

Foundation PHP for Dreamweaver 8

David Powers



Foundation PHP for Dreamweaver 8

Copyright © 2006 by David Powers

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner and the publisher.

ISBN (pbk): 1-59059-569-6

Printed and bound in the United States of America 9 8 7 6 5 4 3 2 1

Distributed to the book trade worldwide by Springer-Verlag New York, Inc., 233 Spring Street, 6th Floor, New York, NY 10013.
Phone 1-800-SPRINGER, fax 201-348-4505, e-mail orders-ny@springer-sbm.com, or visit www.springeronline.com.

For information on translations, please contact Apress directly at 2560 Ninth Street, Suite 219, Berkeley, CA 94710.
Phone 510-549-5930, fax 510-549-5939, e-mail info@apress.com, or visit www.apress.com.

The information in this book is distributed on an “as is” basis, without warranty. Although every precaution has been taken in the preparation of this work, neither the author(s) nor Apress shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this work.

The source code for this book is freely available to readers at www.friendsofed.com in the Downloads section.

Credits

Lead Editor **Assistant Production Director**
Chris Mills Kari Brooks-Copony

Technical Reviewer **Production Editor**
Jason Nadon Kelly Winquist

Editorial Board **Compositor**
Steve Anglin, Dan Appleman, Katy Freer
Ewan Buckingham, Gary Cornell,
Tony Davis, Jason Gilmore,
Jonathan Hassell, Chris Mills,
Dominic Shakeshaft, Jim Sumser

Project Manager **Indexer**
Richard Dal Porto Diane Brenner

Copy Edit Manager **Cover Artist**
Nicole LeClerc Corné van Dooren

Copy Editor **Interior and Cover Designer**
Andy Carroll Kurt Krames

Manufacturing Director
Tom Debolski

CONTENTS

- About the Author x**
- About the Technical Reviewer xi**
- About the Cover Image xii**
- Acknowledgments xiii**
- Introduction xiv**
 - Who this book is for xiv
 - Do I need to have Dreamweaver 8? xv
 - Windows- and Mac-friendly xv
 - What if I'm new to Dreamweaver? xvi
 - What this book covers xvi
 - Support for this book xvii
 - Layout conventions xvii
- Chapter 1: So, You Want to Build Dynamic Sites? 1**
 - What makes a site dynamic? 2
 - Increasing response to the user with server-side technology 3
 - Why choose PHP/MySQL? 4
 - How dynamic sites work 5
 - Using code that acts as a template 5
 - Taking a peek behind the scenes 7
 - Building dynamic sites with Dreamweaver 8
 - An overview of Dreamweaver server behaviors 9
 - Looking ahead 11

Chapter 2: Dreamweaver and PHP—A Productive Partnership . . . 13

- Taking a quick first look at Dreamweaver 8’s new features 14
 - Improved CSS support 14
 - A more productive coding environment 15
 - Support for PHP 5 16
- Organizing your workspace 17
 - Preset workspace layouts in Windows 17
 - Tabbed documents in Mac OS X 18
 - Saving and sharing customized workspace layouts 20
- Getting the best out of Code view 21
 - Using the Coding toolbar 21
 - Collapsing code sections 22
 - Formatting code with context menus 24
 - Using PHP code hints and auto completion 25
- Comparing different versions of files 26
 - Setting up the File Compare feature 27
 - Using File Compare 27
 - Comparing two local files in the same site 30
 - Comparing two local files in different sites 30
 - Comparing local and remote files 30
 - Problems with File Compare 31
- Creating standards-compliant code 32
 - Choosing the right DTD 32
 - Be aware of potential pitfalls in XHTML 33
 - Changing the DTD in Dreamweaver 8 35
 - Treat the DOCTYPE declaration with respect 38
 - Meet Mark of the Web 40
 - Removing unwanted code cleanly 40
 - Watch that cursor! 41
- The next step 41

