

**A PROJECT GUIDE TO**

# **UX DESIGN**

**FOR USER EXPERIENCE DESIGNERS  
IN THE FIELD OR IN THE MAKING**

**SECOND EDITION**

**RUSS UNGER AND CAROLYN CHANDLER**

**A PROJECT GUIDE TO**

# UX DESIGN

**FOR USER EXPERIENCE DESIGNERS  
IN THE FIELD OR IN THE MAKING**

**SECOND EDITION**

**RUSS UNGER AND CAROLYN CHANDLER**

**New  
Riders** | VOICES THAT MATTER™

## **A Project Guide to UX Design, Second Edition**

Russ Unger and Carolyn Chandler

### **New Riders**

1249 Eighth Street  
Berkeley, CA 94710  
(510) 524-2178  
(510) 524-2221 (fax)

Find us on the Web at: [www.newriders.com](http://www.newriders.com)

To report errors, please send a note to [errata@peachpit.com](mailto:errata@peachpit.com)

New Riders is an imprint of Peachpit, a division of Pearson Education.

Copyright © 2012 by Russ Unger and Carolyn Chandler

**Project Editor:** Michael J. Nolan

**Development Editor:** Jeff Riley/Box Twelve Communications

**Production Editor:** Tracey Croom

**Copyeditor:** Jeff Riley/Box Twelve Communications

**Proofreader:** Rose Weisburd

**Interior and Cover Designer:** Mimi Heft

**Indexer:** Rebecca Plunkett

### **Notice of Rights**

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission for reprints and excerpts, contact [permissions@peachpit.com](mailto:permissions@peachpit.com).

### **Notice of Liability**

The information in this book is distributed on an "As Is" basis without warranty. While every precaution has been taken in the preparation of the book, neither the authors nor Peachpit 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 instructions contained in this book or by the computer software and hardware products described in it.

### **Trademarks**

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and Peachpit was aware of a trademark claim, the designations appear as requested by the owner of the trademark. All other product names and services identified throughout this book are used in editorial fashion only and for the benefit of such companies with no intention of infringement of the trademark. No such use, or the use of any trade name, is intended to convey endorsement or other affiliation with this book.

ISBN 13: 978-0-321-81538-5

ISBN 10: 0-321-81538-6

9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

## Praise for *A Project Guide to UX Design*

If Russ Unger and Carolyn Chandler were magicians, the Alliance would be after them for revealing their best secrets. Fortunately for you, they're not. Russ and Carolyn have collected up sage wisdom previously only known to the most experienced UX project leaders and codified it for all to see. Now you can learn the secrets necessary to running great user experience projects.

Jared M. Spool, CEO and founding principal of User Interface Engineering

Is there one book that can tell you everything you need to know about designing user experiences? No. Is there a book that can get you most of the way there? There is now. Carolyn and Russ have laid a solid foundation for planning and managing design projects. This is an essential handbook for anyone mired in the competing methodologies, the endless meetings, and all the moving parts of user experience design.

Dan Brown, author of *Communicating Design*

This book is a fantastic introduction to how to design great products for real people. But it covers much more than just design—it also includes all the things around design: managing projects, working with people, and communicating ideas. A great all-rounder.

Donna Spencer, author of “Card Sorting: Designing Usable Categories”

This is a practical, accessible, and very human guide to a very human activity: working together with people to make great things for other people.

Steve Portigal, Portigal Consulting

If you've heard of Wil Wheaton the author, you understand why I hold Russ Unger in such high regard. Russ's experience and guidance was fundamental to the construction and design of Monolith Press, and he's been one of the most valuable collaborators I've ever worked with.

Wil Wheaton, actor and author of *Dancing Barefoot*, *Just a Geek*, and *The Happiest Days of Our Lives*



# Acknowledgments

## *Russ Unger*

When you agree to write a second edition of a book, it seems it should be a breeze. Then you start to review the tasks ahead of you, and you realize that it can be every bit as challenging as the first edition. Fortunately, as with the first edition, there was a lot of help in creating this.

My family allowed me to do this. Again. I'm eternally grateful. Thank you for keeping me in smiles and laughter at times when I've been in short supply. Thank you for laughing at jokes no one else would ever find funny.

My friends chimed in, threw in support at the last minute, and stepped up to bat to provide content and confidence, both of which were definitely needed at points during this endeavor. In no specific order, the stars of the second edition are: Brad Nunnally, Kim Nunnally, Jonathan "Yoni" Knoll, Brad Simpson, Gabby Hon, Laura Creekmore, Tim Frick, Margot Bloomstein, Dr. Arthur Doederlein, Sarah Krznarich, Matthew Grocki, Dave Gray, and Todd Zaki Warfel. I'm blessed to know such amazing people, who have offered their time and resources.

Carolyn and our counterparts at New Riders, who are always a blessing to get to work with: Michael Nolan, Jeff Riley, Tracey Croom, and Mimi Heft pulled together to help us really nail this down. It is a pleasure to get to work with you all.

Everyone who helped out with the first edition, and offered continued support: Linda Laflamme, Becca Freed, Steve "Doc" Baty, Brad Simpson, Mark Brooks, Jonathan Ashton, Jono Kane, Lou Rosenfeld, Christina Wodtke, Todd Zaki Warfel, Will Evans, David Armano, Livia Labate, Matthew Milan, Troy Lucht, Ross Kimbarovsky, Wil Wheaton, Tonia M. Bartz, Leah Buley, Dave Carlson, Christopher Fahey, Nick Finck, Jesse James Garrett, Austin Govezza, Jon Hadden, Whitney Hess, Andrew Hinton, Gabby Hon, Kaleem Khan, James Melzer, Chris Miller, Maciej Piwowarczyk, Stephanie Sansoucie, Kit Seeborg, Josh Seiden, Jonathan Snook, Joe Sokohl, Samantha Soma, Jared M. Spool, Keith Tatum, Tim Bruns, Peter Ina, Jean Marc Favreau, Steve Portugal, Andrew Boyd, Dan Brown, Christian Crumlish, Alec Kalner, Hugh Forrest, and all of the UX Book Clubs (<http://uxbookclub.org>) across the world that continue to support the authors crazy enough to put it down in writing.

Finally, it is important to note that without organizations like the Information Architecture Institute, Interaction Design Association, and others, it would have been impossible for me to make the connections with many of the people mentioned. If you're at all curious about the field of UX design, go explore these organizations, join them, and get involved!

### ***Carolyn Chandler***

Every worthy challenge brings its own set of lessons, and writing a book is certainly that kind of challenge. In writing the first edition, I learned how difficult it is to step away from what you do day to day, and to tell that story of a user-centered project approach from beginning to end. I kept jumping to the middle, but thankfully Linda Laflamme kept Russ and me focused on the overall flow and clarity.

In working on this edition, I finally realized how closely the book-writing process resembles the design process. You need to research, immerse, talk to users, talk to experts, generate concepts and create structure before you can really get into the details.

The experts in this edition helped me immerse in some of the most recent and relevant changes in the field. Nate Bolt shared his expertise in remote research tools, which have had an unbelievable growth in both number and effectiveness since the first edition. Jeff Gothelf brought his experience in Lean UX, an approach that has helped entrepreneurs focus on bringing user-centered products to light quickly and inexpensively. Brian Henkel, Chris Ina, and Jim Jacoby provided invaluable information on considerations when designing for mobile devices. And Brandy Taylor brought the new information on design principles to a higher level by sharing her philosophy and process in working with the visual, emotional elements of a design.

A hearty "thanks!" to these experts, and to all the folks at Manifest Digital who gave me extra time and space to write this edition, including Jennifer Conklin, Sue Hardek, and Michael Latiner. And of course, I'd like to thank Jim Jacoby for talking me off the ledge when I wasn't sure how to balance everything. It all turned out fine, just like you said, Jim!

