

Companion Web Site

- Provides code files for all examples in the book

Aaron Brazell

Technical editing by Mark Jaquith,
leading WordPress core developer

WordPress®

2nd Edition

**Install, configure,
and manage WordPress**

**Turn a blog into a
social network**

**Create a dynamic,
full-fledged CMS**



The book you need to succeed!

WordPress® Bible

2nd Edition

WordPress® Bible

2nd Edition

Aaron Brazell



WILEY

Wiley Publishing, Inc.

WordPress® Bible, 2nd Edition

Published by

Wiley Publishing, Inc.

10475 Crosspoint Boulevard

Indianapolis, IN 46256

www.wiley.com

Copyright © 2011 by Wiley Publishing, Inc., Indianapolis, Indiana

Published by Wiley Publishing, Inc., Indianapolis, Indiana

Published simultaneously in Canada

ISBN: 978-0-470-93781-5

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

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 Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, 201-748-6011, fax 201-748-6008, or online at <http://www.wiley.com/go/permissions>.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

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 (877) 762-2974, outside the U.S. at (317) 572-3993 or fax (317) 572-4002.

Library of Congress Control Number: 2011924123

Trademarks: Wiley, the Wiley logo, and related trade dress 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. WordPress is a registered trademark of Automattic, Inc. 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.

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

About the Author

Aaron Brazell is a Co-Founder at WP Engine, an Austin, Texas-based startup built to meet the technical needs of WordPress bloggers. He is a WordPress core contributor and has been an active member of the WordPress community since 2004 as a developer, user, and consultant.

He is a frequent public speaker, engaging with the WordPress community at WordCamps around the United States, as well as at marketing, social media, and other industry events. He has organized WordCamp Mid-Atlantic, a WordPress community conference catering to the Greater Capital region, which includes Maryland, D.C., Delaware, and Northern Virginia. He believes in challenging conventional thinking and assumptions, and as a result, often takes actions that are provocative, strategic, and unconventional in an effort to move dialogue and popular opinion forward.

In addition to his work with WordPress and social media, Aaron is an avid photographer and sports fan (his favorite teams are the Boston Red Sox and Baltimore Ravens), and has one son, Devin Michael. He currently lives in Austin, Texas.

*To Devin, my only son, for giving me something
to think about even when I don't realize
I need to be thinking about it.*

Credits

Senior Acquisitions Editor

Stephanie McComb

Executive Editor

Jody Lefevere

Project Editor

Beth Taylor

Technical Editor

Mark Jaquith

Copy Editor

Beth Taylor

Editorial Director

Robyn Siesky

Editorial Manager

Rosemarie Graham

Business Manager

Amy Knies

Senior Marketing Manager

Sandy Smith

Vice President and Executive Group

Publisher

Richard Swadley

Vice President and Executive Publisher

Barry Pruett

Project Coordinator

Sheree Montgomery

Graphics and Production Specialists

Melanee Habig

Ronald G. Terry

Quality Control Technician

Melissa Cossell

Proofreading

Evelyn Wellborn

Indexing

BIM Indexing & Proofreading Services

Media Development Project Manager

Laura Moss

Media Development Assistant

Project Manager

Jenny Swisher

Media Development Associate Producers

Josh Frank

Shawn Patrick

Doug Kuhn

Marilyn Hummel

Foreword

When Aaron first mentioned he was writing the *WordPress Bible*, I immediately offered him a hand in editing. I figured it was a safe bet. After all, I'm a PHP guy with five years of Drupal experience and zero years of WordPress. In fact, my only involvement with WordPress was attending WordCamp Mid-Atlantic; I'd never even installed it before. I had to open my mouth. . . .

Fast-forward a couple months and suddenly chapter after chapter fill my inbox. So I started digging into this alien environment from two different perspectives: first, from the community perspective and second, from a developer's perspective.

For open source projects, the community is important to understand. Not only do you need to know how to get involved, but also you also need to know how healthy it is. Is this project going to be active a month or year from now? Therefore, I started reading with the intent to learn about the WordPress community. I wanted to know its motivations, how it interacted, how decisions were made, and how information flows within, into, and out of the team. Delving into the community and help chapters, I learned quite a bit. I found myself dropping into IRC, exploring a mailing list or two, and hitting WordPress forums to see how new voices were welcomed. To be honest, I appreciated the perspective and guidance from someone who "gets it."

