



Luncheon
12:00

Project Mtg:
1:30

START TO
LEARN TO
APACHE
MYSQL and
PHP TODAY!

Apache[®], MySQL[®] and PHP

WEEKEND CRASH COURSE[®]

30 Sessions that will
get you up and running
with Apache, MySQL, and
PHP in only

***Apache[®], MySQL[®], and PHP
Weekend Crash Course[®]***

Steven M. Schafer



WILEY

Wiley Publishing, Inc.

Apache[®], MySQL[®], and PHP Weekend Crash Course[®]

Published by
Wiley Publishing, Inc.
10475 Crosspoint Boulevard
Indianapolis, IN 46256
www.wiley.com

Copyright © 2004 by Wiley Publishing, Inc., Indianapolis, Indiana. All rights reserved.

LOC: 2003113192

ISBN: 0-7645-4320-2

1B/RQ/RQ/QT/IN

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Published by Wiley Publishing, Inc., Indianapolis, Indiana
Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Legal Department, Wiley Publishing, Inc., 10475 Crosspoint Blvd., Indianapolis, IN 46256, (317) 572-3447, fax (317) 572-4447, E-Mail: permcoordinator@wiley.com.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or to obtain technical support, please contact our Customer Care Department within the U.S. at 800-762-2974, outside the U.S. at 317-572-3993 or fax 317-572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Trademarks: Wiley, the Wiley Publishing logo, and Weekend Crash Course are trademarks or registered trademarks of John Wiley & Sons, Inc., and/or its affiliates, in the United States and other countries and may not be used without written permission. MySQL is a registered trademark of MySQL AB Limited Company. All other trademarks are the property of their respective owners. Wiley Publishing, Inc., is not associated with any product or vendor mentioned in this book.

About the Author

Steven M. Schafer is a veteran of technology and publishing. He programs in several languages and works with a variety of technologies. He has been published in several technical publications and written online articles. He is currently the COO/CFO for Progeny, an open-source-based service and support company. Steve can be reached by e-mail at sschafer@synergy-tech.com.

Credits

Acquisitions Editor

Jim Minatel

Development Editor

Marcia Ellett

Technical Editor

William Patterson

Production Editor

William A. Barton

Copy Editor

Luann Rouff

Project Coordinator

Maridee Ennis

Graphics and Production Specialists

Beth Brooks

Sean Decker

Quality Control Technician

Carl William Pierce

Permissions Editor

Laura Moss

Media Development Specialist

Angela Denny

Proofreading and Indexing

Publication Services

Preface

In the early 1990s, a revolution was begun. Pioneers such as Richard Stallman, Linus Torvalds, Eric Raymond, and others created a program called Linux, a concept called *open source*, and a governing document called the *General Public License (GPL)*. Although the revolution was sparked by the advent of Linux, it was not limited to the operating system — the concept of open source software spread to all manner of programs, generating innovation across the boundaries of computing.

Innovations in open source software spawned servers such as the Apache HTTP server, the MySQL relational database, and scripting languages such as PHP.

However, open source software is not confined to running on open source operating systems — Apache, MySQL, and PHP run as well on Microsoft Windows (and other operating systems) as they do on Linux.

Thankfully, the open source world is both close-knit and prolific. Not only do these technologies work well on their own, they work even better together. Combining Apache, MySQL, and PHP, you can easily create and deploy dynamic content on your Web sites.

If you are reading this, you have already decided that knowing these technologies can be useful, and you want to learn how to use them. In that case, you have obtained the right book — this structured approach to Apache, MySQL, and PHP teaches you about all three technologies and how to integrate them in one short weekend.

Who Should Read This Book

This crash course was designed to provide you with short lessons to get you up to speed on Apache, MySQL, and PHP over one weekend. This book is for the following individuals:

- Someone who is new to running Web servers, using relational databases, and/or programming using scripting languages. This book covers many of the basic concepts and techniques necessary to get going with these three technologies. If you are new to them, you receive a serviceable background to get up and running quickly.
- Someone who has experience with similar technologies — administering servers, working with Web technologies, using relational databases, or programming. This book covers how the technologies interact, bolsters the knowledge you might already have, and shows you how to apply it to the technologies discussed in this book.