In addition to the people Russ has already acknowledged, I'm continually grateful for the people who contributed to the first edition, with support, expertise, and time: Steve Baty, John Geletka, Linda Laflamme, Christine

Mortensen, Brett Gilbert, Jen O'Brien, Jason Ulaszek, Haley Ebeling, Meredith Payne, Jenn Berzansky, Santiago Ruiz—and for Danyell Jones, for helping me get set up on [delightside.com](http://delightside.com).

Last but not least, I want to thank my family and friends, who once again patiently dealt with my random appearances, and my occasional hermit-like retreats to the writing cave. I'm coming out now—see you in the sunlight!

# Contents

<b>INTRODUCTION</b> .....	<b>xiii</b>
<b>CHAPTER 1: The Tao of UXD</b> .....	<b>1</b>
What Is User Experience Design? .....	3
The Broad Definition .....	3
Don't Forget the Tangible .....	4
Our Focus .....	5
About UX Designers .....	6
Where UX Designers Live .....	7
Let's Get Started! .....	8
<b>CHAPTER 2: The Project Ecosystem</b> .....	<b>9</b>
Identify the Type of Site .....	10
Brand Presence .....	11
Marketing Campaign .....	14
Content Source .....	16
Task-Based Applications .....	18
E-Commerce Sites .....	19
E-Learning Applications .....	20
Social Networking Applications .....	21
Mobile Sites and Applications .....	21
Choose Your Hats .....	30
Information Architect .....	30
Interaction Designer .....	31
User Researcher .....	32
Other Roles You May Play or May Need .....	35
Building a Network of User Advocacy .....	41
Understand the Company Culture .....	42
History .....	43
Hierarchy .....	45
Logistics .....	46
Pulling It Together .....	47

<b>CHAPTER 3: Proposals for Consultants and Freelancers</b>	<b>49</b>
Proposals	50
Creating the Proposal	51
Title Page	52
Revision History	53
Project Overview	54
Project Approach	55
Scope of Work	57
Assumptions	57
Deliverables	58
Ownership and Rights	59
Additional Costs and Fees	60
Project Pricing	61
Payment Schedule	62
Acknowledgment and Sign-Off	63
Statements of Work	65
<b>CHAPTER 4: Project Objectives and Approach</b>	<b>67</b>
Solidify Project Objectives	68
How Can a UX Designer Help?	71
Understand the Project Approach	73
Waterfall Approach	74
Agile Approaches	75
Modified Approaches	80
How Does the Approach Affect Me?	81
<b>CHAPTER 5: Business Requirements</b>	<b>83</b>
Understand the Current State	86
Heuristic Analysis	86
Gather Ideas from Stakeholders	90
Outline Responsibilities	91
Gather the Right Stakeholders	92
Create a Plan for the Meetings	94
Sales: Requirements-Gathering Meeting	94
Run the Meetings Effectively	96
Coalescing Requirements	98

<b>CHAPTER 6: User Research</b>	<b>101</b>
Basic Steps of User Research	102
Define Your User Groups	102
Create a List of Attributes	103
Prioritize and Define	105
Choosing Research Techniques	107
How Many Research Activities Can I Include?	110
User Interviews	111
Contextual Inquiry	114
Surveys	118
Focus Groups	121
Card Sorting	124
Usability Testing	127
After the Research	128
<b>CHAPTER 7: Personas</b>	<b>129</b>
What Are Personas?	130
Why Create Personas?	130
Finding Information for Personas	131
Creating Personas	131
Minimum Content Requirements	134
Optional Content	137
Advanced Personas	139
Guerrilla Personas: The Empathy Map	141
Final Thoughts on Personas	143
<b>CHAPTER 8: Content Strategy</b>	<b>145</b>
Why Do You Need Content Strategy?	146
When Do You Need Content Strategy?	147
Who Does Content Strategy?	149
How Long Does Content Strategy Last?	149
This Sounds Familiar...	150
Tools of the Trade	152
The Artifacts	152
What is the One Artifact You Need?	156
Additional Resources	156
Things to Look Out For	160

<b>CHAPTER 9: Transition: From Defining to Designing</b> .....	<b>163</b>
Ideate and Visualize Features .....	165
The Basic Process of Storyboarding .....	166
Facilitate the Prioritization Process .....	169
Maintain a Good Tension .....	173
The Development Advocate .....	175
Managing Conflict During Prioritization .....	177
Plan Your Activities and Documentation .....	181
<b>CHAPTER 10: Design Principles</b> .....	<b>185</b>
Visual Design .....	186
Unity and Variety .....	187
Hierarchy and Dominance .....	189
Economy of Elements .....	191
Proportion and Balance .....	193
Interaction .....	196
Associations and Affordance .....	197
Economy of Motion .....	200
Response .....	202
Psychology .....	205
The Effect of Attractive Design .....	205
Flow & Game Design .....	207
Social Proof .....	212
Creating Your Own Guiding Principles .....	215
<b>CHAPTER 11: Site Maps and Task Flows</b> .....	<b>219</b>
Tools of the Trade .....	221
Basic Elements of Site Maps and Task Flows .....	222
Page .....	222
Pagestack .....	222
Decision Point .....	223
Connectors and Arrows .....	223
Conditions .....	224
Common Mistakes .....	224
Sloppy Connections .....	225
Misaligned and Unevenly Spaced Objects .....	225
Poorly Placed Text .....	226

Lack of Page Numbering . . . . .	226
The Simple Site Map . . . . .	228
Advanced Site Maps . . . . .	228
Breaking the Site Map Mold . . . . .	230
Task Flows . . . . .	231
Taking Task Flows to the Next Level . . . . .	234
Swimlanes . . . . .	234
<b>CHAPTER 12: Wireframes and Annotations . . . . .</b>	<b>237</b>
What Are Annotations? . . . . .	239
Who Uses Wireframes? . . . . .	239
Creating Wireframes . . . . .	240
Tools of the Trade . . . . .	241
Start Simply:	
Design a Basic Wireframe . . . . .	244
Getting Started . . . . .	245
The Wireframes and Annotations . . . . .	246
Creating Wireframes: A Sample Process . . . . .	249
What is This Sketching You Mention? . . . . .	250
Into the Digital: Wireframes . . . . .	251
Into the Digital: Visual Design . . . . .	253
Hey, What About This Responsive Design Stuff I Hear About? . . . . .	254
Wireframes Vs. Prototypes . . . . .	256
Which Design Is Right? . . . . .	256
A Final Note on Presenting Wireframes . . . . .	257
<b>CHAPTER 13: Prototyping . . . . .</b>	<b>259</b>
How Much Prototype Do I Need? . . . . .	260
Paper Prototyping . . . . .	261
Digital Prototyping . . . . .	262
Wireframe vs. Realistic Prototypes . . . . .	263
HTML vs. WYSIWYG Editors . . . . .	264
Additional Tools for Prototyping . . . . .	274
Working with a Developer . . . . .	275
Prototype Examples . . . . .	276
What Happens After Prototyping? . . . . .	278