Secondly, one of the joys of open source is looking at things from a developer's perspective. Unfortunately, many open source projects are a pile of messy code with horrible documentation, and you'll find yourself huddled under a desk crying pitifully in under 15 minutes. With WordPress, I didn't have that experience. Sure, there were times when something didn't make sense at first pass, but I kept digging. I asked some harsh questions related to PHP 5 and object-oriented principles and coding standards and APIs and a variety of other things. Each response — even those which I disagreed with — was well-reasoned and internally consistent. More important, the documentation and explanations supporting the system were amazing and provided numerous great examples. In fact, the underlying concepts were useful enough that I've duplicated a few in one of my projects.

All that said, I enjoyed the book, I enjoyed exploring a new community and system, and I appreciated having Aaron as a guide.

And yes, I have installed WordPress now.

D. Keith Casey
CTO, Blue Parabola, LLC
<http://blueparabola.com>

Preface

WordPress, by most accounts, is the most popular self-hosted blogging platform in the world. WordPress.com is the second most popular hosted blogging platform in the world. The ecosystem built on openness and extensibility has helped the software thrive and overcome other rivals that, in some cases, have been around longer than WordPress has.

Developers now have the means to take a platform that was built for blogs and turn it into much more robust applications for content management, contact management, e-mail management, and more. I have yet to find something WordPress cannot be made to do with custom plugins and intuitive theming.

There are many books on WordPress available when you go to your local bookstore. Even if the books are not currently in stock, it's elementary to have them ordered or delivered directly to your home from Amazon.com. However, most of these books cover only a portion of WordPress or examine WordPress from a singular perspective. Until now, there has never been a book that covers the topic holistically and exhaustively and for all levels of expertise.

If you're a newbie just getting involved with WordPress, you should find value in these pages in the form of tutorials and tips. I cover the user interface and plugin management throughout this book and have endeavored to write in such a way that the least technical reader can still grab the concepts that are at work.

If you're a developer and have been hacking around with WordPress for years, you will also get value out of this book. With the extensive reference charts and appendixes, it will become the book that sits next to your computer and becomes a bit worn and dog-eared with torn pages from you picking it up over and over again.

Of course, designers have the opportunity to grasp the principles at work behind themes and templates, template hierarchy, and template tags. Design is much more than simply creating an elegant user interface in Adobe Photoshop and calling it a day. It's also using the tools that WordPress provides to create usable, smart themes that bring the power of WordPress to the reader.

WordPress Versioning

There is, of course, the question of versioning for this book. WordPress maintains a (rough) four-month release cycle for major releases. During the development of the next major release, there are typically security fixes that are released in the form of “dot releases.” During the process of writing, I have been asked about what version of WordPress this book will cover.

Fortunately, 90 percent of WordPress stays the same. Part of the guiding principles of WordPress core development is maintaining backward compatibility unless it is absolutely mandatory that it be changed. To that end, it doesn’t really matter for what version I wrote this book.

During the process of editing this book, WordPress 3.1 was released. That is the version this book is based upon. However, it is likely that WordPress 3.2 will be released around the time this book goes to print. Never fear. Though there will be new features in WordPress 3.2 that will not be covered in this book, the bulk of the software will remain intact and version neutral.

Getting the Most out of This Book

The chapters in this book are organized into eight parts. Each part is a selection of chapters that all relate to each other in some way. You probably will not want, or need, to read the book from cover to cover, though I would be flattered if you did. Instead, you will find that different parts of the book address different levels and experiences with WordPress and you should feel free to flip back and forth to find the answers you need at different times.

For example, Part I, “Getting Started with WordPress,” contains the initial introductory stuff that describes installing WordPress and basic steps to getting a WordPress blog off the ground, as well as background information to help you understand the philosophies that have guided the development of the software.

