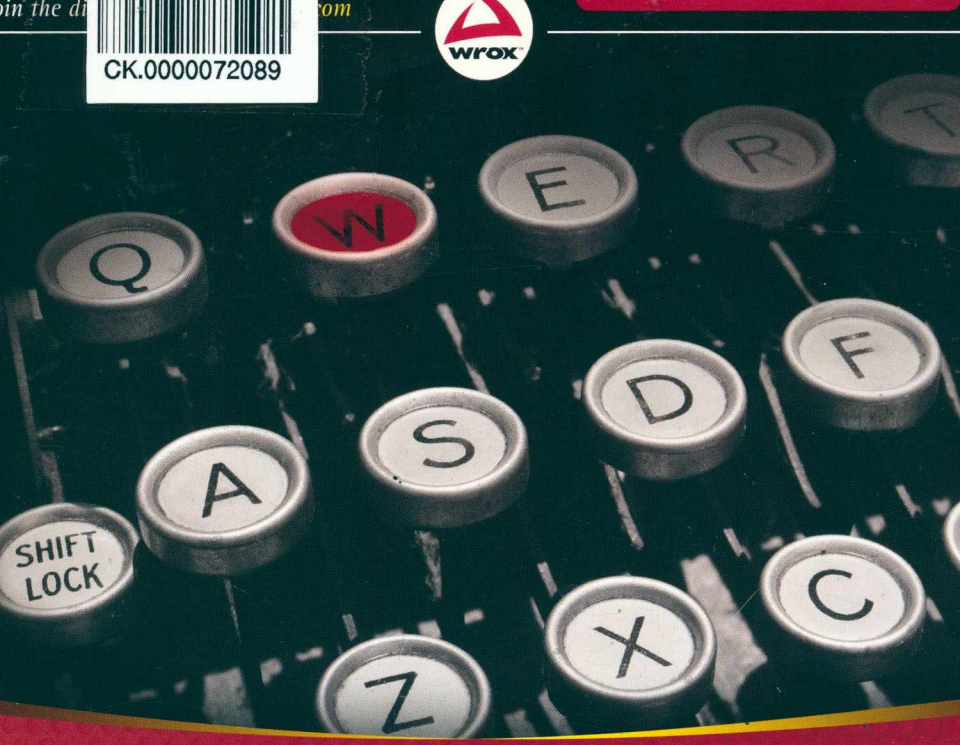
CK.0000072089



Professional WordPress®

Design and Development

Brad Williams, David Damstra, Hal Stern

PROFESSIONAL

WordPress®

PROFESSIONAL

WordPress®

DESIGN AND DEVELOPMENT

Second Edition

Brad Williams
David Damstra
Hal Stern

GIFT OF THE ASIA FOUNDATION
NOT FOR RE-SALE
QUÀ TẶNG CỦA QUỸ CHÂU Á
KHÔNG ĐƯỢC BÁN LẠI

WILEY
John Wiley & Sons, Inc.

Professional WordPress®: Design and Development, Second Edition

Published by
John Wiley & Sons, Inc.
10475 Crosspoint Boulevard
Indianapolis, IN 46256
www.wiley.com

Copyright © 2013 by John Wiley & Sons, Inc., Indianapolis, Indiana

Published simultaneously in Canada

ISBN: 978-1-118-44227-2
ISBN: 978--1118-44229-6 (ebk)
ISBN: 978-1-118-60438-0 (ebk)
ISBN: 978-1-118-60423-6 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3

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 Web site 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 Web site may provide or recommendations it may make. Further, readers should be aware that Internet Web sites 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 please contact our Customer Care Department within the United States at (877) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2012950504

Trademarks: Wiley, the Wiley logo, Wrox, the Wrox logo, Wrox Programmer to Programmer, 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 WordPress Foundation. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc., is not associated with any product or vendor mentioned in this book.

For my wife, my partner, my best friend April Williams. You'll never know how much you mean to me. Thank you for putting up with my nerdy ways and always supporting me.

—Brad Williams

For my loving wife Holly, my children - Jack, Justin and Jonah. Thanks for your love and support.

—David Damstra

For Toby, whose patience grows with each project.