<b>CHAPTER 14: Design Testing with Users</b> . . . . .	<b>279</b>
Exploring Visual Design Mock-Ups. . . . .	283
Choosing a Design Testing Approach . . . . .	284
Qualitative Research vs. Quantitative Research . . . . .	285
In-Person Research vs. Remote Research . . . . .	286
Remote Research Considerations . . . . .	287
Moderated Techniques vs. Automated Techniques. . . . .	288
<b>Usability Testing</b> . . . . .	<b>292</b>
Planning the Research. . . . .	295
Recruiting and Logistics . . . . .	299
Writing Discussion Guides. . . . .	304
Facilitating . . . . .	306
Analyzing and Presenting Results. . . . .	308
Creating Recommendations. . . . .	310
<b>CHAPTER 15: Transition: From Design to Development and Beyond</b> . . . . .	<b>311</b>
Almost Done. . . . .	312
Visual Design, Development, and Quality Assurance . . . . .	312
Design Testing with Users (Again). . . . .	315
10, 9, 8, 7, 6, 5, 4, 3, 2, 1 ... Launch! . . . . .	315
Personal Advantage . . . . .	316
Support . . . . .	316
Network Opinion . . . . .	317
<b>Postlaunch Activities</b> . . . . .	<b>317</b>
Postlaunch Analytics . . . . .	318
Postlaunch Design Testing with Users (Again, Again) . . . . .	319
<b>CHAPTER 16: A Brief Guide to Meetings</b> . . . . .	<b>321</b>
The Agenda . . . . .	323
Meeting Rules . . . . .	325
After the Meeting . . . . .	328
Dealing with Nonconformers . . . . .	330
A Final Note on Meetings. . . . .	331
All Done, Right? . . . . .	332
Just Like Starting Over. . . . .	332
<b>INDEX</b> . . . . .	<b>321</b>

# Introduction

## Why We Wrote This Book

Welcome to the second edition of *A Project Guide to UX Design*.

Somewhere there's a student in user experience design losing sleep because he doesn't know what it will be like to work on a real project at his new company. Across town, there's a visual designer with plenty of project experience who yearns to take on new responsibilities in defining her site's user experience. These are two people at different points in their lives but with a similar need: to understand how to integrate user experience practices within the context of a living, breathing project.

Our goal with this book is to give you the basic tools and context that will help you use UX tools and techniques with working teams. As you'll see in many of these chapters, we're not trying to be everything to all people, but we're trying to provide you with the core information and knowledge that you should have to perform many of the duties you'll be assigned as a UX designer. Beyond our own examples, we provide you with examples that help you identify ways to jumpstart the basic materials and allow you to mash up the information and create something newer, better, or even more suited to your own purposes.

We hope we've done a decent job of articulating that this is a pretty good approach to UX design projects.

We're nothing if not constantly trying to learn and improve (*whatever we do*) with each iteration. That's why, to a degree, we're in this field.

### ***A Word from Russ***

A lot has changed since the first edition, but fundamentals still exist. As UX roles start to expand to encompass more responsibility (content strategy, research, kick-off meetings, design, prototyping, testing with users, and so on), it is sometimes difficult to find for a good place to start. We like to think we have offered up a good place to start in UX. It will not encompass everything, and it will not go as deep as everyone needs—we have done our best to supply additional resources to help you take the deeper dives where it is important to you, while providing you a foundation that helps you get started.

I was at the Information Architecture Summit ([www.iasummit.org](http://www.iasummit.org)) in 2008 when the idea for this book first began to take shape. I started planning and plotting an outline of the topics I wish someone would have covered with me when I was getting started, and luckily, I found Carolyn a willing and capable co-author who helped sand the corners off of the ideas and inject her own. That start, and the back-and-forth iterations on the content, eventually became this book.

### ***A Word from Carolyn***

For many years now, I've been in the lucky position of building and managing UX teams. I say "lucky" because I find that UX designers in general have a great balance of characteristics that make them plain fun to work with, mixing right-brain intuition and left-brain logic.

As I've conducted interviews to build these teams, one thing has really stuck out: A related educational background, like human factors or communication design, is a great indicator that someone is committed to the field of UX design, but it's not the number one indicator of whether someone would be a good fit within the team or on a project. Just as important—if not more so—is the person's ability to have a consultant's mind-set. This means a positive attitude, a drive to understand and include others throughout a project, and—above all—a focus on making a real impact for users and clients.

This mind-set means taking the time to understand the perspectives of other roles on the project, making cases, and making compromises where necessary. It takes experience and effort to get this mind-set down really well, but having an open mind, a strong foundation, and a good set of questions (with the courage to ask them) can take you a long way. This book may not supply all "the answers," but it will give you the questions to ask to help you find them.

## **Who Should Read This Book**

*A Project Guide to UX Design* provides a broad, introductory overview to UX design within the context of a project. Anyone with an interest in UX design should find something useful here. We focused on the following groups in particular:

**Students** taking UX design courses (such as human-computer interaction or interaction design) who want to supplement their coursework with information on how to apply their learning to real-life situations, where communication and collaboration are vital.

**Practitioners** who would like to deepen their knowledge of the basic tools and techniques of UX design and improve team communication about the roles involved. Chapter 3 is also particularly geared toward freelancers who need to create their own proposals.

**Leaders of UX design groups** who are looking for a book that will help their teams integrate project best practices with UX design activities.

**Leaders of any project teams** who are interested in learning more about how UX design integrates into their projects, what the value is, and what to expect from UX designers.

IF YOU NEED TO...	THEN YOU SHOULD READ...
Define user experience design and understand what draws people to the field	Chapter 1: The Tao of UXD
Ask the questions that are important to have answered before the project begins (or at least before you start to work on it)	Chapter 2: The Project Ecosystem Chapter 3: Proposals for Consultants and Freelancers
Start things off right with efficient meetings, clear objectives, and well-understood approval points	Chapter 16: A Brief Guide to Meetings Chapter 4: Project Objectives and Approach
Define project requirements for content and functionality that are unambiguous and easy to prioritize, drawn from business stakeholders and users	Chapter 5: Business Requirements Chapter 6: User Research Chapter 8: Content Strategy Chapter 9: Transition: From Defining to Designing
Learn about your users and represent their needs throughout the project	Chapter 6: User Research Chapter 7: Personas Chapter 14: Design Testing with Users
Choose and utilize the tools and techniques that enable you to bring visual ideas to your project team quickly	Chapter 10: Design Principles Chapter 11: Site Maps and Task Flows Chapter 12: Wireframes and Annotations Chapter 13: Prototyping
Ensure your site is easily found and searched by users and by search engines	Online chapter: User Experience Design and Search Engine Optimization
Communicate and evolve your design with the project team once development begins	Chapter 15: Transition: From Design to Development and Beyond

Be sure to visit [www.projectuxd.com](http://www.projectuxd.com) to read the bonus chapter “User Experience Design and Search Engine Optimization” and to download other bonus materials such as templates.

## What’s New in the Second Edition

Most of the information from the first edition is still relevant three years later and is still present here, refreshed with some new examples.

In addition, you’ll find updates and new chapters based on the following reader suggestions and new developments in the field.

**Mobile and gestural design considerations have been added to Chapter 2: The Project Ecosystem.** The number of mobile devices, and frequency of their use, has outpaced that of desktops. They form a crucial part of your users’ ecosystem and should be a part of any digital product strategy.

**Lean UX makes a new appearance in Chapter 4: Project Objectives and Approach.** This approach has helped entrepreneurs bring a user-centered focus to developing new businesses in the face of high uncertainty.

**Content strategy finds itself as a new topic in the book at Chapter 8.** The content strategy field is blowing up and the information is timely, relevant, and a good springboard into the topic.

**Design principles make their debut in the new Chapter 10.** In response to reader requests for additional information on the elements of design, you’ll find some of the prevalent principles in visual design, interaction design, and psychology to ground your design decisions, as well as tips on creating unique design principles for your own products.

**Prototyping got an overhaul in Chapter 13.** Jonathan “Yoni” Knoll lent a hand (and by “lent a hand,” I mean “guided the process, wrote the code, made the examples available, and was an all-around good friend”) and guided the chapter to being closer to a primer for those interested in finding out if they want to be “designers who code.”

**Chapter 12: Wireframes and Annotations was updated to include sketching** and to show more of the process of creating wireframes. The change was minor and significant at the same time.