Chapter 3: Getting the Work Environment Ready 43

- Deciding where to test your pages 44
 - Checking the suitability of your remote server for testing 45
- Creating a local testing server 45
 - Why not use an all-in-one package? 46
 - Deciding where to locate your sites 47
 - Two strategies: centralized or distributed 47
 - Setting up on Windows 51
 - Getting Windows to display filename extensions 51
 - Choosing the right web server 52
 - Installing Apache on Windows 52
 - Starting and stopping Apache on Windows 56
 - Changing startup preferences or disabling Apache 58
 - Downloading and installing PHP on Windows 58
 - Adding PHP to your Windows startup procedure 65
 - Configuring Apache to work with PHP 66
 - Avoiding the “Cannot load mysqli extension” error 72

Configuring IIS to work with PHP	73
Upgrading and uninstalling Apache and PHP on Windows	77
Setting up on Mac OS X	78
Starting Apache and testing PHP	78
Upgrading PHP on Mac OS X	80
Configuring PHP to display errors on Mac OS X	82
Checking your PHP configuration (Windows and Mac)	84
Setting up virtual hosts	85
Registering virtual hosts on Windows	86
Registering virtual hosts on Mac OS X	87
Registering virtual directories on IIS	89
Defining a PHP site in Dreamweaver	89
Points to watch when using a remote server for testing	95
Now you're set to go	96

Chapter 4: Getting Ready for the Case Study 99

Creating the basic structure of East-West Seasons	101
Organizing the download files for the case study	101
Installing Lorem and More	103
Analyzing the main page layout	103
Styling the page with CSS	111
Deciding whether to support legacy browsers	111
Attaching the basic styles with <link>	112
Attaching the remaining styles with @import	114
PHP, here we come	119

Chapter 5: Integrating PHP into Your Site 121

Including text and code from other files	122
Using require() instead of include()	127
Points to remember when using includes	129
“Failed to open stream” and other error messages	130
Displaying PHP output with Live Data view	131
Introducing the basics of PHP	133
Using the correct filename extension	134
The core components of PHP syntax	134
Handling unknown values with variables	135
Assigning values to a variable	136
Getting to know the various datatypes	137
Indenting code and use of white space	138
Separating commands with the semicolon	138
Commenting scripts for clarity and debugging	139
Handling text and other output in PHP	142
Choosing single or double quotation marks	143
Using escape sequences in strings	145
Joining strings	146
Adding to an existing string	147

- Doing calculations with PHP 148
 - Arithmetic operators 148
- Making decisions with PHP 151
 - Using if . . . else conditional statements 153
 - Using comparison operators 154
 - Testing more than one condition 156
 - Solid foundations 158

Chapter 6: Getting Feedback from an Online Form 161

- Designing the feedback form 162
- Activating the feedback form 167
 - Understanding how the contact form works 167
 - Organizing related values in arrays 168
 - Identifying elements in the POST array 170
 - Keeping secure with the superglobal arrays 170
- Improving the feedback form 176
 - Getting rid of unwanted backslashes 176
 - Checking required fields for valid input 178
 - Avoiding email injection attacks 178
 - Improving the look of the email 184
 - How long does a variable last? 185
 - Acknowledging the feedback 186
 - Using Balance Braces 191
 - Turning the email regular expression into a snippet 192
- Changing the site's styles automatically 193
 - Using the switch statement for decision chains 193
 - Building an automatic style changer 194
 - Extracting date parts with date() 194
- Automating the navigation menu 198
 - Using loops to handle repetitive tasks 199
 - Loops using while and do . . . while 199
 - The versatile for loop 200
 - Looping through arrays with foreach 200
 - Creating arrays 201
 - Modularizing code with functions 205
 - Naming functions 206
 - Passing values to functions 206
 - Returning values from functions 208
- Halfway review 208

Chapter 7: Putting the Power of a Database Behind Your Pages 211

- Choosing the right version 213
- Explaining the terminology 213
- Installing MySQL on Windows 214
 - Removing an older version of MySQL 215
 - Installing the Windows Essentials version of MySQL 215

Configuring MySQL Windows Essentials	218
Upgrading to a later series of Windows Essentials	224
Performing a straight upgrade from one series to another	224
Running two series in parallel	225
Changing the default table type on Windows Essentials	226
Starting and stopping MySQL manually on Windows	227
Introducing the MySQL monitor on Windows	229
Starting a session	229
Ending your session	229
Setting up MySQL on Mac OS X	230
Downloading and installing the software	230
Adding MySQL to your PATH	232
Amending PATH in the bash shell	232
Amending PATH in the tcsh shell	233
Securing MySQL on Mac OS X	233
Setting the MySQL root password	234
Working with the MySQL monitor on Windows and Mac	236
Using MySQL with a graphical interface	237
phpMyAdmin: A golden oldie	237
Obtaining and installing phpMyAdmin	237
MySQL Administrator and MySQL Query Browser: Snapping at the heels of phpMyAdmin	240
Now to business	241

