson@burlesonisd.net)

Click here to send an email

- Exercise #4
- 
- The background of the slide features several overlapping, semi-transparent polygons in various colors including light blue, yellow, red, and orange. The polygons are scattered across the frame, creating a layered, abstract effect. The text 'Exercise #4' is positioned in the upper-left quadrant of the slide.