Report on web programming

Technology

INTRODUCTION TO HTML What is HTML? The explosive growth of the World Wide Web is relatively unprecedented, although it resembles the desktop publishing revolution of the early and mid-1980s. As personal computers became more common in homes and offices, people began to learn to use them for document creation and page layout. Although early word processing programs were not terribly intuitive and often required memorizing bizarre codes, people still picked them up fairly easily and managed to create their own in-house publications.

Suddenly, the same kind of growth is being seen as folks rush to create and publish pages of a different sort. To do this, they need to learn to use something called the Hypertext Mark-up Language (HTML). HTML at a Crossroads HTML and the World Wide Web in general are currently in a stage of development similar to that of the desktop publishing revolution. Still working to reach maturity as a standard, HTML is feeling the same growing pains that early word processing programs did-as more users flock to HTML, there is a growing need to standardize it and make it less complex to implement.

These days, word processors are much more intuitive than they were 15 years ago. There are fewer codes and special keystrokes required to get something done. The applications have matured to the point where most of the low-level formatting is kept hidden from the user of the application. At the same time, the printed page is now more completely mirrored on the computer screen, with accurately represented fonts, emphasis, line breaks, margins, and paragraph breaks. Although programs are quickly being

developed to offer similar features for HTML development, these tend to be less than ideal solutions.

Currently then, anyone who decides to learn HTML is going to have to know some codes, memorize some syntax, and develop pages for the World Wide Web without the benefit of seeing all the fonts, emphasis, and paragraph breaks beforehand. But anyone who has had any success with word processing programs of ten or 15 years ago (or desktop publishing programs as recently as five years ago) will have little or no trouble learning HTML. Ultimately, you'll see that HTML's basic structure makes a lot of sense for this emerging medium-the World Wide Web.

And, as with most things computer-oriented, you'll find that once you've spent a few moments with it, HTML isn't nearly as difficult as you might have originally imagined. A Short HTML History HTML developed a few years ago as a subset of SGML (Standard Generalized Mark-up Language) which is a higher-level mark-up language that has long been a favorite of the Department of Defense. Like HTML, it describes formatting and hypertext links, and it defines different components of a document.

HTML is definitely the simpler of the two, and although they are related, there are few browsers that support both. Because HTML was conceived for transmission over the Internet (in the form of Web pages), it is much simpler than SGML, which is more of an application-oriented document format. While it's true that many programs can load, edit, create, and save files in the SGML format (just as many programs can create and save programs in the Microsoft Word format), SGML is not exactly ideal for transmission across the

Internet to many different types of computers, users, and browser applications.

HTML is more suited to this task. Designed with these considerations in mind, HTML lets you, the designer, create pages that you are reasonably sure can be read by the entire population of the Web. Even users who are unable to view your graphics, for instance, can experience the bulk of what you're communicating if you design your HTML pages properly. At the same time, HTML is a simple enough format (at least currently) that typical computer users can generate HTML documents without the benefit of a special application.

Creating a WordPerfect-format document would be rather difficult by hand (including all of the required text size, fonts, page breaks, columns, margins, and other information), even if it weren't a " proprietary"-that is, nonpublic-document format. HTML is a public standard, and simple enough that you can get through a book like this one and have a very strong ability to create HTML documents from scratch. This simplicity is part of a trade-off, as HTML-format documents don't offer nearly the precision of control or depth of formatting options that a WordPerfect- or Adobe PageMaker-formatted document would. Marking Up Text

The most basic element of any HTML page (and, therefore, any page on the Web) is ASCII text. In fact, although it's slightly bad form, a single paragraph of regular text-generated in a text editor and saved as a text file-can be displayed in a Web browser with no additional codes or markings An example of this might simply be: Remember that HTML-formatted documents aren't that far removed from documents created by a word processing program,

which are also basically text. Marking up text, then, simply means you add certain commands, or tags, to your document in order to tell a Web browser how you want the document displayed.

One of the most basic uses for HTML tags is to tell a browser that you want certain text to be emphasized on the page. The HTML document standard allows for a couple of different types of emphasis including explicit formatting, where you choose to make something italic as opposed to bold, or implicit formatting, where it's up to the browser to decide how to format the emphasized text. Using part of the example above, then, an HTML tag used for emphasis might look something like this: Welcome to my home on the World Wide Web.

In this example, and are HTML tags that tell the Web browser which text (in this example, my home) is to be emphasized when displayed. The browser isn't just displaying regular text; it has also taken into account the way you want the text to be displayed according to the HTML tags you've added. Tags are a lot like margin notes you might make with a red pen when editing or correcting term papers or corporate reports. After you've entered the basic text in a Web document, you add HTML mark-up elements to tell the browser how you want things organized and displayed on the page.

In most word processing documents, the " mark up" that describes the emphasis and organization of text is hidden from the user. HTML, however, is a little more primitive than that, as it allows you to manually enter your text mark-up tags to determine how the text will appear. You can't do this with an MS Word document, but, then again, MS Word documents aren't the standard for all Web pages and browsers on the Internet! The World Wide

Web and Web Servers Probably the most important thing to remember about the World Wide Web and the Internet in general is that they are global in scale and often a very cooperative venture.

Information on the Web tends to be distributed around the world, and it's just as easy for you to access a site in New Zealand or Japan as it is to access Web information in your own state. The basic reason for learning HTML is to create pages for the World Wide Web. Before you start, though, you'll want to know a little about how this whole process works. We'll begin by taking a look at Web browsing programs, then we'll talk about how the World Wide Web works, and we'll discuss some of the terms associated with surfing the Web.