**Remote research techniques and automated research tools get a deeper dive in Chapter 14: Design Testing with Users.** You'll find information on balancing the choice between remote and in-person research, as well as an overview of the types of results you might expect from some of the popular automated tools.

## A Note on Methodology

There are a variety of approaches and methodologies out there. We aren't proponents of one approach over another. Our goal for this book is to focus on the steps that are common to most projects: defining the project needs, designing the experience, and developing and deploying the solution. The amount of overlap between these steps will vary greatly depending on the project approach you use (see Chapter 4 for more detail). For the most part, our framework is a loose, linear approach, where the definition step comes first—but in each step we take advantage of facilitation and design techniques where they're most helpful.

## What This Book Is Not

**An encyclopedia of all techniques.** The UX field has an enormous number of creative people, and they're always trying new approaches to design problems. Including all of those approaches here would make a much larger book—and one that would quickly be outdated. What we've included here are the most commonly used techniques, the nuts and bolts of UX design. We've tried to provide enough information to both intrigue you and allow you to communicate the activities to other project members—including the basic process for each technique and additional references to books or sites that will help you implement it once you choose your path.

**A guide to being a project manager.** Good project management (including setting and tracking project objectives, timelines, and budgets) is key to any project's success. We don't cover specifics on how to be a project manager or how to choose a particular project methodology. We do discuss the skills that a UX designer brings to a project that allow it to run effectively, such as facilitation and communication, as well as the ability to clarify and maintain focus on project objectives. These skills will help you become a partner in project management.

**The only or the perfect process or methodology for you to follow.** We don't have all the answers—no one does, today. The UX design field is relatively young, and we're all working to improve upon where we are. You will probably find that trial and error, enhancements and improvements, and feedback from others will help you tailor a process to fit your needs. When you find something that works for you—share it! Let us know!

## How to Use This Book

There are many excellent resources out there for UX designers. We cover topics broadly here but point you to references that will allow you to explore topics at a deeper level depending on how much time you want to dedicate to them. To help you understand the amount of time generally needed for each reference, we've split them out into three major categories:



### Surfing

References called out with the surfboard are shorter features (usually online) that will take 5 to 30 minutes to read.



### Snorkeling

Those called out with the snorkel are longer online articles, white papers, or short books that take anywhere from an hour to a weekend to read.



### Deep Diving

Those called out with the diver's helmet are longer books that will probably take more than one weekend to read; they give you in-depth coverage of the topic.

# 4 Project Objectives and Approach

## Know Which Star to Navigate By

One of the keys to a good project is to start the team out with clear project objectives and a well-understood approach. Ideally, the project leadership will have this defined for you—but how do you know if they don't?

This chapter talks about forming project objectives and offers some questions that will help you solidify those goals. We'll also discuss some common project approaches (or *methodologies*) and how they may influence the way you work.

*Carolyn Chandler*





You're in the project kickoff, with the full team for the first time. The project manager hands out some materials and gives you an overview of the project. By the end of the meeting, ideally, you should have the following information:

- ▶ Why is the project important to the company?
- ▶ How will stakeholders determine if the project was a success?
- ▶ What approach or methodology will the project follow?
- ▶ What are the major dates or *milestones* for key points, such as getting approval from business stakeholders?

All of these questions concern the expectations that stakeholders have for the project: *what* the project will accomplish and *how* they will be involved in it. The first two questions pertain to the project's objectives and the last two to the project's approach.

A *project objective* is a statement of a measurable goal for the project. Let's talk about objectives in more detail.

## Solidify Project Objectives

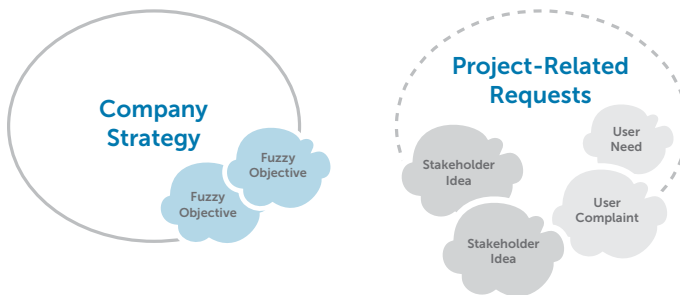
Objectives are an important focusing lens that you'll use throughout the project. They should spring from the client company's overall business strategy, so the project objectives should be in line with the strategic initiatives within the company. For example, if there is a strategic initiative to appeal to a new group of prospective customers (called a *market*), the site or application you're creating may be an effort to provide that market with online access to products and services relevant to them. The objective for that project would then be focused on reaching and engaging that market.

A clear objective resonates throughout a project. It helps you:

- ▶ Ask the right questions as you gather ideas from business stakeholders
- ▶ Plan research with users and focus your analysis of the results
- ▶ Detail the ideas gathered from stakeholders and users and convert them into a consolidated list of project requirements
- ▶ Prioritize those project requirements based on their value to the company

- ▶ Create effective interaction designs
- ▶ Manage requests for changes to the design once development begins
- ▶ Focus efforts during deployment activities (such as training and communications to users about the new site or application before and during its launch)
- ▶ Determine whether you've met the needs of the client company, once the project is launched

When you start a new project, you probably have project objectives from the project's sponsor (the business stakeholder who has direct responsibility for the success of the project), as well as a set of project-related requests coming from business stakeholders and from customers, but they all may be a bit fuzzy (**Figure 4.1**). Your goal is to clarify these into solid statements that you can use as a yardstick for the project's success.

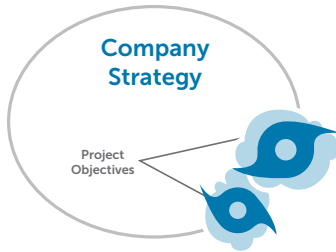


**Figure 4.1** Fuzzy objectives, ideas, and needs

A solid objective has the following characteristics:

- ▶ **Easy to understand.** Avoid insider terminology
- ▶ **Distinct.** Avoid vague statements; instead, use wording that seems like it will be useful when you're prioritizing requirements
- ▶ **Measurable.** Make concrete statements that you can set an independent measurement against to determine your success

As you define a fuzzy objective, making it clear and measurable, it becomes a solid objective that you can base decisions on (**Figure 4.2** on the next page).



**Figure 4.2** Objectives being solidified

You'll hear many statements that could be considered objectives. Analyzing fuzzy ones such as those below will help you solidify your objectives and communicate more effectively within the project team.



Business  
Advocate

**"Our objective is to become the market leader in industry x."**

This is an objective for the entire company, but is too broad for a specific project. Multiple initiatives at the company need to come together to make this happen; any one site or application may *help* with this but will be very unlikely to be able to handle the entire burden—unless the entire company is about this one site or application and it ends up being wildly successful.



Business  
Advocate

**"Our objective is to generate excitement among our customer base."**

This one is better, because a site or application could have an impact on this, but it's still too vague. Why is it important to generate excitement? How does that excitement translate into meeting a business need? And how can you tell if you've been successful?



Business  
Advocate

**"Our objective is to increase the amount of traffic on our website."**

Now we're getting there. This one is easy to measure, but it's too focused on an intermediate step. Suppose you do generate more traffic: It may not help you if people don't perform the actions you want once they get there.

Fuzzy objectives can give you a sense of a client's desires and larger goals. From these you can craft more solid project objectives, such as

- ▶ Increase the revenue from online sales by 10 percent
- ▶ Increase the revenue from online advertising by 20 percent
- ▶ Increase the number of current and potential customers in our customer database to at least 20,000
- ▶ Deliver highly rated and highly referenced content to our primary users (Note that this one requires some work to decide how to measure "highly rated" and "highly referenced," but the elements are there to build from)

Each of these can be measured and affected by your project. They can also map pretty closely to your designs and the features offered. For example, it's very common to offer an online newsletter as a way to meet an objective of growing the customer database: To deliver the newsletter you'll need to capture customer e-mail addresses, which will be added to the database. Objectives may also bring out new requirements. For example, if you're measuring success by the average rating given to articles on your site, you'll need a feature that allows users to give ratings. In these ways, objectives help you focus as you gather ideas for the site, and these may later become project requirements.