Part II, “Working with Plugins,” gets more technical by examining plugins and describing the plugin application programming interfaces (APIs) in WordPress. This is the part that developers will likely use often to understand how to write new plugins for WordPress.

In Part III, “Working with Themes and Template Tags,” I talk about the aspects of WordPress that have to do with themes and templates. If you have an Adobe Photoshop layout and need to hack it up into a WordPress theme, this is the series of chapters you’ll want to get into. It is most suited for designers who need to understand how the WordPress theme system works.

Part IV, “Creating Content,” is going to be the go-to series of chapters for the newbie who just wants to use WordPress to write or create content. This is not a super-technical part, and it doesn’t assume that the reader is changing his theme. It does, however, describe the concepts and principles behind using the WordPress Admin and creating content.

No blogger wants to be caught with a hacked site because she did not keep up to date with upgrades and security fixes. To that end, Part V, “Keeping Up with the Joneses: Maintenance and Upgrades,” is all about maintaining your WordPress blog, and provides suggestions, routines, and concepts behind the maintenance and upgrade routine. It also covers caching, an essential topic for anyone who owns a blog that receives, or will receive, a large amount of traffic.

In Part VI, “Alternate Uses for WordPress,” I stretch the bounds of what WordPress can do. Hopefully by reading this part, you will be inspired to find alternate uses for WordPress and will see that WordPress is not just for blogging. I look forward to seeing how WordPress is used in new and creative ways.

In Part VII, “Looking at the WordPress Ecosystem,” I bring everything full circle by talking about the surrounding community and ecosystem around WordPress. It seems that there is a new venture or product released around WordPress regularly. Many of these are associated with WordPress.com and Automattic, the owner of WordPress.com and patron of the WordPress project.

Part VIII, “Appendixes,” includes all of the appendixes that are important corollary pieces to this book. In some cases, such as with Appendix A and Appendix B, they are reference guides that will be popular among developers who purchase this book. Other appendixes include articles that I have written for the *WordPress Bible* that describe an aspect or use of WordPress that is not necessarily relevant as “chapter material” but add to an understanding of the greater WordPress community. My favorite appendix? Appendix F, “WordPress in Government.” Did you know that the United States intelligence community has more than 7,000 WordPress blogs across 14 different intelligence agencies? Exactly... who knew? And they aren’t the only ones using WordPress in federal, state, and local governments around the world.

Using the Margin Icons

Throughout the book, you will find icons in the margin that address important things you should be aware of. Take note of these icons because they indicate important things that are relevant to the content you are reading.

Note

Notes highlight useful information that you should take into consideration.

Tip

Tips provide additional bits of advice that make particular features quicker or easier to use.

Preface

Caution

Caution warns you of potential problems before you make a mistake.

Cross-Reference

Watch for the Cross-Ref icon to learn where in another chapter you can go to find more information on a particular topic.

Web Resource

The Web Resource icon directs you to other material available online.

On the Web

This icon points you toward related files available on the book's Web site, www.wiley.com/go/wordpressbible.

Acknowledgments

Though I get the credit for this book, the load that is carried through the process is one that is shouldered by more than just me. In fact, if it wasn't for the incredible team of people behind it, it would only be vapor passing in the air. As an author, I have come to lean and rely on these people, whether they were directly involved or pure mental and emotional support. These are my friends, colleagues, and the battle mates in getting this job done, in both the first and second editions of this book.

First of all, thank you, Stephanie McComb, my acquisitions editor, for originally reaching out to me. I was working in a local coffee shop in Arlington, Virginia, when her initial inquiry to write this book popped into my inbox in April of 2009. It was Stephanie indicating that she had heard of my work and extending that initial hand of opportunity for me to bring my knowledge to bear in this book. She has been a tremendous support through this process. Thank you for having the faith in me.

To Lynn Haller, my agent at StudioB, who took care of all the heavy lifting and even threw some blocks for me along the way. When I first started to consider this, I consulted with other authors. Some told me to get an agent and some said I should "go it alone." I'm glad you were there to take care of the business.