Finally, we'll round out the discussion by talking about the Internet in general and the different services available on the Internet and how they interact with the Web. What's the World Wide Web? The World Wide Web is an Internet service, based on a common set of protocols, which allows a particularly configured server computer to distribute documents across the Internet in a standard way. This Web standard allows programs on many different computer platforms (such as UNIX, Windows 95, and the Mac OS) to properly format and display the information served.

These programs are called Web browsers. The Web is fairly unique among Internet services (which include Internet e-mail, Gopher, and FTP) in that its protocols allow for the Web server to send information of many different types (text, sound, graphics), as well as offer access to those other Internet services. Most Web browsers are just as capable of displaying UseNet newsgroup messages and Gopher sites as they are able to display Web

pages written in HTML. This flexibility is part of what has fueled the success and popularity of the Web.

Not only do the Web protocols allow more interactive, multimedia presentations of information, but the typical Web browser can also offer its user access to other Internet resources, making a Web browser perhaps a user's most valuable Internet application. The World Wide Web is the youngest and most unique of the Internet services. Its protocols allow it to transmit both text and multimedia file formats to users, while also enabling Web browsers to access other Internet services. The Web is based on a concept called hypertext, which means that text within the paragraphs on a Web page is designed to act as links to other Web pages.

There is no hierarchy on the Web, which is only loosely organized by this system of links. Other services that can be accessed via the Web include Gopher, WAIS, UseNet, e-mail, and FTP. Each of these older Internet services has its own scheme for formulating addresses. Most of these services require a server computer of some sort to allow Internet applications to access their information. These server computers have specific addresses on the Web which you need to know in order to contact them. The World Wide Web is the youngest and most unique of the Internet services.

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For example, consider this line of HTML: This is in Italics. But this isn't. The first HTML tag, , turns on italics. The second tag, , turns them off. When displayed on-screen, this line of text would look like this: This is in Italics. But this isn't. The tags themselves don't appear on-screen. They just tell the browser program how to display the elements they contain. The simplest possible HTML document is given in Listing 4. 1. The entire document is enclosed in the container tags. The first part of the document is encapsulated in the container, which itself contains a container.

Finally, the body of the page is contained in a container. The Simplest HTML Document A Very Basic HTML Document My name is Ogbonnaya Stephen Success. The most fundamental of all the tags used to create an HTML document is, not surprisingly, the tag. This tag should be the first item in your document and the corresponding end tag, , should be the last. Together, these tags indicate that the material contained between them

represents a single HTML document (refer to Listing 4. 1). This is important because an HTML document is a plain text ASCII file.

Without these tags, a browser or other program isn't able to identify the document format and interpret it correctly. Brief Introduction to PHP What is PHP? PHP stands for PHP: Hypertext Preprocessor PHP is a server-side scripting language, like ASP PHP scripts are executed on the server PHP supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.) PHP is an open source software PHP is free to download and use Basic Requirements in Working with PHP Notepad++ Xampp server Web Browser 2. 5. 2 SOFTWARE DEVELOPMENT TOOL NOTEPAD++; Notepad++ is a text editor and source code editor for Windows.

Fig 2. 5. 2a Screen shot on Notepad++ XAMPP; is a free and open source cross-platform web server solution stack package, consisting mainly of the Apache HTTP Server, MySQL database, and interpreters for scripts written in the PHP and Perl programming languages. X (meaning cross-platform) Apache HTTP Server MySQL PHP Perl The program acts as a free web server capable of serving dynamic pages. XAMPP is available for Microsoft Windows, Linux, Solaris, and Mac OS X, and is mainly used for web development projects. This software is useful while you are creating dynamic webpages using programming languages like PHP, JSP, Servlets.

Uses Officially, XAMPP's designers intended it for use only as a development tool, to allow website designers and programmers to test their work on their own computers without any access to the Internet. To make this as easy as possible, many important security features are disabled by default. In

practice, however, XAMPP is sometimes used to actually serve web pages on the World Wide Web. A special tool is provided to password-protect the most important parts of the package. XAMPP also provides support for creating and manipulating databases in MySQL and SQLite among others.

Fig 2. 5. 2b XAMPP control Panel Application 2. 5. 3 Basic PHP Syntax A PHP scripting block always starts with . A PHP scripting block can be placed anywhere in the document. A PHP file normally contains HTML tags, just like an HTML file, and some PHP scripting code. Below, is an example of a simple PHP script which sends the text " Hello World" to the browser: Fig 2. 5. 2 A simple program in PHP using notepad++ The output of this will be gotten by making sure that my xampp server is running and putting in the right address in my web browser. Fig 2. 5. b showing webpage output displaying " Hello World". Each code line in PHP must end with a semicolon. The semicolon is a separator and is used to distinguish one set of instructions from another. There are two basic statements to output text with PHP: echo and print. In the example above we have used the echo statement to output the text " Hello World". 2. 5. 3 Comments in PHP In PHP, we use // to make a single-line comment or /* and */ to make a large comment block. Below is a simple program showing single comment line and multiple comment line Fig 2. 5. showing comment line Below is a simple PHP code on PHONEBOOK. This program is able to Add and Delete Name and Phone number in a Phonebook. Fig 2. 5. 4 Output for Adding Data in a Phone Book. From the Output above adding contact name and Phone number, saves the data into the Phone book. While deleting contact also deletes Name and Phone Number in the Phone book. Fig 2. 5. 5; Output after adding Contact Name and Phone

number in a Phonebook. The code shown below is a Code Behind file for the

sample Phone Book Application that was developed using PHP/MYSQL. Code

Behind File