If there are multiple objectives, be sure to create a prioritized list with your business sponsor and project team. Objectives sometimes conflict with each other during design, and the team will need to know what takes precedence. The final prioritized list of objectives should come from your project sponsor, but you can be a key part of the discussion. Let's talk about how.

## How Can a UX Designer Help?

If you find the project objectives are unclear at the beginning of a project, you can bring your facilitation skills to bear. Help the project team understand the business-related context of the project by holding a workshop with key stakeholders (see the next chapter for more on identifying the right stakeholders). Your goal in this session, which usually lasts two to four

hours, is to bring out information on the company's strengths, weaknesses, opportunities, and threats. Called a *SWOT analysis*, this is a common business analysis technique and one way to discuss a company's position in the market. You can also use this time to discuss the company's competition.

### ***Understand Strengths and Weaknesses***

The *SW* in a SWOT analysis are the company's current strengths and weaknesses as they pertain to the project. Strengths and weaknesses could include internal processes as well as external perceptions—and often they influence each other. For example, a company with a large research and development (R&D) department could have access to a large source of original research that is published (a strength), but there may be no one to help make that content more accessible to the average user, leading to the perception that the company is “too academic” (a weakness).

### ***Identify Opportunities and Threats***

The *OT* is the future-facing half of the SWOT. Considering the things that differentiate the company from its competitors, what future initiatives could it pursue that will open up a new niche or strengthen a current one? What situations could threaten those plans?

For example, our R&D company may decide to hire writers to publish more accessible feature articles around its original research (an opportunity), but if the current site toolset doesn't have robust content-management features, the publishing process may be prohibitively slow. That could give competitors a chance to respond more quickly (a threat).

### ***Compare Competitors***

What is the company's main competition? Who are the competitors for the site being developed? They can be different, especially for large companies or brand new sites.

Are there sites that aren't necessarily direct competitors but that represent interesting models to consider? You can learn a lot from reviewing other e-commerce sites to see whether and how they sell what you're selling.

### ***Pull It Together***

SWOT and competitors are good topics to discuss at the same time because they interact with each other. It's hard to talk about future threats without knowing who your competitors are—and once you start talking about future opportunities, new competitors may come to mind.

Once you have a full picture here of the company's competitors and SWOT, your project objectives—as well as the overall fit of your project within the company strategy—should become easier to define, and the priorities among them should become clear.

Solidifying project objectives helps you understand expectations of what the project is going to accomplish. Next, let's talk about expectations concerning how the project will be run. Understanding the project approach will help you collaborate effectively and involve the right people at the right time.

## **Understand the Project Approach**

Knowing the overall approach, or *methodology*, of a project is an important part of understanding when and how you'll be involved and how you should be involving others, such as your project team and business stakeholders.

Sometimes there seem to be as many project approaches as there are projects. How to choose the right approach for a project is a large topic in itself. The methodology you choose can depend on many things, including the structure and location of the project team, the technologies being used on the project, and the degree to which collaboration is a part of the company's culture. For the purposes of this book, we're assuming that you've joined a project where the approach has largely been determined by those responsible for the project's success, such as the project sponsor and project manager. In this situation, your main goal will be to understand the approach and help make it effective for the business stakeholders and your users.

Here we'll focus on two of the most common types of approach, as well as a third that shows a possible variation you might encounter on a project. The important thing to note is that most approaches involve the same steps:

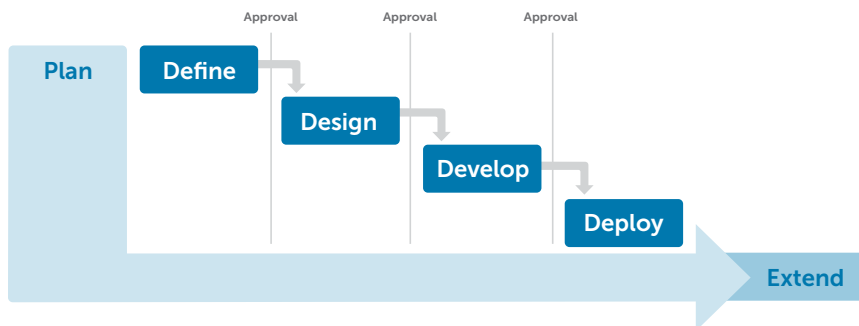
- ▶ **Plan** the overall strategy, approach, and team structure
- ▶ **Define** the project requirements

- ▶ **Design** interaction and visual concepts and evolve them into detailed specifications
- ▶ **Develop**, test, and refine the solution
- ▶ **Deploy** the solution via messaging, training, and a planned launch
- ▶ **Extend** the project by making recommendations for improvements

The names for these steps may vary, as may the degree to which they overlap and the way information is documented. But the general activities in each step are common to most projects and to all three models presented here.

## Waterfall Approach

A *waterfall approach* (**Figure 4.3**) involves treating the steps of a project as separate, distinct *phases*, where approval of one phase is needed before the next phase begins. For example, the Design phase does not begin in earnest until requirements have been approved by business stakeholders, who sign off on one or more requirements documents at the end of the Define phase.

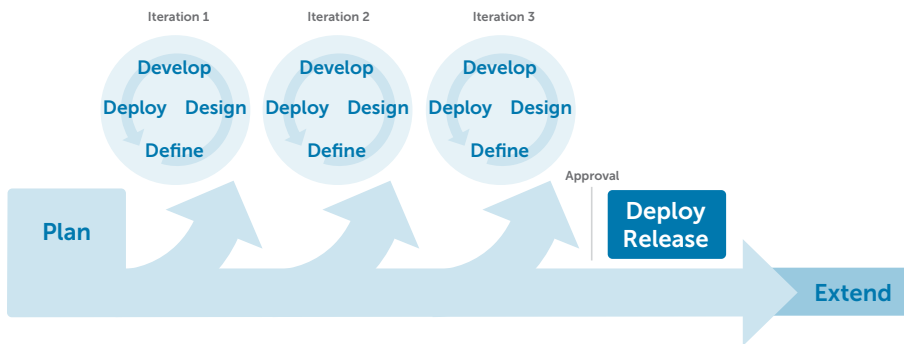


**Figure 4.3** Example of a waterfall approach, where each phase “falls” into the next

The problem with a pure waterfall approach is that it assumes that each phase can be completed with minimal changes to the phase before it. So if you come up with new requirements in the Design phase, which is common, you must suggest changes to documents that were approved at the end of the Define phase, which can throw off the plan and the schedule.

## Agile Approaches

Because change is constant, project teams are continually looking for more flexible approaches than the waterfall model. Many methodologies follow a more fluid approach, with some steps happening alongside each other; for example, versions of the website could be released on a rapid, iterative schedule using an *agile* or *rapid development* approach (**Figure 4.4**). An agile approach generally has a greater focus on rapid collaboration and a reduced focus on detailed documentation and formal sign-off.



**Figure 4.4** Example of an agile approach

A true agile approach (following the best practices developed by members of the Agile Alliance, for example) calls for small teams whose members are located next to each other physically, with little focus on defining formal roles between team members. Working this way allows a very high degree of collaboration, which reduces the need for heavy documentation between the stages of design, development, and testing. A team member can pose a question, come to the answer together with other team members during a quick whiteboarding session, and implement a solution without the delay of detailed documentation and approval. Stakeholder reviews occur with a fully functioning system when one of the many iterations is released, and the resulting input is taken into account as the next iteration is planned. (*Iterations* are draft versions of a particular site or application and may also be called *sprints*.)

