Introduction to Computer Programming: PHP, it's not just for pre-processing hypertext anymore

Continuing education only – not for college credit

Background: Many "computer languages" have been proposed since the creation of the first programmable general purpose digital computers way back in the 1940's, most intended for special applications but a few designed for general use. However, before comparing one language to another, one must be careful to properly characterize the inherent nature of each language: 1) to be considered a "programming" language, the defined syntax and symantics *must* facilitate the implementation of a logical flow of the desired process algorithm, *e.g.*, COBOL or C; and 2) lacking the ability to implement logic, the language should be considered more of a support facility to a true programming language, *e.g.*, HTML (a so-called "Markup" language) or CSS (a so-called "Style Sheet" language). Thus, one would be wise first to develop a basic capability in designing and composing a "program" in a programming language before exploring in depth any of the support languages.

Prerequisites: High-school level reading and writing skills; basic understanding of how a problem may be reduced to a reasoned series of steps, logically arranged so as to produce a solution to the problem. Basic capability of operating a modern desk-top/lap-top computer, preferably one of the products available from Apple, Inc.

Course Description: I shall introduce students to the popular *server-side scripting* language "PHP" (a recursive *backronym* for "PHP: Hypertext Preprocessor"). PHP is a very nice programming language, and, despite being originally intended for preprocessing hypertext, I will demonstrate that this language is entirely capable of implementing almost any process algorithm one might wish to perform on a computer. Once I introduce you to the basic syntax and symantics of PHP, you will quickly be able to compose simple, executable programs that produce visible output. With a bit more exposure to some of the more powerful features built-in to PHP, you will soon be creating more exciting "applications", capable of displaying text, images and even videos. Most importantly, I will introduce you to sound programming practices that, if followed, will make your programs easier to understand to others and to yourself when revised after some significant period of time. Time permitting, I will teach you how to interact with a locally-hosted database, and to generate and *serve* HTML pages to your local browser.

Jeff Meyers holds a J.D. Law, from Oklahoma City University Law School, a M.S. in Business Administration, specializing in Data Automation Processing, from George Washington University, and a B.S. in Mathematics, specializing in Computer Sciences, from the University of Oklahoma. Jeff was admitted to practice before the U.S. Patent and Trademark Office (1974), the Oklahoma State Bar (1976), and the Texas State Bar (1980). He is a member of IEEE and ACM. He has prepared and presented numerous papers at continuing legal education forums on topics of interest to the IP Bar and has been18 issued U.S. Patents in computer hardware and software, and more pending. He has professionally (and privately) prepared and executed many hundreds of computer programs, ranging in scale from quite modest to very large, using more than 35 different languages, many at the machine or assembly level and others at higher levels, on a wide spectrum of computers offered commercially by: International Business Machines: 1620, 1401/1410, System/360, *et al*., Honeywell International, Inc.: H200/H800/H1800, Burroughs Corporation: B3500, General Electric: GE635, Univac: 1108, National Cash Register Corporation: Century 100, Apple, Inc.: MacIntosh (Motorola 68000/PowerPC and Intel X86)