To Keith Casey, my friend, colleague, and fellow PHP rumbler. You had no idea about how WordPress worked as you come from a Drupal background. I asked you to be a safe valve for me since you didn't know WordPress but are an expert in PHP and could give an objective outside opinion. You agreed to bring your high level of expertise to bear to help me with sanity checks in this book before I submitted each chapter and caused me to think twice on more than one occasion.

To Mark Jaquith, the technical editor of this book, my friend, and WordPress colleague. Mark and I have worked together in one form or another since 2007. When Wiley asked me if I had recommendations for a technical editor, Mark was the only name that I wanted in that role. He is a rock star and could have written this book himself. There are only a few people on the face of the planet who know WordPress as well as Mark. I am not one of them.

To Erin Kotecki Vest, my best friend, who knows absolutely nothing about any of this stuff, but offered mental support all along the way. Often during the process of writing, I would hit a point of mental exhaustion at some point midday. It was at times like these that she was always available for a quick chat and encouraged me every step of the way. Thank you!

To my colleagues at WP Engine, particularly Jason Cohen, who shamelessly plugs this book and my expertise here in Austin, on the web and around the country. You make me feel like more of a pro than I think I am.

To the community on my blog, Twitter, Facebook, and all the other social networking outlets I participate in. You have been patient with me as I constantly talked about this book, the processes of writing, and the mental exhaustion I experienced at times. Your excitement has buoyed my efforts. Now go buy five of these books and give them to your families and friends as stocking stuffers during the holidays.

Contents at a Glance

Part I: Getting Started with WordPress.	1
Chapter 1: Learning About WordPress.....	3
Chapter 2: Installing and Configuring WordPress.....	23
Chapter 3: WordPress, SEO, and Social Media Marketing.....	43
Chapter 4: Finding Help in the WordPress Support System.....	63
Part II: Working with Plugins	77
Chapter 5: Extending WordPress with Plugins.....	79
Chapter 6: Building Widgets and Navigation Menus.....	115
Chapter 7: Understanding the WordPress Database Class.....	137
Chapter 8: Dissecting the Loop and WP_Query.....	159
Part III: Working with Themes and Template Tags	179
Chapter 9: Using Free or Premium Themes.....	181
Chapter 10: Understanding the Template File Hierarchy.....	195
Chapter 11: Adding JavaScript and CSS to Themes.....	225
Chapter 12: Dissecting the Comment Loop, Template Tags, and Theme Best Practices.....	245
Part IV: Creating Content.	269
Chapter 13: Navigating the Content Production Experience.....	271
Chapter 14: Using Offline Editors.....	291
Part V: Keeping Up with the Joneses: Maintenance and Upgrades	311
Chapter 15: Performing Automatic Upgrades.....	313
Chapter 16: Moving to WordPress and Backing It Up.....	323
Chapter 17: WordPress Maintenance and Security.....	349
Chapter 18: Caching Strategy to Ensure WordPress Scales.....	369
Chapter 19: Understanding WordPress Roles and Capabilities.....	389

Contents

Part VI: Alternate Uses for WordPress	399
Chapter 20: Using WordPress for Alternative Blogging.....	401
Chapter 21: WordPress as a Content Management System.....	423
Part VII: Looking at the WordPress Ecosystem	437
Chapter 22: Leveraging WordPress Multisite Functionality	439
Chapter 23: Adding User Forums with bbPress.....	459
Chapter 24: Creating Your Own Social Network with BuddyPress.....	469
Chapter 25: Using BackPress as a Development Framework.....	485
Chapter 26: WordPress.com and the Automattic Products.....	495
Chapter 27: Leveraging Automattic Products.....	513
Part VIII: Appendixes	529
Appendix A: WordPress Hook Reference	531
Appendix B: Template Tags	589
Appendix C: WordPress Hosting.....	643
Appendix D: WordPress Vendors and Professional Services.....	653
Appendix E: WordPress in Government.....	665
Appendix F: WordPress in Major Media.....	675
Appendix G: The General Public License.....	683
Index	689

Contents

Table of Contents

About the Author.....	v
Foreword.....	vii
Preface.....	ix
WordPress Versioning.....	x
Getting the Most out of This Book.....	x
Using the Margin Icons.....	xi
Acknowledgments.....	xiii