Designers moving to an agile approach for the first time often face a conundrum. How do you go from a waterfall approach (which favors detailed documentation and sign off, taking weeks or months per phase), to an agile



approach (which favors conversations and quick decision making over the course of days or weeks) and still make time for design thinking and user research? To see how some designers have made the transition, let's dive deeper into a particular kind of approach called Lean UX.

### **Lean UX**

Lean UX is an agile project approach that's well-suited to products being developed in the face of great uncertainty (as most products for startups are). It reduces waste in the project's process by removing effort spent on features that don't really matter at the time of each iteration. For example, spending time designing an entire set of categories and subcategories of products may be wasteful if the team has not yet proven that they're offering products that their target users are willing to purchase.

Some of the principles of Lean UX include:

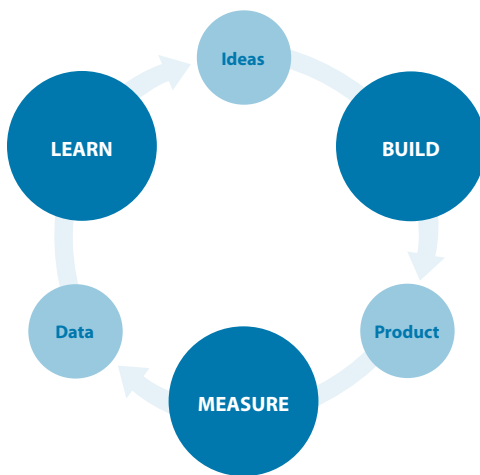
- ▶ **A focus on validated learning.** Iterations of the product are not seen as simply working versions of the product, but as the presentation of a hypothesis that can be tested with users. The goal is to *learn* as quickly as possible, by validating design decisions with customers and incorporating the subsequent changes that will help the team learn the next important lesson.

## **The Origins of Lean UX**

Eric Ries developed an approach called the Lean Startup after studying Toyota's lean manufacturing processes, and Steve Blank's Customer Development model, which emphasizes the need for startups to have an early focus on customers. A Lean UX approach builds on this direction with its customer inclusion, its reduction of waste in the process, and its definition of product iterations as experiments.

Entrepreneurs can find out how experimentation and a focus on learning can help startup teams in the face of uncertainty, in *The Lean Startup* by Eric Ries (Crown Business, 2011).

- ▶ **A continuous loop of Build—Measure—Learn.** Lean processes prioritize the building of a testable iteration of the product as quickly as possible, in order to test assumptions that the team is making about how users will react to the product. Tests fail or succeed based on qualitative user feedback during research, and on quantitative measures that are put in place to track success. These measures should pull from actual user behavior—for example, the number of registrations for a site, the number of products purchased, and so on. Care should be taken that the measures put in place really test the assumptions of that iteration. For example, if people are registering for your site, but not taking any important actions in it afterwards, you’ve just learned that your post-registration experience needs to be more compelling! Incorporate that learning into your decisions on what goes into the next build, and complete the loop (**Figure 4.5**).



*Figure 4.5* Lean approaches focus on a loop of Build—Measure—Learn. The process is meant to increase the speed by which teams cycle through the loop, maximizing learning and allowing for quicker adjustments in strategy based on customer response.

- ▶ **The importance of developing the Minimum Viable Product (MVP) at each iteration.** In a lean process, the focus is on testing a hypothesis about user behavior, rather than building a fully functioning product at each iteration. Teams don’t need to create a fully functioning digital version of their product to test a hypothesis (although a more robust digital version will eventually exist after several cycles, if things are going well on the validation front). Especially in beginning stages teams can focus on developing a Minimum Viable Product, which Eric Ries defines as “that version of product that enables a full turn of the Build—Measure—Learn

## Ask the Experts: Jeff Gothelf



*Jeff Gothelf is the founder of Proof, a product innovation and design studio, and is the author of Lean UX: Getting Out of the Deliverables Business (O'Reilly, 2012.)*

**You've said that Lean UX is an approach that gets designers out of the deliverables business. But many UX designers use deliverables—documentation like detailed wireframes—in order to communicate design recommendations to their teams. Does Lean UX skip this step?**

Deliverables aren't skipped in Lean UX. They're still used, to the extent necessary, to communicate to target audiences like stakeholders, developers, and customers. But they're not the focus of the project, and they don't create the bottleneck they would in waterfall where the team sits back and waits for the design to be "done" and then signed off before anyone else begins working. Also, there's still a large amount of work that you're doing as a designer outside of the actual documentation, because the goal is to validate your design hypotheses as soon as possible—so the more tests you're running with customers, the more right you'll be in the product you're building. The trick to getting to a level of efficiency with it is to build a shared understanding across your entire cross-functional team. The more you're out there with your team having conversations with them, discussing what you're seeing and why you think that is, the more they get a clear sense of why you're making the design decisions you're making and what direction the design is heading in. When they have a clear sense of that, they need less documentation in order

loop with a minimum amount of effort and the least amount of development time." For example, elements of the experience that should eventually become automated—like confirmation emails when a purchase has been made—may be completed more manually by a team member while the test is being run in an earlier iteration.

- ▶ **A move away from formal deliverables and detailed documentation.** This is consistent with the overall agile approach. Deliverables like detailed wireframes and use cases, which may become replacements for direct communication and fast implementation of ideas, are removed from the process in favor of faster methods like sketching. Conceptual wireframes

to start building those experiences because they have the foundation and shared understanding from which to work.

### **How does a Lean UX approach affect the role of a UX designer on the project?**

It assumes a leadership quality to the UX role on the team. The Lean UX process forces you to constantly communicate out to the team and solicit feedback from them. But it's not design by committee, either. Yes, you're out there soliciting feedback from your team early and often, but it isn't your job to take all their feedback and make sure it all makes it into the next iteration of the design. It's your job to prioritize the feedback based on what's needed to get to the next level of learning with your customers. Then you incorporate that and communicate the result out to the team so they're aware of what design decisions are being made, and why.

### **Is there anything the team should have from the beginning to ensure a Lean UX approach is successful?**

There needs to be a freedom to fail in the organization. If people feel they have to get it right the first time, right out of the gate, then the whole process fails. This is a hypothesis validation process, and by the very nature of it you're going to come up with some wrong answers. The idea is to figure out what those wrong answers are as quickly as possible and minimize the wasted effort going down those paths. If you don't have the freedom to be wrong in your organization, then you will not be able to execute this process with any kind of success.

are often still used, but are meant to illustrate quickly as an aid to communication, and do not "live on" as records of design decisions.

When an agile approach is working as it's designed to, it's a beautiful thing. At most companies and within most consulting engagements, however, teams rarely follow a pure agile approach. In part, this is because companies often have distributed teams and remote workers, which makes it difficult to maintain the high degree of collaboration needed to take best advantage of the pure agile approach. However, a greater prevalence of virtual collaboration tools and digital sketching tools makes this distributed agile approach increasingly possible, as long as teams commit to clear communication, high availability, and effective decision-making.



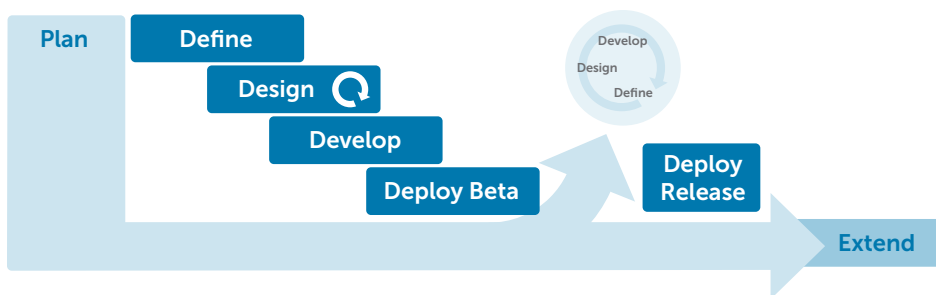
## Surfing

LUXr is a company founded on Lean UX practices. You can see an introduction to Lean UX and more detail on its principles on their site at <http://luxr.co/lean-ux/9-principles-for-lean-ux/>.

