



INTRODUCTION

If you're looking at this book, then I probably don't need to tell you how great PHP is. Presumably, since you're perusing the pages of an advanced text on the topic, you are already using PHP for developing dynamic Web sites. Maybe you've been doing so for a couple of years, perhaps just a couple of months. You could have learned PHP on your own, in a class, or by reading one of the many excellent books on the subject. (I'm referring not just to my own, of course!) Whatever the case, with some experience under your belt, you probably don't want another "here's how to use PHP and isn't it swell" book. What you probably want to learn is how to use PHP more efficiently, more securely, faster, and all-around better than you already are. If so, you've found the right book.

In this humble author's (or not-so-humble author's) opinion, advanced PHP is about learning: how to do different things, how to improve upon the basic things, and about technologies that intersect with PHP. In short, you know how to make a dynamic Web site with PHP, but you'd like to know how to make a *better* Web site, with every possible meaning of "better." That's the approach I've taken in writing this book. I've not set out to blow your mind discussing esoteric idiosyncrasies the language has, rewriting the PHP, MySQL, or Apache source code, or making theoretically interesting but practically useless code. In short, I present to you several hundred pages of beyond-the-norm but still absolutely necessary (and often cool) tips and techniques.

About This Book

Simply put, I've tried to make this book's content accessible and useful for every PHP programmer out there. As I suggest in the introductory paragraphs, I believe that "advanced" PHP is mostly a matter of extended topics. You already possess all the basic knowledge—you retrieve database query results in your sleep—but want to go further. This may mean learning object-oriented programming (OOP), using PEAR (PHP Extension and Application Repository), incorporating Ajax (Asynchronous JavaScript and XML) into a site, or improving upon aspects of your existing skill set.

My definition of advanced PHP programming covers three loosely grouped skills:

- ◆ Doing what you already do better, faster, and more securely
- ◆ Learning more sophisticated PHP techniques
- ◆ Doing standard things using PHP and other technologies (like PEAR, Ajax, or OOP)

This book can be divided into three sections, corresponding to those skills. The first five chapters cover advanced PHP knowledge in general: programming techniques, Web applications, databases, security, and e-commerce. They all cover information that the average PHP programmer may not be familiar with but should be able to comprehend, providing useful code in the process.

The next six chapters focus on extending your knowledge to areas of PHP with which you might not be as familiar. Half of this section goes over object-oriented programming in great detail, from the fundamentals to advanced topics to some real-world examples. The other three chapters are on different ways you might use PHP: to communicate with

networked servers, to communicate with the host server, or from a command-line interface. The remaining three chapters each deal with a specific technology tied into PHP: PEAR, Ajax, and XML.

Two bonus chapters, “Image Generation” and “Creating PDFs”, can be downloaded from Peachpit’s Web site. Those two chapters, which are available for free, provide another 100 pages of content showing how PHP ties into related, and very useful, technologies. Visit www.peachpit.com/title/0321376013 to learn how to register this book and download the chapters.

Most examples used in this book are intended to be applicable in the real world, omitting the frivolous code you might see in other books, tutorials, and manuals. I focus as much on the philosophies involved as on the coding itself so that, in the end, you will come away with not just how to do this or that but also how to apply the overarching mentality to your own, individual projects.

Unlike with most of my other books, I do not expect that you’ll necessarily read this book in sequential order, for the most part. Some chapters do assume that you’ve read others, like the object-oriented ones, which have a progression to them. Some later chapters also reference examples completed in earlier ones. If you read the later ones first, you’ll just need to quickly hop over to the earlier ones to generate whatever database or scripts the later chapter requires.

Finally, I’ll be using XHTML in my scripts instead of HTML. I’ll also use some CSS, as warranted. I do not discuss either of these subjects in this book (and, to be frank, may not adhere to them perfectly). If you are not already familiar with the subjects, you should look at some online resources or good books (such as Elizabeth Castro’s excellent Visual QuickStart Guides) for more information.

