

Unit 8

The World Wide Web

When you browse the Web, you view multimedia pages composed of text, graphics, sound, and video. The web uses hypertext links that allow you to jump from one place to another on the Web. The language that allows you to use hypertext links and to view Web pages is called Hypertext Markup Language, more commonly known as HTML.

The Web works on a client / server model in which the client software known as Web browser runs on a local computer. The server software runs on a Web host. To use the Web, you first make an Internet connection, and then launch your Web browser.

In a Web browser, you type the URL for a location you want to visit or click on a link that will send you to the desired location. The names for Web locations are URLs (universal resource locators.) Your Web browser sends the URL request using HTTP (Hypertext Transfer Protocol), which defines the way the Web browser and the Web server communicate with one another.

Here is an example of a URL:

`http://www.zdnet.com`

URLs contain several parts. The first part - the " http:// " – details which Internet protocol to use. The second part - the part that usually has a "www" in it - sometimes tells what kind of Internet resource is being contacted. The third part - such as "zdnet.com" - can vary in length and identifies the Web server to be contacted. The final part identifies a specific directory on the server and a home page, document, or other Internet object.

The request is sent to the Internet. Internet routers examine the request to determine which server to send the request to. The information to the right of the "http://" in the URL tells the Internet on which Web server the requested information can be found. Routers send the request to that Web server.

The Web server receives the request using the HTTP protocol. It is told which specific document is being requested. Having found the requested home page, document, or object, it sends that home page, document, or object back to the Web browser client. The information is then displayed on the computer screen in the Web browser. When the page is sent from the server, the HTTP connection is closed.

The home page is the first or top page of any Website. A site can be just one page, or can comprise dozens or even hundreds of pages. In the latter case, the home page acts as a table of contents and can help users find information available on the site.

Highlighted hyperlink text is often embedded in the home page. The hyperlinks serve to connect the top page with other pages throughout the site. Related documents residing together on a Web host computer make up a Website. However a single server can host multiple Websites, each contained in a separate area or directory, much like a hard drive can accommodate multiple directories. Some Websites are so large and heavily trafficked that they cannot fit on a single server and require multiple servers.

Good Web design principles suggest that pages throughout a site link back to the home page. Tills approach allows users to always find their way back to the top of a site in order to navigate in other directions. Documents within a site can be linked to any other document in the site and even to documents on other sites.