All UX designers should be focused on reducing waste in the process, and prioritizing communication over documentation regardless of the specific approach of the team, as Whitney Hess points out here: <http://whitneyhess.com/blog/2011/02/27/why-i-detest-the-term-lean-ux/>

## Modified Approaches

Many projects try to follow an approach that marries elements of waterfall and agile approaches, with enough structure and documentation to reduce the risks posed by distributed teams and turnover of team members, but enough collaboration and iteration to respond to changes in a relatively nimble way. For example, a project may follow a waterfall model but include an overlap in phases so that there are key collaboration points from team to team. This allows potential changes to surface earlier in each phase. This may also include an early release (such as a beta release to a particular user group) with a shorter iteration cycle. Feedback from that release can then be incorporated before the full deployment of the new site. (Figure 4.6)



**Figure 4.6** Modified waterfall with beta release

Notice the smaller iterations within the Design phase in Figure 4.5. That's one of the greatest values you bring to your team as a UX designer. Tools such as wireframes (Chapter 12) and prototypes (Chapter 13) can allow you to gather feedback on quick iterations of ideas, before a lot of development time has been put in.

This book loosely follows a modified waterfall approach like the one shown in Figure 4.6. However, many of the topics covered here will apply to your project regardless of the specifics of your approach, because the basic activities behind them—defining and designing, for example—are still necessary.



## Deep Diving

If your project is using an agile approach, you'll have unique needs during requirements gathering, such as the writing of "user stories" as a way to capture requirements. We recommend *User Stories Applied: For Agile Software Development* by Mike Cohn (Addison-Wesley Professional, 2004).

## How Does the Approach Affect Me?

Knowing your approach helps you understand a number of things:

- ▶ **What questions you should be asking, and when.** For example, if you're working with a pure waterfall approach, you'll need to put in extra effort to make sure the requirements captured in the Define phase contain all the information you need for the Design phase. (We'll be discussing requirements in the next chapter.)
- ▶ **Expectations on how project team members will collaborate and how close that collaboration will be.** For example, an agile approach requires very close collaboration. A waterfall approach may involve individual work most of the time, with touchpoints once or several times per week.
- ▶ **The level of detail needed in your documentation and the level of formality.** Documents submitted at sign-off points need to be formal, almost like legal contracts. Typically, you'll need more formal documents

in a waterfall approach, where sign-off is required before you move on to the next phase. However, you may also have some formal sign-off documents when using an agile approach—for example, to capture information at major decision points, such as when a particular iteration is prepared for full release and deployment.

- ▶ **Important milestones that involve approval from stakeholders and deployment to different groups.** The approach will determine what different audiences need to provide at various points in the project, including approvals from stakeholders at sign-off points and feedback from potential users during a beta release.

Now that you've solidified your project objectives and gained an understanding of the project approach, in the next chapter we'll start with the primary work in the Define phase: gathering requirements.

# INDEX

## A

- accessibility 187
- acknowledgement for projects 63–64
- action
  - economy of motion and user 200–202
  - elicited by marketing campaigns 15–16
  - object's properties communicating 198
  - responses to user 202–204
  - understanding site's potential for 196–197
- active observation 115
- activities in project 164, 181–183
- additional project costs and fees 60–61
- advanced site maps 228–230
- affinity diagramming
  - applying to card sorting 116–117
  - solving design conflicts with 179–180
- affordance 198
- age of personas 136
- agendas for meetings 323–325, 327
- agile approaches 75–80
- AI/ML 61
- Amazon.com 197–198, 202
- American Customer Satisfaction Index (ACSI) 119
- analytics tools 33
- analyzing usability test results 308–310
- Anderson, Stephan P. 215
- Angeles, Michael 221
- annotations
  - defined 239
  - uses for 237, 246–248
- Aquent 61
- arrows 223–224
- Art of Game Design, The* (Schell) 209
- associations 197–198
- assumptions in proposals 57–58
- audience
  - developing persona for target 140–141
  - knowing site's 189
  - testing sites for 300
  - wireframe 239–240
- audits
  - qualitative 153
  - quantitative 152–153

## B

- baby-naming websites 135
- Bainbridge, Mike 281
- balancing
  - advocate input 173–175
  - design elements 6–7, 193–196
- Baty, Steve 111

- Beecher, Fred 247
- Beyer, Hugh 117
- biographies 136
- Bloomstein, Margot 147
- body language 123
- Bolt, Nate 287
- Boston Globe, The* website 194–195
- brand presence websites
  - common types of 13
  - defined 11
  - design goals for 13–14
  - focus of 11–12
- brands
  - about 12
  - role of brand strategists and stewards 35–36, 41
- Brown, Dan 249
- Brown, Sunni 142
- Build-Measure-Learn loop 77–78
- Buley, Leah 242–243
- business advocates
  - balancing input of 173, 175
  - clarifying objectives of 70
  - listening to 97
  - role of 169
- business analysts 36–37
- business requirements 83–100
  - adding user requirements to 102
  - coalescing 98–100
  - developing 83–86
  - developing wireframes and 238
  - gathering with heuristic analysis 89
  - meeting to gather 94–95
  - site type and development of 11
  - stakeholder input on 90–97
  - taking time to visualize 165–166
  - turning objectives into 83–86
- business stakeholders. *See* stakeholders
- Buxton, Bill 250, 296

## C

- card sorting
  - applying affinity diagramming to 116–117
  - defined 109, 124–125
  - process of 125–126
  - variations on 126–127
- Carpendale, Sheelagh 250
- chartjunk 192
- Cialdini, Robert B. 215
- Cipov, Matt M. 193
- Cisco 25
- clients
  - presenting wireframes to 257–258
  - providing contracts and proposals for 50–51
- closed sorts 127



- collaboration
    - coordinating work among designers 183
    - developing custom design principles with 216
    - effect of project approach on 81
    - planning project 181
  - Communicating Design* (Brown) 249
  - communication problems 178–179
  - companies. *See also* business requirements
    - assessing competition 72
    - building brands 12
    - clarifying project objectives 68–71
    - contracts and proposals for 50–51
    - examining history of 43–44
    - hierarchy within 45–46
    - network building within 41–42
    - quality assurance tasks within 313–314
  - competition 72
  - concept exploration 280–283
  - conditions 224
  - conflicts
    - with business requirements 99–100
    - managing during prioritization 177–180
  - connectors 223–224, 225
  - consensus 178–179
  - consumers. *See* users
  - content. *See also* content source websites; content strategy
    - adhering to content strategy 149
    - developing 37–38
    - minimum required for personas 134–136
    - optional persona 137–138
    - role of copywriter in 38–39
    - scope of 146
  - content audit 152–153
  - content flow 156
  - content matrix 154, 227
  - content source websites
    - card sorting for 124–125
    - common uses for 16
    - defined 11
    - design goals of 17–18
    - focus of 16–17
    - further information on 17–18
  - content strategists
    - finding 149
    - Laura Creekmore 64–65, 146–147, 160
    - Matthew Grocki 146–147, 148, 149
    - role of 37–38, 41
    - Sarah Krznarich 151, 161
    - Tim Frick 158–159, 162
    - tools used by 152–156
  - content strategy 145–182.
    - See also* content strategists
    - about 145–146
    - adhering to 149
    - copywriting vs. 150–151
    - defining role of 150–152
    - developing 162
    - finding artifact needed for 156
    - finding content strategists 149
    - further information on 156–157
    - information architecture vs. 150
    - need for 146–147
    - tools for 152–156
    - when needed 147–148
  - Content Strategy at Work* (Bloomstein) 147
  - Content Strategy for the Web* (Halvorson) 146
  - content templates 154–155
  - context for mobile devices 27
  - contextual inquiry 108, 114–117
  - continuing education in UX design 7
  - conversion 16
  - copywriters 38–39
  - copywriting 150–151
  - Coroflot 61
  - corporate culture
    - examining project history and 43–44
    - hierarchy in 45–46
    - logistics within 46
    - power distance in 45–46
    - understanding 42
  - costs
    - additional project 60–61
    - estimating project 61–62
    - meeting 322
  - Creekmore, Laura 64–65, 146–147, 160
  - cross-over projects 11
  - Csikszentmihalyi, Mihaly 207–208, 212
  - Cunningham, Christopher 212
  - customers. *See* user groups; users
- ## D
- data-driven personas 139
  - data from usability testing 109, 127, 297–298
  - decision points 223
  - Define phase 73–74, 164
  - deliverables 58–59
  - demographics 104, 136
  - design goals
    - brand presence websites 13–14
    - content source websites 17–18
    - e-commerce websites 20
    - e-learning application 20
    - marketing campaign websites 15–16
    - site type and 10
    - social networking application 21
    - task-based application websites 19
    - using prototyping for 278
  - Design of Everyday Things, The* (Norman) 198
  - design principles 185–218
    - about 186
    - benefit of 185
    - creating own 215–218
    - interaction 196–204
    - Lean UX 76–77
    - mobile site and application 26–27