What's new in this edition

The most important change in this edition of the book is that every bit of code has been updated, rewritten, or replaced to ensure 100 percent compatibility with PHP 5. Many of the examples have also been modified to take advantage of features added to the language.

What is also new is my approach. The first edition of this text was the second book I ever wrote. I've learned a lot since then, both in terms of PHP and in terms of what readers expect in a book. A lot of my valuable experience in this latter category comes from the constant interactions with other readers through email and my supporting forums (www.DMCIInsights.com/phorum/). A fair amount of material is therefore based upon frequently asked questions I see.

How this book compares to my others

Those readers who have come to this book from my *PHP for the World Wide Web: Visual QuickStart Guide* may find themselves in a bit over their heads. This book does assume comfort with standard PHP programming, in particular debugging your own scripts. I'm not suggesting you put this book down, but if you find it goes too fast for you, or assumes knowledge you don't currently possess, you may want to check out my *PHP and MySQL for Dynamic Web Sites: Visual QuickPro Guide* instead.

If you have read the *PHP and MySQL* book, or the first edition of this one, I'm hoping that you'll find this to be a wonderful addition to your library and skill set.

About PHP 5

Although version 5 of PHP has been out since July 2004 (when the first non-beta version was released), there are still a large number of servers running older versions of PHP, particularly outside of the United States. This book does assume you're using PHP 5, although some examples will work with older versions of the language.

The most important change in PHP 5, with respect to this book, is the completely different object model and syntax. Object-oriented programming in PHP 4 is a rather watered-down concept, really not worth using in comparison to PHP 5's OOP. The object-oriented chapters use PHP 5 syntax exclusively, and that code will not work on older versions of the language.

In addition, PHP 5 added support for the Improved MySQL extension, designed for use with MySQL 4.1 or later. With only one or two exceptions, I use these Improved MySQL functions instead of the older, "regular" MySQL functions. If your PHP installation (or MySQL installation) does not support these functions, you'll need to change the code accordingly.

What You'll Need

Just as this book assumes that you already possess the fundamental skills to program in PHP (and, more important, to debug it when things go awry), it also assumes that you already have everything you need to follow along with the material. For starters, this means a PHP-enabled server. At the time of this writing, the latest version of PHP was 5.2, and much of the book depends upon your using at least PHP 5.0.

Along with PHP, you'll often need a database application. I use MySQL for the examples, but you can use anything. And, for the scripts in some of the chapters to work—particularly the last five—your PHP installation will have to include support for the corresponding technology, and that technology's library may need to be installed, too. Fortunately PHP 5 comes with built-in support for many advanced features. If the scripts in a particular chapter require special extensions, that will be referenced in the chapter's introduction. This includes the few times where I make use of a PEAR or PECL class. Nowhere in this book will I discuss installation, though, as I expect you should already know or have accomplished that.

As with any issue, should you have questions or problems, you can always search the Web or post a message in my support forums for assistance.

Beyond PHP, you need the things you should already have: a text editor or IDE, an FTP application (if using a remote server), and a Web browser. All of the code in this book has been tested on both Windows XP and Mac OS X; you'll see screen shots in both operating systems.

Support Web Site

I have developed a Web site to support this book, available at www.DMCinsights.com/phpvqp2/. This site:

- ◆ Has every script available for download
- ◆ Has the SQL commands available for download
- ◆ Has extra files, as necessary, available for download
- ◆ Lists errors that have been found in the book
- ◆ Has a support forum where you can get help or assist others
- ◆ Provides a way to contact me directly

When using this site, please make sure you've gone to the correct URL (the book's title and edition are plastered everywhere). Each book I've written has its own support area; if you go to the wrong one, the downloadable files won't match those in the book.

Two bonus chapters, "Image Generation" and "Creating PDFs," can be downloaded for free. Visit www.peachpit.com/title/0321376013 to learn how to register this book and access the chapters.