Part I: Getting Started with WordPress **1**

Chapter 1: Learning About WordPress3

A Brief History of WordPress.....	3
The creation of WordPress.....	4
The WordPress ecosystem emerges.....	6
The future of WordPress.....	7
Leveraging the WordPress Community.....	7
Support.....	7
Support forums.....	7
The WordPress Codex.....	8
IRC.....	8
Development.....	8
Hackers mailing list.....	8
Testers mailing list.....	9
Trac.....	9
WordPress by the Numbers.....	10
Ten Things You Need to Know About WordPress.....	12
Generate content with an offline editor.....	12
Benefit from built-in SEO features.....	13
Widgetize your blog for a unique experience.....	14
Install themes, plugins, and core upgrades automatically.....	15
Turn your blog into a social network.....	16
Extend WordPress with plugins.....	16
Provide context with the WordPress taxonomies.....	16
Import your blog from any platform.....	17
Take advantage of multiple feeds.....	17
Make WordPress a full-fledged CMS with custom post types.....	18

Contents

Generate navigation menus on the fly with no coding required.....	18
Understanding Open Source and the General Public License.....	18
Summary.....	21
Chapter 2: Installing and Configuring WordPress	23
System Requirements.....	24
Choosing a Web Server.....	26
Apache.....	26
Lighttpd.....	27
Nginx.....	28
Internet Information Services.....	29
Optional modules.....	30
Apache mod_rewrite.....	30
eAccelerator for PHP.....	32
APC for PHP.....	34
SSH2 module for PHP.....	35
FTP for PHP.....	36
Installing WordPress.....	36
Configuring the database.....	36
Uploading your files.....	39
Summary.....	41
Chapter 3: WordPress, SEO, and Social Media Marketing	43
Understanding the Basics of Search Engine Optimization.....	44
Canonical URLs.....	44
Google searches.....	45
Google Webmaster Tools.....	47
Steps for setting up proper canonical URL redirection.....	47
The Meta tag boost.....	48
Meta keywords tag.....	49
Meta description tag.....	49
Title tag.....	49
The All in One SEO plugin.....	52
Home Title.....	52
Home Description.....	52
Home Keywords.....	53
Canonical URLs.....	53
Rewrite Titles.....	53
Title Formats.....	53
Use Categories for META Keywords.....	53
Dynamically Generate Keywords for Posts Page.....	54
Noindex Options.....	54

Autogenerate Descriptions	54
Additional Headers	54
Leveraging Social Networks to Extend Your Blog	54
Facebook.....	55
Facebook Photos for WordPress	55
WP-FacebookConnect	56
Facebook Like Button.....	56
Twitter.....	56
Twitter Tools.....	57
TweetMeme	59
Twitter Widget Pro.....	60
Summary.....	61
Chapter 4: Finding Help in the WordPress Support System	63
Using the WordPress Codex.....	64
Staying in the Loop with Mailing Lists.....	66
wp-hackers	66
wp-testers	66
wp-docs.....	67
wp-xmlrpc.....	67
wp-polyglots	67
wp-svn	68
wp-trac	68
Finding Help in the WordPress Support Forums.....	68
Understanding the support forum layout.....	69
Installation	69
How To and Troubleshooting	69
Themes and Templates.....	70
Plugins and Hacks	70
WP-Advanced.....	70
Multisite.....	70
Your WordPress.....	70
Miscellaneous.....	71
Requests and Feedback	71
Alpha/Beta	71
Posting in the support forums	71
Using IRC to Find Help.....	73
Quick Start for IRC.....	73
The WordPress IRC Rooms	75
Summary.....	75