—Hal Stern

CREDITS

EXECUTIVE EDITOR
Carol Long

PROJECT EDITOR
Christina Haviland

TECHNICAL EDITOR
Hal Stern

PRODUCTION EDITOR
Daniel Scribner

COPY EDITOR
Nancy Rapoport

EDITORIAL MANAGER
Mary Beth Wakefield

FREELANCER EDITORIAL MANAGER
Rosemarie Graham

ASSOCIATE DIRECTOR OF MARKETING
David Mayhew

MARKETING MANAGER
Ashley Zurcher

BUSINESS MANAGER
Amy Knies

PRODUCTION MANAGER
Tim Tate

VICE PRESIDENT AND EXECUTIVE GROUP PUBLISHER
Richard Swadley

VICE PRESIDENT AND EXECUTIVE PUBLISHER
Neil Edde

ASSOCIATE PUBLISHER
Jim Minatel

PROJECT COORDINATOR, COVER
Katie Crocker

PROOFREADER
Sarah Kaikini, Word One

INDEXER
Robert Swanson

COVER DESIGNER
Elizabeth Brooks

COVER IMAGE
© Karen Phillips / iStockphoto

ABOUT THE AUTHORS

BRAD WILLIAMS is the co-founder of WebDevStudios.com, a cohost on the WP Late Night podcast, and the coauthor of *Professional WordPress* and *Professional WordPress Plugin Development*. Brad has been developing websites for over 15 years, including the last 5 where he has focused on open-source technologies like WordPress. Brad has given presentations at various WordCamps across the country and is a co-organizer of the Philadelphia WordPress Meetup and WordCamp Philly. You can follow Brad online on his personal blog at `http://strangework.com` and on Twitter @williamsba.

DAVID DAMSTRA is a vice president of Professional Services for CU*Answers, a credit union service organization. David manages a team of developers to create websites and web applications for the financial industry. David's team uses WordPress as the foundation for many web projects. David is also a Zend Certified Engineer for PHP5. You can find David online professionally at `http://ws.cuanswers.com` where he focuses on web technology and best practices for web development, especially pertaining to the credit union industry, and personally at `http://mirmillo.com` where he talks about his family and home brewing.

HAL STERN is a Vice President with a major technology company focusing on software architecture for programmable networks and architectures for "big data" applications. Hal began blogging as part of a corporate communications effort at Sun Microsystems, and has been using WordPress to share thoughts on music, sports, food, and New Jersey for the past five years. Hal's affinity for WordPress internals began when he was trying to determine how a mangled URL returned almost-correct content, and that curiosity has turned into his contributions to this book and a WordCamp talk. Hal is online at `http://snowmanonfire.com` and @freeholdhal.

ACKNOWLEDGMENTS

THANK YOU to the love of my life, April, for your endless support, friendship, and continuing to put up with my nerdy ways. Thank you to my awesome nieces, Indiana Brooke and Austin Margaret. Thank you to the entire WordPress community for your support, friendships, motivation, and guidance. Thank you to Michael, Jason, Freddy, and Hannibal for always lurking in the shadows. Last but not least, thank you to my ridiculous zoo: Lecter, Clarice, and Squeaks the Cat (aka Kitty Galore). Your smiling faces and wiggly butts always put a smile on my face.

—Brad Williams

CONTENTS

INTRODUCTION *xxi*

CHAPTER 1: FIRST POST **1**

What Is WordPress? **1**
Popularity of WordPress **3**
Current State 3
Intersecting the Community 4
WordPress and the GPL 5
Content and Conversation **6**
WordPress as a Content Management System 6
Creating Conversation 7
Getting Started **8**
Hosting Options 8
Do It Yourself Installation 10
Finishing Up **17**
First-Time Administration 17
First Post 19
Summary **20**

CHAPTER 2: CODE OVERVIEW **21**

Downloading **21**
Download Locations 21
Available Formats 22
Release Archive 22
Directory and File Structure **23**
WordPress Configuration **24**
wp-config.php File 24
Advanced wp-config Options 26
.htaccess 31
The .maintenance File 35
wp-content User Playground **36**
Plugins 36
Themes 37
Uploads and Media Directory 37
Upgrade Directory 38

Custom Directories 38
Summary 39

CHAPTER 3: WORKING WITH WORDPRESS LOCALLY 41

Benefits of Working Locally 41
Typical Deployment Cycle 42
Why So Much Process? 42
Tools for Component Administration 43
Getting Your Development Stack 44
Adding WordPress to the Local Install 45
Configuration Details 46
Managing the Web Server Document Tree 46
Enabling Debug Information 48
Handling Local and Production Database 50
Creating Virtual Local Server Names 50
Local Theme and Plugin Development 53
Deploying Local Changes 53
Summary 55

CHAPTER 4: TOUR OF THE CORE 57

What's in the Core? 57
Using the Core as a Reference 58
Inline Documentation 59
Finding Functions 60
Exploring the Core 62
Deprecated Functions 65
WordPress Codex and Resources 66
What Is the Codex? 66
Using the Codex 66
Function Reference 67
WordPress APIs 69
Codex Controversy 71
Don't Hack the Core! 71
Why Not? 71
Alternatives to Hacking the Core 72
Summary 72

CHAPTER 5: THE LOOP 73

Understanding the Loop 74
From Query Parameters to SQL 75