What You Need

To perform the tasks in this book, you need the following:

- **A machine running a recent copy of Linux or Windows.** This book uses Red Hat Linux 8.0 and Windows 2000 Professional. (Almost any version of Windows will do, from Windows 95 to Windows XP. However, I strongly recommended that you use Windows NT, Windows 2000, or Windows XP. These platforms provide better performance and more stability for server applications.)
- **Apache version 2.x, MySQL version 4.x, and PHP version 4.x.** The first three sessions of this book tell you where to get them and explain how to install each. This book was written based on the aforementioned versions. If you use other versions, the instructions and examples in this book may vary. However, subsequent versions of each program should vary only slightly.
- **A fairly quick Internet connection.** You need to download various applications and utilities to follow along with the sessions in this book. It is highly advisable that you download current copies of Apache, MySQL, and PHP from the Internet. The sessions provide several Web sites, which you should visit while reading this book.
- **A local area network and a separate machine with a Web browser.** These are handy to test your server's configuration.
- **A text editor.** Those readers using Linux can use any one of the many text editors provided with their distribution — *vi*, *vim*, Emacs, GNUmacs, and so on. Several other tools can help make your work easier; these tools are covered where appropriate in the text.
- **Ample time and patience.** This book is designed to occupy most of a weekend — set aside enough time to complete each section. In addition, although the concepts are fairly easy to understand, mastering them and getting everything to work as desired can take practice and patience.

What You Can Expect from This Book

This book, believe it or not, contains everything you need to use Apache to deliver dynamic content via PHP and MySQL. Although three technologies are covered in this book, they are all remarkably well-behaved and easy to integrate. In three short days and 30 sessions, you learn how to utilize all three technologies.

Of course, to accommodate such a broad spectrum of technologies, the coverage isn't as deep as that found in a book dedicated to each one individually — Apache, MySQL, or PHP. Although you learn the basics of each technology, including how to use each for various purposes and how they integrate, you will not learn *everything* about each. After getting acquainted with the technology, you need to continue learning about each on your own.

Weekend Crash Course Features and Layout

This book follows the standard Weekend Crash Course format and layout. It is designed to be fast-paced, with each session taking 30 minutes to complete. However, a lot of information

is covered in each session, and you should take some time to relax after each session to let the information sink in and to prepare for the next session.

The format of each session is set up to provide the information in a structured fashion that reinforces the information through several levels. At the beginning of each session is a summary of the information covered within that session. At the end of the session, a short review section covers what you should have learned; and a Quiz Yourself section provides a few questions about the material you just covered. At the end of each part is a Part Review that provides questions on the content covered in that part of the book — answers to the Part Review questions can be found in Appendix A, “Answers to Part Review Questions.”

Layout

The Weekend Crash Course is divided into 30 individual, half-hour sessions. The sessions are divided into six parts, each of which corresponds to a particular time period of a weekend, from Friday evening through Sunday afternoon.

Part I: Friday Evening

Your weekend starts with installing the three technologies and getting acquainted with the basics of the Apache Web server.

Part II: Saturday Morning

Saturday begins with more details about the Apache Web server’s configuration and moves on to the configuration and operation of the MySQL database server. Coverage of MySQL proceeds through coverage of SQL queries.

Part III: Saturday Afternoon

The afternoon wraps up basic MySQL coverage and begins the basic coverage of PHP. You learn how to write basic scripts and progress to more advanced techniques.

Part IV: Saturday Evening

Saturday evening covers more advanced scripting techniques, including how to work with standard HTML and forms, and how to write scripts that work with multiple users.

Part V: Sunday Morning

Sunday morning wraps up the PHP coverage with more advanced scripting techniques, and then describes how to integrate PHP with MySQL. Finally, this section begins the hands-on projects covered in this book by showing how to create a simple calendar using PHP’s date-handling functionality.

