Essential Skills for First-Time Programmers

# PHP4

## A Beginner's Guide

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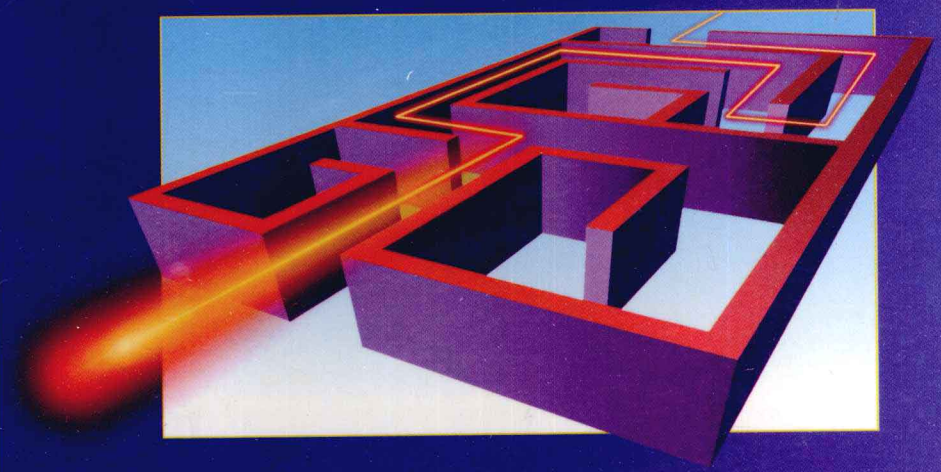

Bill McCarty
*Computer book author and* Linux Magazine *columnist*

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# PHP 4:
## A Beginner's Guide

Bill McCarty

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*This book is dedicated to John C. Reynolds, Chief Information Officer at Azusa Pacific University. May God bless his efforts to lead APU into a new awareness of technology and the potential benefits it offers.*

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# Introduction

PHP is one of the most exciting technologies available today. Because it combines ease of use with sophisticated capability, PHP has quickly become a leading tool for web development. Unlike other popular web development tools, however—such as Perl—PHP is a comfortable programming language for beginners, even those who haven't previously programmed.

If you know HTML but have no programming experience, you may wonder what additional capabilities an understanding of PHP can provide. Like other web scripting languages, PHP lets you provide *dynamic web content*; that is, web content that automatically changes from day to day or even minute to minute. Dynamic content is an important element in sustaining web site traffic; visitors usually won't return to a web page if it offers the same information it presented the last time they visited. Web sites that *are* frequently updated, however, can draw enormous volumes of traffic.

Moreover, unlike scripting languages, such as Javascript, PHP runs on the web server, not in the web browser. Consequently, PHP is able to access files, databases, and other resources that Javascript cannot. These are rich sources of dynamic content that attract visitors.

This book is intended to introduce the reader to programming and web development using PHP. It's important to be clear that the book itself is merely a starting point. Web development is a demanding activity and the would-be

web developer must possess many skills, programming being only one of them. I trust that beginning web developers will find this book a useful and friendly first step in the craft of PHP programming. Moreover, this book has been carefully designed to provide a foundation for the further learning that mastery of PHP entails. After studying this book, the reader should be prepared to learn more about sophisticated PHP features and capabilities, such as XML, LDAP, and E-commerce.

# How This Book Is Organized

This book begins at the beginning, by explaining how PHP works, then moves on to explain how to create PHP programs, outlining the small but important details, such as how to upload PHP scripts. It contains a review of HTML fundamentals and an explanation of HTML forms. Its seventeen modules take a measured approach in gradually introducing programming concepts and PHP particulars, each one including elements designed to reinforce the reader's recall and understanding. In addition, the book contains a module (Module 13) that explains the fundamentals of relational databases.

## Goals

Every module begins with a set of explicit goals, so you have an idea how each module fits into the bigger picture.

## Mastery Check

A Mastery Check, a self-test that helps you evaluate your progress, also appears in every module. Answers to Mastery Check items can be found in Appendix A.

## 1-Minute Drills

Each major section of the book contains a 1-Minute Drill, a self-test that helps you avoid falling asleep at the wheel. You can find the answers to 1-Minute Drill items at the bottom of the pages where they appear.

## Ask the Expert

The book includes many Ask the Expert boxes. These amplify and qualify material given in the associated chapter. Often, they contain more advanced

material that isn't essential to the beginning PHP programmer, but helps the reader look ahead to intermediate-level PHP concerns. Ask the Expert boxes use a question/answer format.

### Projects

Each module contains one or more projects that show you how to apply the concepts and techniques explained therein. You can then use these projects as the basis for further study and experimentation. Often, the project provides a good starting point for your own real-world program.

## No Previous Programming Experience Required

This book assumes you have some familiarity with HTML, and assumes little else. In particular, it does not presuppose you have programming experience. Because of this, it explains how to create HTML forms, how to program, and use PHP, and describes everything you need to know in order to develop simple, database-backed web sites using PHP.

## Required Software

To run the examples and projects in this book, you'll need access to a PHP server running PHP version 4. You can install PHP on your own PC, using the information provided in Appendix B. However, as a beginner, you may find it more convenient to use a PHP server administered by someone else. Appendix C points you to some web sites that identify Internet service providers (ISPs) who support PHP. Many ISPs provide PHP at prices of $20 per month or less.

## Don't Forget: Code on the Web

The source code for all the examples and projects in this book is available free of charge on the Web at http://www.osborne.com.

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