Chapter 8: Building a Random Quotation Generator 243

Finding your way around phpMyAdmin	244
Creating user accounts for MySQL	245
Granting the necessary user privileges	246
Building the first database table	250
Choosing the right column type	254
Storing text	255
Storing numbers	256
Storing dates and times	256
Storing predefined lists	257
Storing binary data	257
Populating the database table	257
Displaying database content	259
Creating and updating database records	270
A great deal achieved	282

Chapter 9: Working with Multiple Tables 285

Storing related information in separate tables	286
Using foreign keys to link records	286
What foreign key constraints do	288
Splitting the quotations table	289
Deciding on the best structure	296
Selecting records from more than one table	296

- The four essential SQL commands 298
 - SELECT 299
 - INSERT 301
 - UPDATE 302
 - DELETE 302
- Managing content with multiple tables 303
 - Inserting new quotations 304
 - Inserting new authors 311
 - Updating authors 315
 - Deleting authors 320
 - Updating quotations 324
 - The mystery of missing records 325
 - Deleting quotations 328
- Chapter review 329

Chapter 10: Using Sessions to Track Visitors and Restrict Access 331

- What sessions are and how they work 332
 - Creating PHP sessions 333
 - Creating and destroying session variables 333
 - Destroying a session 334
 - The “Headers already sent” error 334
- Registering and authenticating users 337
 - Creating a user registration system 337
 - Building custom server behaviors 346
 - Completing the user registration form 349
 - Updating and deleting user records 353
 - Adapting the Sticky Text Field server behavior 354
 - Building the update and delete pages 356
 - Creating a login system 362
 - Restricting access to individual pages 364
 - Logging out users 365
- Automating the validation process with MX Kollection 3 365
 - Installing MX Kollection 3 366
 - Defining your MX Kollection site preferences 367
 - Building the user registration and login system 370
 - Assessing the pros and cons of MX Kollection 374
- Two approaches to PHP 375

Chapter 11: Displaying a Blog and Photo Gallery 377

- Creating the blog back-end 378
 - Planning and building the required components 378
 - Building a list of images in a folder 381
 - Displaying a message when no records are found 384
 - Formatting dates and time in MySQL 388
 - Creating striped table rows 391
 - Finishing the back-end 392

Displaying the blog	396
Extracting the first section of a long item	396
Using Live Data view with a URL parameter	401
Creating an intelligent link	403
Displaying images in a dynamic site	405
Weighing the pros and cons of storing images in a database	405
Positioning dynamically inserted images	406
Getting an image's dimensions dynamically	411
Displaying a photo gallery	413
How the photo gallery is structured	415
Putting the photo gallery together	417
Improving the blog and photo gallery	424
Storing dates in MySQL	425
Validating and formatting dates for database input	425
Mission almost accomplished	429
Chapter 12: Using XSLT to Display Live News Feeds and XML . . .	431
A quick guide to XML and XSLT	432
What an XML document looks like	432
Using client-side and server-side transformations	434
Checking your server's capability	436
Pulling in an RSS news feed	437
How Dreamweaver handles server-side XSLT	438
Choosing a suitable news feed	439
Being a bit more adventurous with XSLT	446
Setting up a local XML source	446
Understanding how XSLT is structured	448
Accessing nested repeating elements	450
Creating conditional regions	451
Sorting elements	454
Formatting elements	454
Displaying output selectively	455
Going further	461
Appendix A: Using Languages Other Than English in MySQL . . .	463
How MySQL uses character sets and collation	463
Setting the right sort order	465
Appendix B: Essential MySQL Maintenance	469
Backing up and transferring a database	469
Updating the privilege tables after an upgrade	474
What to do if you forget your root password	475
Upgrading and uninstalling MySQL on Mac OS X	475
Index.	481