Part VI: Sunday Afternoon

Sunday afternoon's sessions kick into high gear by extending the calendar example and providing two projects for deploying dynamic content via PHP and MySQL. The last session and project show how dynamic content can be multipurposed by exporting it in various formats.

Features

As mentioned in the previous section, each session is designed to take 30 minutes. To aid with the pacing for each session, the following icons appear:



**30 Min.
To Go**

The 30-minute icon appears at the beginning of each session to remind you of the time frame.



**20 Min.
To Go**

A 20-minute icon appears when you have progressed through a third of the session and have roughly 20 more minutes to go.



**10 Min.
To Go**

The 10-minute icon appears at the two-thirds mark, when you have roughly 10 more minutes to go in the session.



Done!

The Done icon indicates that the current session's tutorial is complete and you can move on to the Quiz Yourself questions.

The following icons indicate special information throughout each session:



This icon indicates special information relating to the current section that you may find useful.



This icon indicates information that explains the best way to do something or alerts you to special considerations you should be aware of when performing a routine task.



This icon indicates a reference to related information in another session.



This icon indicates cautionary information, alerting you to potential hazards encountered within the tasks at hand.

Other Conventions

Additional conventions are used for special purposes throughout this book:

Code in Text

This is a special font used to indicate code within normal text. It appears as follows: `<?php print "hello world"; ?>`.

Syntax Listings

For most commands, functions, and the like, a syntax listing is given. This listing shows you the command's basic syntax. The following conventions are used for these listings:

- Required items are shown in a normal, monospaced font.
- Variable items — such as parameters — are shown in angle brackets or italics with mnemonic names.
- Optional items — such as optional parameters — are shown enclosed in square brackets ([and]).

For example, the following line shows the syntax for a MySQL query:

```
SELECT * FROM <database_name> [WHERE <conditions>];
```

In this example, *<database_name>* would be replaced by the name of the database, the WHERE section is optional, and *<conditions>* would be replaced by conditions for the WHERE (if the WHERE were used).

Notice that the angle-bracketed text appears in italic text to avoid causing confusion in the syntax. For example, the following HTML syntax replaces the angle brackets with italic because the HTML code uses angle brackets:

```
<input type=text name=field_name value=field_value>
```

Code Listings

Code listings appear in specially formatted fonts and paragraphs like these lines.

User Input

Two methods are used to indicate user input:

Bold text

Within listings, it represents commands you should type.

Variable text in commands is indicated by an italic keyword or phrase enclosed in angle brackets:

```
mysql -p <user_name>
```

For example, *<user_name>* would indicate that you should replace the text within the brackets with a specific username (which varies depending on the situation or use). As with syntax listings, italic text is used in place of the angle bracket text if the angle-bracketed text would cause confusion.

Feedback

Wiley Publishing and I value your feedback. We welcome suggestions for making the books better — including hearing about errors and omissions in this book. You can visit www.wiley.com for information on additional books and ways to provide feedback to the publisher. I can be reached at sschafer@synergy-tech.com.

Acknowledgments

A book such as this is not a singular effort. Many people came together and worked hard to produce this work. As such, I'd like to thank each one, especially those who interacted with me during this process:

The management team at Wiley Publishing, for recognizing this as a publishable topic.

Jim Minatel, for giving me the chance to put more of my knowledge into print.

Marcia Ellett, for keeping me on track and organized, despite my best efforts to the contrary.

William Patterson, for checking my technical words and examples to ensure their accuracy and for adding numerous bits of value throughout. (Note that any deficiencies in this area remain my sole responsibility.)

Bill Barton, for coordinating the final steps of editing, and Luann Rouff for making me look like English is indeed my first language.

The Composition Services crew, who packaged the raw material into this nice, tidy product you now hold.

Last, but definitely not least, I would like to thank Angie and Ashley, for believing in me, letting me know when it was truly time for sleep, and supporting me in everything I do.