Part II: Working with Plugins **77**

Chapter 5: Extending WordPress with Plugins 79

Understanding WordPress Hooks	80
The anatomy of a hook	80
Theme hooks	81
Writing Your Own Plugin	82
Extending the WordPress Admin.....	83
Creating an admin interface.....	84
Adding an admin panel to the WordPress Admin navigation menu	85
Creating unique nonces for plugin form security.....	88
Processing data and interacting with the database.....	89
Loading JavaScript libraries.....	90
Preparing JavaScript with <code>wp_enqueue_script()</code>	91
Creating new Dashboard widgets.....	91
Creating Events with Actions.....	93
Modifying Content with Filters	94
Using Multi-Argument Hooks	96
Working with Custom Post Types	97
Making WordPress a full-fledge CMS	97
Using <code>register_post_type()</code>	98
Massaging custom post type functionality	99
Applying Custom Taxonomies	101
Localizing Plugins	103
Enabling plugin code for translation.....	104
Providing a <code>textdomain</code> for the plugin	108
Generating a POT file for translators	109
Summary.....	112

Chapter 6: Building Widgets and Navigation Menus 115

Using Widgets in WordPress	116
Building Widgets with the Widget API	119
Building a new widget plugin.....	119
Creating a control interface for the plugin	122
Saving configuration data	123
Putting it all together	123
Replacing existing widgets.....	125
Widgetizing Your Theme.....	128
Declaring sidebars.....	128
Integrating widgetized sidebars in themes.....	130

Building WordPress Navigation Menus 132
 Exploring the navigation menu interface..... 132
 Enabling a theme to use navigation menus..... 134
 Registering navigation menu locations in a theme..... 135
 Summary..... 136

Chapter 7: Understanding the WordPress Database Class 137

Examining the Schema and Properties of the Database Class..... 138
 The database properties..... 138
 show_errors..... 139
 suppress_errors 139
 last_error..... 139
 num_queries 139
 last_query..... 139
 col_info 139
 queries..... 139
 prefix..... 140
 ready 140
 blogid 140
 siteid..... 140
 global_tables 140
 ms_global_tables 140
 posts..... 140
 postmeta..... 142
 users..... 142
 usermeta 143
 comments 144
 commentmeta 145
 links 145
 options 146
 terms 146
 term_taxonomy 147
 term_relationships..... 147
 blog_versions..... 148
 registration_log 148
 signups 149
 site..... 149
 sitemeta 150
 tables..... 150
 field_types..... 151
 charset..... 151
 collate 151
 real_escape 151

Contents

Adding Data to MySQL with WordPress	151
Inserting new data into MySQL	151
Updating data in MySQL safely	152
Retrieving Data from MySQL with WordPress.....	153
Retrieving a single value from a table	153
Retrieving a column of data	153
Retrieving a row of data	154
Retrieving a full data set.....	154
Performing other queries.....	155
Preventing SQL Injection	155
Summary.....	157
Chapter 8: Dissecting the Loop and WP_Query	159
Defining the Loop.....	160
Wrangling the Loop with Plugins.....	163
Discovering query hooks.....	163
Altering the query with hooks	165
Developing Custom and Multiple Loops	168
Using query_posts() and rewind_posts()	168
Instantiating a new Loop with WP_Query	169
Using variables to alter the query	170
Examples of WP_Query in action	172
Featured stories.....	172
Future posts.....	173
Display only sticky posts.....	173
Analyzing the Twenty-Ten Loop	175
Child theming Twenty-Ten.....	175
Leveraging get_template_part()	175
Using Loops Strategically	176
Summary.....	177
Part III: Working with Themes and Template Tags	179
Chapter 9: Using Free or Premium Themes	181
Understanding the User Experience.....	181
Typography	182
White space	182
Fixed or fluid width	183
Sidebars	184
Finding and Implementing Free Themes.....	184
Finding and Implementing Premium Themes.....	187
Exploring Free Theme Frameworks.....	189
Twenty-ten theme.....	190
Thematic framework.....	190

