Network Update

Plug-Ins, Forms and All That Java
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Introduction

You have probably seen sites where you fill out a form and submit it. In a matter of moments a response comes back. You may have gone to a site and received a message that you need a “plug-in” for the page to work properly. You have probably seen sites where icons or graphics are animated such as a globe rotating or a letter being sealed and sent. You have probably asked yourself, “How can I do that?”

In the last issue I presented a variety of sites related to HTML and web page design. However, it is not only HTML which can be used to develop web pages. HTML is just the beginning. The desire to make pages more interactive and laden with animation, sound and video brings us to the threshold of the deeper levels of web page creation. It is these dynamic functions of the World Wide Web that entice us and challenge us.

CGI script, JavaScript, PERL script, VRML, plug-ins are just a few of the resources which allow you to create highly interactive multimedia web sites. Below you will find some of the resources available on the WWW which will help you learn and use these dynamic functions for web page development.

CGI

Many language sites are now setting up interactive activities on the web for their students. The basis for these sites are CGI scripts which work on the host server to interpret the information sent via the form and respond. At Virginia Commonwealth University where many of their faculty have created interactive lessons on the web, there is a site called Language Interactive to help language educators create
dynamic web pages. There are many other sites which offer introductory guides and tutorials for learning CGI.

Language Interactive—An introduction for language and humanities teachers to the ins and outs of creating dynamic Web pages, especially to Web forms and CGI Scripting: http://www.fln.vcu.edu/cgi/interact.html.

Language Interactive: SCRIPTING GUIDE: Web Scripting for Language Learning—This guide provides a starting point for language teachers interested in adding interactivity to their own work or student-generated Web pages: http://www.fln.vcu.edu/cgi/guide.html.

World Famous CGI Shop—A list of resources including tutorials to learn and write CGI scripts: http://www.Lpage.com/cgi/.

An Introduction to CGI Programming—This document contains an introductory tutorial on CGI programming, including some example CGI programs. After completing this tutorial you will be able to develop your own CGI programs: http://www.usi.utah.edu:80/bin/cgi-programming/counter.pl/cgi-programming/index.html.

The Common Gateway Interface—A general introduction to CGI: http://hooihoo.ncsa.uiuc.edu/cgi/overview.html.

PERL Script

Perl is a practical programming language frequently used for creating CGI Scripts. It is great for scanning text files, extracting information from files, and printing reports based on that information.

The Perl Language Home Page—gives an introduction to the Perl programming language with details on the latest version: http://perl.com/perl/.

perlWWW—is a list of Perl programs and libraries related to the WWW. It also offers a good list of resources for using Perl for programming interactive web pages: http://www.oac.uci.edu/indiv/ehood/perlWWW/.

WWW Protocol Library for Perl—is a library of Perl packages/modules which provides a simple and consistent programming interface to the World Wide Web: http://www.ics.uci.edu/pub/websoft/libwww-perl/.

Perl Guru Homepage—is a list of perl-related sites for programming and CGI scripting: http://perl.guru.org/.

JavaScript

While Java is actually a programming language, much like C++, JavaScript is an object-based scripting language for developing Internet applications. It complements CGI and can be used to create interactive web pages.

All About Java and JavaScript—This site answers some of
the basic questions about Java and JavaScript and how they can be used for instruction: http://ampere.scale.uiuc.edu/~wvanwaze/demo/.


JavaScript Resources—These sites feature JavaScript resources and examples: http://home.netscape.com/comprod/products/navigator/version_2.0/script/script_info/index.html.


Kneedeep in Java—A new tutorial for the programming language Java. It is not meant to be a beginners guide to Java. Here we discuss advanced topics of Java - for example how sophisticated graphic effects can be programmed: http://rummelplatz.uni-mannheim.de/~skoch/javatut/kneedeep.htm.

Virtual Reality Modeling Language

The Virtual Reality Modeling Language or VRML allows you to create three-dimensional virtual worlds. This seems to be the next step in interactive multimedia via the WWW.

The VRML Foundry—is a site dedicated to help visitors learn about and develop virtual worlds: http://www.mcp.com/general/foundry/.

Silicon Graphics VRML Site—has information on how to view virtual worlds and the story of VRML. It also has a section on how to develop with VRML: http://vrml.sgi.com/intro.html and http://vrml.sgi.com/experts/.

The VRUniverse—presents a good introduction to VRML and Virtual Worlds as offering tutorials in the creation of virtual worlds: http://www.vruniverse.com/vrml.shtml.


The sites listed above are just a few of the sites which help people learn how to create some of the more dynamic functions available on the WWW. But what about using them? Many of the basic programs created with JavaScript, Perl, VRML and CGI will work with Netscape and Microsoft Internet Explorer. However there are some of the more high end multimedia tasks which need some external help to work: plug-ins.
Plug-ins are external programs which allow sound, graphics and video to function concurrently with a WWW page. Shockwave, Crescendo and Real Audio are just a few of the plug-ins which bring life to the text and graphics of a standard HTML page. Below is a description of various types of plug-ins and resource sites for finding and downloading them.

Plug-In Plaza!—is a site where you can find links to “all” of the plug-ins available on the net with descriptions of each including platform and contact information: http://browserwatch.iworld.com/plug-in.html.

Netscape Inline Plug-Ins—Netscape has a huge list of plug-ins divided into categories such as 3D and animation, audio/video, business and utilities, image viewers, presentations and what’s new: http://home.netscape.com/comprod/products/navigator/version_2.0/plugins/index.html.

Macintosh Plug-Ins—is a site with a list of plug-ins specifically for the MAC: http://home.pacific.net.sg/~hattrick.

Yahoo’s List of Plug-In Sites for WWW Browsers—gives links to many plug-in related sites: http://www.yahoo.com/Computers_and_Internet/Software/Internet/World_Wide_Web/Browsers/Plug_Ins/.

Here are some of the most commonly used plug-ins (at least in my experience).

Shockwave by Macromedia—is the industry standard for delivering and experiencing quality interactive multimedia, graphics, and streaming audio on the World Wide Web: http://www.macromedia.com/.

Crescendo by LiveUpdate—delivers high-quality stereo MIDI music to the Web: http://www.liveupdate.com/crescendo.html.


RealAudio by Progressive Networks—provides live and on-demand real-time audio with broadcast quality stereo over 28.8 modems, and near CD-quality audio at ISDN and LAN speeds: http://www.realaudio.com/.


Watermark Webseries Viewer by Filenet—turns Netscape Navigator into your industry-standard TIFF viewer for

Astound Web Player by Gold Disk Inc.—is a Netscape plug-in that plays dynamic multimedia documents created with Gold Disk’s award-winning Astound or Studio M software: http://www.golddisk.com/.

Powerpoint Animation Player & Publisher by Microsoft—provides users with the fastest, easiest way to view and publish PowerPoint animations and presentations in your browser window: http://www.microsoft.com/mspowerpoint/internet/player/default.htm.

As we take the step from web page presentation to web-based interactive multimedia, these sites offer information on some of the dynamic functions available via the web.

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The third in a series of jointly sponsored conferences and the first to be held in North America. Sponsors: LLA, Language Laboratory Association of Japan and IALL, the International Association for Learning Laboratories.

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—Rudyard Kipling

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