Contents at a Glance

Preface	ix
Acknowledgments	xv
FRIDAY	2
Part I—Friday Evening	4
Session 1—Installing Apache	5
Session 2—Installing PHP	21
Session 3—Installing MySQL	33
Session 4—Apache Basics	47
SATURDAY	56
Part II—Saturday Morning	58
Session 5—Configuring Apache	59
Session 6—Apache Security Concerns	69
Session 7—The Basics of MySQL	79
Session 8—MySQL Security	89
Session 9—Working with Data	97
Session 10—Queries	111
Part III—Saturday Afternoon	130
Session 11—Troubleshooting MySQL Commands and Queries	131
Session 12—Advanced MySQL Concepts	139
Session 13—Getting Ready to Use PHP	151
Session 14—PHP Basics	159
Session 15—Program Flow	175
Session 16—PHP Functions	185
Part IV—Saturday Evening	196
Session 17—Working with Files	197
Session 18—HTML Constructs	213
Session 19—Working with Forms	219
Session 20—Multiple-User Considerations in PHP	233
SUNDAY	246
Part V—Sunday Morning	248
Session 21—Good Coding Practices	249
Session 22—Debugging and Troubleshooting PHP	257
Session 23—MySQL Through PHP	273
Session 24—Debugging and Troubleshooting MySQL in PHP	287
Session 25—Odds and Ends	293
Session 26—Project: Calendar I	303

Part VI—Sunday Afternoon	320
Session 27—Project: Calendar II	321
Session 28—Project: Content Publishing I	341
Session 29—Project: Content Publishing II	381
Session 30—Project: Building an RSS Feed	405
Appendix A—Answers to Part Review Questions	415
Appendix B—What’s on the Companion Web Site	425
Index	427

Contents

Preface	ix
Acknowledgments	xv
FRIDAY	2
Part I—Friday Evening	4
Session 1—Installing Apache	5
Why Use Apache?	5
Apache Is Free	6
Apache Is Open Source	6
Apache Is Cross-Platform	6
Apache Is Continually Undergoing Rapid Development	6
Apache Capabilities	7
Gathering Required Materials	7
Windows Downloads	9
Linux Downloads	9
Installing Apache	10
Installing Apache on Windows	10
Building and Installing Apache for Linux (from Source)	13
Installing Apache on Linux from Packages	16
Testing the Installation	18
Session 2—Installing PHP	21
Understanding Preprocessed HTML	21
Gathering the Required Materials	22
Compiling PHP for Linux	22
Installing PHP on Linux from a Package	24
Installing PHP on Windows	26
Getting PHP to Work with Apache	26
Updating httpd.conf on Linux	27
Updating http.conf on Windows	28
Testing PHP	30
Session 3—Installing MySQL	33
Introducing MySQL	33
Gathering the Required Materials	34
Compiling MySQL for Linux	35
Installing a Linux Binary Version of MySQL	35
Installing MySQL on Linux from a Package	36
Installing MySQL on Windows	37
Testing Your MySQL Installation	42

Session 4—Apache Basics	47
Understanding HTTP Servers	47
The Evolution of Feature-Rich Web Content	47
HTTP Services over TCP	48
Apache: Status, Starting, and Stopping	48
Apache Status	48
Starting and Stopping the Server	50
Automatically Starting Apache	51
Locating Apache Files	52
Apache Log Files	54
SATURDAY	56
Part II—Saturday Morning	58
Session 5—Configuring Apache	59
Understanding the httpd.conf File	59
Apache Directives	60
Scope Sections	64
Conditional Directives	65
Access Directives	66
MIME Types	67
Session 6—Apache Security Concerns	69
The Web — A Great Security Hole	69
A Review of Apache Security	70
Securing the Entire Site	71
Securing Individual Directories	72
Securing Directories with <Directory>	72
Securing Directories with .htaccess	72
Securing Directories with Authentication Control	73
Securing Script Access	76
Performing a Security Audit	77
Session 7—The Basics of MySQL	79
Understanding MySQL	79
What’s New in MySQL 4.0?	80
Configuring MySQL	80
MySQL Linux Configuration	80
Windows MySQL Configuration	81
Building Blocks of Databases	83
Tables	83
Records (Row)	84
Fields	84
Putting It All Back Together	84
Running the MySQL Server	85
Using the MySQL Monitor	86
Session 8—MySQL Security	89
Setting the Root Password	89