Comparing Premium Theme Frameworks	191
Builder Theme.....	192
Genesis Theme Framework.....	192
Summary.....	193
Chapter 10: Understanding the Template File Hierarchy	195
Looking at the Minimum Necessary Template Files.....	196
style.css.....	196
index.php.....	197
Understanding the Common Template Files	199
header.php.....	200
footer.php.....	204
sidebar.php.....	206
comments.php.....	207
single.php.....	211
archive.php.....	212
page.php	212
search.php.....	213
loop.php.....	213
functions.php.....	213
screenshot.png.....	214
Enhancing the User Experience with Template Files.....	214
attachment.php.....	214
image.php, video.php, audio.php, and application.php.....	215
author.php	215
loop- <code>{type}</code> .php.....	215
tag.php.....	215
tag- <code>{slug}</code> .php.....	216
category.php	216
category- <code>{x}</code> .php.....	216
date.php	217
year.php, month.php, day.php	217
home.php.....	217
404.php.....	217
Developing Custom Template Files.....	218
Taking Advantage of WordPress Theme Features	219
Post Thumbnails	219
Navigation Menus.....	219
Automatic Feed URLs.....	220
Custom Backgrounds.....	220
Custom Headers	220
Summary.....	223

Chapter 11: Adding JavaScript and CSS to Themes	225
Examining the jQuery and Prototype Frameworks	226
jQuery	226
Prototype.....	231
Comparing the frameworks	233
Leveraging WordPress' JavaScript Libraries	233
Prototype: script.aculo.us	234
Prototype: TinyMCE	234
jQuery: Autosave.....	235
jQuery: hoverIntent	236
jQuery: Farbtastic.....	236
jQuery: jQueryUI	237
Examining WordPress Plugins that Use JavaScript Effects.....	238
jQuery Reply to Comment.....	238
Social Bookmarks	239
WP Conditional Digg This Badge	239
WPTouch iPhone Theme	239
Looking at Theme Styles.....	240
Queuing styles.....	240
Using JavaScript to style elements.....	241
Summary.....	242
Chapter 12: Dissecting the Comment Loop, Template Tags, and Theme Best Practices	245
Using Hooks in Themes	246
Common hooks	247
wp_head().....	247
wp_footer()	248
comment_form.....	248
Additional hook suggestions.....	249
Implementing Scripts in Themes	250
Using Template Tags to Make Themes Dynamic.....	251
Using bloginfo() to access blog metadata	251
Modularizing themes with get_template_part().....	256
Using template tags in the Loop	257
Using Loop template tags outside the Loop.....	261
Creating Conversations with Threaded Comments and Paged Comments	261
Personalizing the Reader Experience with Avatars.....	266
Summary.....	267

Part IV: Creating Content **269**

Chapter 13: Navigating the Content Production Experience 271

- Customizing Your Workspace 271
- Leveraging the Elements of Content Creation..... 272
 - Using the title strategically..... 273
 - Designating an excerpt..... 274
 - Enhancing searchability of content 274
 - Adjust the title slug..... 275
 - Use “bold” font to enhance importance..... 275
 - Add descriptive text to videos and podcasts..... 276
 - Write well 277
 - Looking at categories and tags: What’s the difference?..... 278
 - Search implications 278
 - Architectural implications..... 279
 - Managing categories 280
 - Managing tags 283
 - Publishing and scheduling posts..... 284
 - Using custom fields 286
- Hacking Your Experience: Getting the Most Out of Writing..... 287
 - Using the visual text editor..... 287
 - Using Full Screen mode..... 288
 - Using the Press This bookmarklet..... 288
- Summary..... 290

Chapter 14: Using Offline Editors 291

- What Is XML-RPC? 291
 - WordPress-supported remote protocols 292
 - Blogger API..... 292
 - MetaWeblog API 293
 - Movable Type API 294
 - WordPress XML-RPC API..... 294
 - The bundled XML-RPC library 296
 - AtomPub and the upcoming standard of remote management 296
- Understanding XML-RPC Security Risks..... 296
- Looking at Offline Blog Editors 299
 - Windows Live Writer (Windows) 299
 - BlogDesk (Windows) 301
 - MarsEdit (Mac)..... 303
 - Ecto (Mac)..... 305
 - Drivel (Linux)..... 306
 - ScribeFire (All)..... 307
- Summary..... 310

Part V: Keeping Up with the Joneses: Maintenance and Upgrades **311**

Chapter 15: Performing Automatic Upgrades 313

Meeting the Minimum Automatic Upgrade Requirements.....	314
Disabling the “Upgrade Nag”.....	314
Performing Automatic Upgrades	318
Using SSH for Automatic Upgrades.....	320
Using SSH with keys	320
Using constants to bypass credentials.....	321
Summary.....	322

