**The World Wide Web**

The World Wide Web is an interlinked system of computers that supports graphics, multimedia, and text. The navigability of the Web gives it an advantage over paper forms of communication. Tim Berners-Lee, at the European Organization for Nuclear Research (CERN), developed the World Wide Web between 1989 and 1990. The Web was introduced in December 1990 at CERN in Switzerland and made available to the public on the Internet in 1991.

**Web Pages**

Located on the World Wide Web are pages created by companies, individuals, educational institutions, government agencies, and other groups to convey information, sell products and services, communicate, and present multimedia in the form of video and audio. Web pages are primarily created using a coding language called Hypertext Markup Language (HTML). A new standard in Web page coding is Extensible Markup Language (XML). XML allows developers to create their own customizable tags to define, transmit, validate, and interpret data between applications and technologies. Both are cross-platform languages recognized by PC, Mac, Linux, UNIX, and other platforms. Basic components of a typical Web page are described in figure 1.1.

* 1. **Typical Web Page Components**

|  |  |
| --- | --- |
| ***Element*** | ***Description*** |
| **Background** | Can consist of solid colors, tiled patterns and images, a sidebar, or a watermark |
| **Page Banner or Title** | Identifies contents of page; may also include addresses, contact information, slogans, and graphics |
| **Page Content** | Includes the information that brought the visitor to the page and may contain a combination of text, graphics, tables, animation, and/or multimedia |
| **Graphical Images** | Make up a large part of a Web page, including banners, figures, photos, animation, buttons, and hyperlinks. |
| **Hyperlinks** | Interconnect users to Web pages through content associations; can consist of both textual and graphical elements. |

**Web Browsers**

Millions of people access the World Wide Web each day using a software program called a Web browser. Browsers enable users to navigate the Web using textual and graphic hyperlinks. Web browser software programs interpret HTML and other codes for display on the screen. Some content, such as Macromedia Flash animation, requires an additional browser plug-in player to be installed before the browser can interpret it. The two most popular Web browsers today are Chrome and Safari.

**URLS**

Accessing a Web page is as easy as entering its address, the Uniform Resource Locator (URL). The URL has four parts (see figure 1.2). The protocol is the standard method of transmission between computers. The domain name refers to an individual’s or organization’s Web site and links users to its home page. The path identifies a folder, or subweb, that has been created on the Web site. A particular Web page may be located several subwebs or folders into the site. The fourth part of the URL refers to the Web page file or document stored on the host computer. Most Web pages will end in either .htm or.html.

* 1. **Components of a URL**

**Path (Folder or Subweb)**

**Domain Name**

**Web Page File Name**

**Protocol**

**www.intel.com/**

**Index.htm**

**home/pentium4/**

**http://**