An Overview of the MySQL Privileges System	90
The MySQL Privileges Database	91
Setting and Changing User Privileges	91
The GRANT Command	92
The REVOKE Command	94
Column Privileges	94
Updating Privileges	94
Session 9—Working with Data	97
Creating Databases	97
Dropping Databases	98
Creating Tables	98
Column Attributes	99
Column Data Types	100
<i>Text Column Types</i>	100
<i>Numeric Column Types</i>	102
<i>Date Column Types</i>	103
Column Indexes and Primary Keys	104
Altering Tables	105
Changing a Table's Name	106
Adding Columns	106
Changing Column Definitions	107
Dropping Columns	107
Changing Primary Keys and Indexes	107
Dropping Tables	108
Informational Commands	108
Session 10—Queries	111
Sample Data	111
Understanding Queries	113
Adding Data with INSERT	113
Selecting Data with SELECT	116
The Basics of SELECT	116
Choosing Specific Rows with WHERE	117
Using LIKE to Find Data	119
Using Complex Expressions with WHERE	120
Ordering Results with ORDER BY	120
Limiting Results with LIMIT	121
Selecting from More Than One Table	122
Deleting Records with DELETE	124
Updating Records with UPDATE	124
Part III—Saturday Afternoon	130
Session 11—Troubleshooting MySQL Commands and Queries	131
The MySQL Monitor	131
Running the Monitor	132
MySQL Monitor Basics	132

Logging the Monitor Session	133
Piping Files to the Monitor	133
Troubleshooting Queries	134
Format Your Queries with Line Breaks	134
Try SELECT	135
Simplify Your Query	135
Session 12—Advanced MySQL Concepts	139
Counting Result Sets	139
Using SELECT with More Than One Table	140
Specifying Columns from Multiple Tables	140
The Equi-Join	141
The Outer Join	142
Database Normalization	144
First Normal Form	144
Second Normal Form	145
Third Normal Form	147
Backing Up and Restoring MySQL Databases	147
Session 13—Getting Ready to Use PHP	151
Reviewing Apache and PHP Configuration	151
Reviewing Windows PHP Setup	151
Reviewing Linux PHP Setup	152
Understanding How PHP Works with Apache	153
Command-Line PHP	153
PHP as a Command-Line Scripting Language	155
Session 14—PHP Basics	159
Basic Script Syntax	159
PHP Beginning and Ending Tags	159
Command Termination Character	160
PHP's Use of White Space	160
Commenting Code	161
PHP Variables	162
print and echo	164
Quoting Output	164
Escape Characters	165
Here Document Output	166
PHP Data Types	167
The Different Data Types	167
PHP Arrays	168
Changing Data Types	168
<i>Testing Data Types</i>	169
<i>Converting Types</i>	169
Operators and Expressions	169
Assignment Operator	170
Arithmetic Operators	170
Concatenation Operator	171

