VBNF
VANCOUVER BUSINESS NETWORK FORUM

Together We Build the World

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Web Programming and Applications

Introduction

In general, a Web Environment consists of two major parts: the front-end and the back-end. In another way we called the client computer and the server computer respectively. The client computer is the computer that you display the requested website such as http://www.vbnf.com. The server computer takes the request and delivers the web page to the client computer. This backend process is usually done with a set of web pages (web programs or scripts).

What is Web Programming?

- Web Programming (or called Backend Processing.) is a set of smart programs that can process information entered to a website. A most simple example is when you fill in a form and press the Submit button. The information that you have provided to the form will be analyzed, and the requested information will be displayed on the next screen. This process is done by the server computer (or called Web server) not your computer at home or at office.
- Most of the Internet sites today have some kind of intelligence to determine what the next step is whenever a button is clicked. This is different from hyperlinks or linking to a different website.

Two Basic Types of Website

- Static Website – in the early days when internet was not fully developed, most (or likely all) websites were strictly providing information to the viewers. Some sites had hyperlinks to take to you the other sites, so that more related information could be viewed. This kind of websites still exists today. However, today static sites can have attractive animated graphics and cartoon like

characters jumping across the screen. Some of them were done using a simple language called JavaScript. JavaScript is not a backend programming language. *Obviously, well planned website layouts and designs are keys to this type of website.*

- Dynamic Website – eBay, Yahoo, and Google are sites that are built with heavy backend programming so that they can return information at your request. One good example with this type of website is the search engine. Besides the returned results for the search, they also track the number of times that the viewers searched. With this information, they can improve their site contents. *Obviously, appropriate information capturing and processing are keys to the success of this type of websites.*

A good website must blend in the strengths of both Static and Dynamic technologies.

Benefits of having a Dynamic Website

A good website must have at least three components working seamlessly:

1. Effective Presentation (constituting with web design, color and graphics, and friendly navigation)
2. Efficient Data Processing (web programming is required to extract appropriate information)
3. Reliable Computer Network (speed of delivery is usually dictated by the hosting environment and local IP connection)

With a dynamic website, this will enable you:

- to know your customers better
- to provide information as requested
- to use information for website content improvement
- to connect and pass relevant information to other sites for downstream processing (e.g. bill payment)
- to present different contents for different members (e.g. Yahoo)

A well planned design and implementation can result with an unlimited power website.

Some applications

- Member Registration with Login
- eCommerce (online Shopping and Payment)
- Newsletter email Management
- Customer Survey
- Video Streaming
- Electronic Greeting Cards
- Online Photo Sharing and Professional Printing Services
- Etc.

Future of web technology

The future will be a fully interactive multimedia global network with rich information (text, sound and video) projected wirelessly that you can access anywhere, anytime

with any device. We can almost do that today but unfortunately the wireless technology has restricted the performance of high quality and high speed video streaming.

About David Ho

David has over 30 years experience in computer networking, application development and project management. He has involved and designed web applications from the beginning of internet technology. Currently, he is the IT Director of CMY Designs. More of his experience can be viewed at http://www.cmydesigns.com/ourteam.html

He has designed and developed the web programming of VBNF and is the team lead for other projects.

In concert with website designs and hyperlinks, web programming is used by many Enterprise corporations to automate some of the Operations to reduce costs and be effective.

Please go to www.cmydesigns.com and www.vbnf.com to see our work.