Chapter 16: Moving to WordPress and Backing It Up 323

Moving a Blog to WordPress.....	323
Blogger	325
Blogware.....	328
DotClear	329
LiveJournal	330
Movable Type and TypePad.....	331
WordPress	334
Importing Tags into WordPress	341
Converting categories to tags.....	342
Looking at Backup Routines.....	342
File backups	343
MySQL backups	343
Using mysqldump.....	343
Using phpMyAdmin.....	343
Backup scripting	345
Summary.....	346

Chapter 17: WordPress Maintenance and Security. 349

Upgrading WordPress.....	350
Upgrading manually with FTP	350
Debugging problems with FTP upgrades.....	353
Re-upload files.....	353
Turning on Debugging in WordPress.....	354
Check the error log	354
Roll back to a previous version	355
Choosing an FTP Client.....	356
Windows FTP clients.....	356
WS_FTP Professional	356
FileZilla	357
Mac OS X FTP clients	358
Transmit.....	358
Fetch.....	359

Practicing Sound WordPress Security	360
Data sanitization	361
Casting variables.....	361
Sanitizing HTML entities for XML	361
Using KSES to filter unsafe content	362
Escaping and encoding HTML.....	362
Escaping and encoding HTML attributes.....	363
Escaping and encoding JavaScript	363
Sanitizing URLs.....	363
Preventing SQL injection.....	364
File permissions	364
Unix file permissions	364
WordPress file permissions.....	366
Summary.....	367
Chapter 18: Caching Strategy to Ensure WordPress Scales	369
Understanding Caching	370
Using WordPress Caching Mechanisms	371
WordPress object cache.....	371
wp_cache_add().....	371
wp_cache_delete().....	372
wp_cache_get()	373
wp_cache_replace()	373
wp_cache_flush()	374
The WP Super Cache plugin	374
Memcached and the Batcache plugin.....	377
Optimizing PHP with Opcode Caching.....	378
eAccelerator	378
APC.....	381
Caching MySQL with HyperDB and the Query Cache	383
MySQL query cache.....	383
HyperDB	384
Harnessing the “Cloud”.....	385
Summary.....	387
Chapter 19: Understanding WordPress Roles and Capabilities	389
Looking at WordPress Roles and Capabilities.....	389
User levels.....	393
Adding and removing custom capabilities	394
Checking capabilities in plugins.....	395
Using the Role Manager Plugin	397
Summary.....	398

Part VI: Alternate Uses for WordPress 399

Chapter 20: Using WordPress for Alternative Blogging 401

Photoblogging with WordPress.....	402
What is a Photoblog?.....	402
Examples of notable photoblogs.....	402
ThomasHawk.com.....	403
The Fine Arts Photoblog.....	403
Lens.....	403
Great WordPress photoblog themes.....	404
Monotone.....	404
Duotone.....	404
StudioPress Landscape Child Theme for Genesis.....	405
Using EXIF data in a photoblog.....	406
Implementing a Twitter-style Blog.....	417
Using Press This for a Tumble Blog.....	419
Summary.....	421

Chapter 21: WordPress as a Content Management System 423

Using WordPress as a Content Management System.....	423
Custom Post Types.....	424
Custom Taxonomies.....	425
Custom Post Formats.....	425
Understanding Enterprise WordPress Needs.....	427
Single sign-on authentication.....	427
Lead generation and CRM integration.....	429
WordPress support.....	430
Conveying a Consistent Message and Brand.....	430
Understanding When a Blog is Not a Blog.....	432
Summary.....	435

Part VII: Looking at the WordPress Ecosystem 437

Chapter 22: Leveraging WordPress Multisite Functionality 439

Installing and Configuring WordPress Multisite.....	440
Setting Up WordPress Multisite.....	440
Creating the blogs.dir directory.....	441
Adding Multisite constants.....	442
Modifying Rewrite Rules.....	442
WordPress Multisite System Configurations.....	443
Wildcard DNS configuration.....	444
Apache Wildcard Vhost configuration.....	444