Comparison Operators	171
Logical Operators	172
Operator Precedence	173
Session 15—Program Flow	175
Programming Blocks	175
Conditional Statements	176
General if Structure	176
else and elseif	177
Multiple Choice with switch	178
Understanding Loops	180
while Loop	180
do while Loop	181
for Loop	181
Breaking and Continuing Code	182
Session 16—PHP Functions	185
Understanding Functions	185
Built-in PHP Functions	186
User-Defined Functions	187
Function Definition	187
Returning a Value from a Function	188
Function Arguments	189
<i>Default Argument Definition and Use</i>	189
<i>Optional Arguments</i>	189
<i>Call by Reference</i>	190
Variable Scope	191
Part IV—Saturday Evening	196
Session 17—Working with Files	197
File Operations with PHP: The Good and the Bad	197
Accessing Files with PHP	198
Opening a File	198
Closing a File	200
Reading from or Writing to a File	200
<i>Writing to a File</i>	200
<i>Reading from a File</i>	201
Additional Reading and Writing Techniques	204
Positioning the File Pointer	204
Reading a File One Character at a Time	205
Locking Files	205
Deleting Files	206
Working with Directories	206
Making Directories	206
Removing Directories	207
Reading the Contents of a Directory	207
File Information	208

Session 18—HTML Constructs	213
The Automatic HTML Header	213
Other Content Headers	214
Outputting HTML	215
Large HTML Blocks	215
HTML Formatting Conventions	217
Session 19—Working with Forms	219
Understanding How HTML Forms Work	219
Standard HTML Form Elements	219
Form Actions	222
How Form Data Is Returned	223
PHP Form Data Handling	224
Parsing \$_POST	224
Auto-Register Globals: Easier, But Less Secure	226
Working with File Uploads	227
Session 20—Multiple-User Considerations in PHP	233
The Old Counter Example	233
The Problem	233
The “So What if a Simple Counter Fails?” Argument	235
Letting the Technology Sort It Out	235
Data Locking Schemes	235
Using flock()	236
Using a Lock File	236
Clearing Stale Locks	237
Keeping User State with Sessions	237
Session Mechanics	237
Key Session Configuration Options	237
Using Sessions	238
<i>Starting or Resuming a Session</i>	239
<i>Registering Variables with a Session</i>	239
<i>Unregistering Variables with the Session</i>	240
<i>Destroying a Session</i>	240
<i>Manually Dealing with Session IDs</i>	240
<i>Encoding and Saving Session Data</i>	241
SUNDAY	246
Part V—Sunday Morning	248
Session 21—Good Coding Practices	249
Building Solid Code	249
The Value of the Right Tools	250
Coding It Right the First Time Around	251
The Value of Consistency	251
Using Functions	252
Revisiting Old Code	252
Code Libraries	252

Commenting and Creating Documentation	253
Comment Placement	253
“Look Here!” Comments	253
“War and Peace” or “Reader’s Digest”?	253
Documentation	254
Applying Good Coding Habits Universally	254
Session 22—Debugging and Troubleshooting PHP	257
Modular Code for Easy Debugging	257
A Nonmodular Coding Example	258
Modular Coding Techniques	260
<i>Use Functions</i>	260
<i>Using Global Variables</i>	260
<i>Group Global Variable Declarations</i>	261
A Modular Code Example	261
Dividing and Conquering	263
Error Control and Processing	264
Controlling the Error Level	264
Sending Errors to a File or E-mail Address	265
Custom Error Handling	266
Print Everything	267
Command-Line PHP	269
Session 23—MySQL Through PHP	273
Connecting to and Disconnecting from the MySQL Server	273
Connecting to the MySQL Server	273
Disconnecting from the MySQL Server	274
Selecting a Database	275
Querying the Database	275
Returning the Result Set Row by Row	276
Resetting the Result Set Pointer	277
Returning the Result Set in an Associative Array	277
Working with Result Sets	278
Determining Affected Rows	283
Letting MySQL Do Some Work	283
Other MySQL Functions	283
Session 24—Debugging and Troubleshooting MySQL in PHP	287
Turning Off Verbose Error Reporting	287
Avoiding Common Errors	288
Error Testing, Trapping, and Reporting	289
Error Testing and Trapping	290
Error Reporting	290
Testing Queries and Functions	291
Session 25—Odds and Ends	293
PHP Libraries	293
What Is PEAR?	294
PHPBuilder.com	294

PHP Classes Repository	295
New York PHP Components	295
Object-Oriented PHP	295
Monitoring Apache Traffic	295
Analog	296
Webalizer	297
AWStats	297
Finding the Right Log Analyzer	298
Virtual Hosting with Apache	299
Monitoring Several IP Addresses	299
Monitoring One IP Address	300
Setting Up Virtual Hosts	300
Putting It All Together	301
<i>Three Domains, Three IP Addresses</i>	301
<i>Three Domains, One IP Address</i>	301
Session 26—Project: Calendar I	303
Project Description	303
Taking Stock of Assets in PHP	304
Robust Date Handling	304
Integration with Forms	305
Pseudocoding Our Calendar	305
Pseudo-Table	305
Pseudo-Form	307
Data and State	308
Pseudo-PHP	308
Calendar Code	309
Calendar.php	309
Explaining the Code	315
Part VI—Sunday Afternoon	320
Session 27—Project: Calendar II	321
Defining the Project	321
Database Definition	322
Web and Flow Design	322
Web Design	323
Application Flow	324
Coding the Application	325
Calendar.php	325
Appt.php (Day View)	326
Editappt.php (Edit Appointment)	330
The Scripts in Action	337
Room for More	340
Session 28—Project: Content Publishing I	341
The Scope of the Project	341
The Publishing System	341
Necessary Tools	342

The Publishing System Database	342
The Authors Table	342
The Categories Table	343
The Articles Table	343
Designing the Editing Tools	344
Understanding Monolithic Scripts	344
Controlling State with Submit	345
A Basic Monolithic Editor	347
States for the Article Editor	348
Coding the Article Editing Script	349
The Start State	349
The Find State	349
The Edit State	352
The Add/Update State	352
The Delete State	353
The printform() Function	354
The Finished Article Editing Script	359
Category and Author Editing Scripts	371
Putting It all Together	379
Session 29—Project: Content Publishing II	381
Methods of Publishing Dynamic Content	381
Full Page from PHP	382
Only Dynamic Content from PHP	383
<i>Turning PHP On and Off</i>	383
<i>Server-Side Includes</i>	384
Publishing Scripts	385
Common Library	385
Full Article	386
Headlines Only	388
Category Listings	390
Teasers	392
Enabling Search Functionality for Users	394
Simple Substring Searches	394
Full-Text Index Searches	397
<i>Creating a FULLTEXT Index</i>	397
<i>Searching a FULLTEXT Index</i>	397
<i>Modifying the Find Script for Full-Text Searching</i>	399
Adding Authentication to Your Scripts	400
Using Authentication with PHP and MySQL	401
Scalability	403
Session 30—Project: Building an RSS Feed	405
What Are RSS Feeds?	405
RSS Syntax	406
Publishing the Feed	406
Creating an RSS Feed for the Publishing System	407

When to Run the RSS Generator	410
Additional RSS References	411
Appendix A—Answers to Part Review Questions	415
Appendix B—What’s on the Companion Web Site	425
Index	427

- [download *Practical Protection Magick: Guarding & Reclaiming Your Power* book](#)
- [Glock Armorer's Manual here](#)
- [Change Of Pace \(Erotic Interludes, Book 1\) for free](#)
- [read online Morgan and Archer \(Windham, Book 8.5\)](#)
- [download Knowledge And Decisions pdf, azw \(kindle\), epub, doc, mobi](#)

- <http://cambridgebrass.com/?freebooks/Practical-Protection-Magick--Guarding---Reclaiming-Your-Power.pdf>
- <http://cambridgebrass.com/?freebooks/This-Is-an-Uprising--How-Nonviolent-Revolt-Is-Shaping-the-Twenty-First-Century.pdf>
- <http://growingsomeroots.com/ebooks/Change-Of-Pace--Erotic-Interludes--Book-1-.pdf>
- <http://academialanguagebar.com/?ebooks/Feng-Shui-For-Dummies.pdf>
- <http://www.netc-bd.com/ebooks/Moral-Realities--An-Essay-in-Philosophical-Psychology.pdf>