- psychology 205–215
- visual design 186–196
- design testing 279–310.
  - See also usability testing
  - choosing approach for 284–290
  - concept exploration 280–283
  - exploring visual design mock-ups 283–284
  - final round of 315
  - in-person vs. remote research 286–287
  - moderated vs. automated techniques for 288–290
  - postlaunch 319
  - qualitative vs. quantitative research 285
  - role of usability testing in 292–294
  - usability recommendations from 310
- designers
  - balancing designs 6–7
  - brand strategists and stewards 35–36, 41
  - building support network for 40–42
  - business analysts 36–37
  - coalescing business requirements 98–100
  - conducting heuristic analysis 88–89
  - content strategists 37–38, 41
  - copywriters 38–39
  - developing contextual inquiry 108, 114–117
  - effect of Lean UX on 79
  - front-end developer 40
  - gaging prototype needs 260–261
  - information architects 30–31, 34
  - interaction designer 31–32, 34
  - interviewing users 107, 111–114, 304
  - involving focus groups 109, 121–124
  - managing meetings 330–331
  - presenting wireframes to clients 257–258
  - priority setting by 170
  - roles for UX 30–42, 92
  - sharing work between 183
  - understanding company culture 42–46
  - user researcher 32–34
  - using surveys 108, 118–120
  - visual designers 39–41
  - where to find 7–8
- Develop phase 74, 164
- development advocates
  - balancing input of 173–175
  - priorities of 175–177
  - role of 169
- digital prototypes
  - creating in WSIWYG editor 264–265
  - development factors for 263–264
  - HTML 264–274
- Discipline of Content Strategy, The* (Halvorson) 146
- documentation
  - agile approach to 78–79
  - detail and formality in 81–82
  - planning project 164, 181–183
- DOM Scripting* (Keith) 271
- dominance in visual design 189–191
- E**
  - e-commerce websites 19–20
  - e-learning applications 20
  - economy of motion 200–202
  - ecosystem of projects 10
  - editorial calendars 155
  - editorial workflow 156
  - elements
    - adding competitive 211
    - aligning site map 225–226
    - arrows 223–224
    - balancing design 6–7, 193–196
    - conditions 224
    - connectors 223–224, 225
    - decision points 223
    - economy in 191–192
    - hierarchy and dominance of 189–191, 199
    - page 222
    - pagestack 222–223
    - site map and task flow 222–224
  - emotional design 206–207
  - Emotional Design* (Norman) 206
  - Empathy Map 141–143
  - Epinions 213
  - error messages 203–204
  - estimates
    - project cost 61–62
    - time for documentation 182
  - Evans, Poppy 196
  - Exploring the Elements of Design* (Evans and Thomas) 196
- F**
  - FaceOff 210
  - facilitating usability testing 306–308
  - Fahey, Christopher 313
  - Favreau, Jean Marc 50
  - features. See ideating and visualizing features; prioritizing features
  - Feeding America website 188
  - Fitts' Law 200
  - flow and game design 207–212
  - Flow* (Csikszentmihalyi) 207–208, 212
  - focus groups 109, 121–124
  - Frick, Tim 147, 158–159, 162
  - front-end developer 40
- G**
  - games 207–212
  - Gamestorming* (Gray, Brown, and Macanuso) 142
  - gamification 210–211
  - Gamification by Design* (Zichermann and Cunningham) 212
  - Garrett, Jesse James 222–224

- gestures 28–29
- Gmail 204
- goals. *See* design goals
- Google analytics tools 33
- Gothelf, Jeff 78–79
- governance plan 155
- Gray, Dave 142
- Greenburg, Saul 250
- grids for proportion 23, 195–196
- Grocki, Matthew 146–147, 148, 149
- groups sorts 127

**H**

- Hadden, Jon 276
- Halvorson, Kristina 146, 153
- hardware
  - remote research 287–288
  - usability testing 304
- Health Month 211
- healthychildren.org website 190
- Hess, Whitney 80, 217
- heuristic analysis
  - benefits of 87
  - conducting 88–89
  - defined 86
  - gathering requirements with 89
- heuristics 86, 87
- hierarchy
  - corporate 45–46
  - page element 189–191, 199
- Hinton, Andrew 230–231
- Hoekman, Robert, Jr. 7
- Hofstede, Geert 45
- Holtzblatt, Karen 117
- home page
  - created 248
  - designing 245
  - wireframe and annotations for 246
- HTML prototypes 264–274
  - breaking down code for 267–270
  - coding log-in process for 266–267
  - sketching in jQuery 270–274
  - testing forms with 274
  - ways to build 264–265

**I**

- ideating and visualizing features
  - importance of 165
  - skills and techniques for 165–166
  - storyboarding for 166–169
- image maps 270
- in-person design testing 286–287
- Influence* (Cialdini) 215
- information architects 30–31, 34
- information architecture 150
- Information Architecture Institute 61
- Ingram, Richard 156
- interaction design principles 196–204

- associations and affordance in 197–200
- core of 196–197
- economy of motion 200–202
- further information on 198
- responses to actions 202–204
- interaction designer 31–32, 34
- iterations
  - defined 75
  - developing MVP with each 77
  - frequency of UX 244
  - in modified approaches 80–81
  - needed for prototyping 259–260
  - planning project 181
  - wireframe 256–257

**J**

- jQuery 271

**K**

- Keith, Jeremy 271
- Knemeyer, Dirk 12
- Knoll, Jonathan 271
- Koster, Raph 210
- Krznarich, Sarah 151, 161

**L**

- Lean Startup, The* (Ries) 76
- Lean UX
  - deliverables in 78–79
  - further information on 80
  - origins of 76
  - principles of 76–77
- licensed work 59–60
- location of personas 136
- log-in process
  - coding HTML prototype for 266–267
  - prototyping views for 271–273
- LUXr 80

**M**

- Macanuso, James 142
- maintaining websites 59, 319–332
- Marcotte, Ethan 23–24, 254
- marketing campaign websites
  - common features of 14
  - defined 11
  - design goals for 15–16
  - focus of 14–15
  - further information on 16
- Marquardt, Nicolai 250
- meetings
  - agendas for 323–325, 327
  - approaches to 331
  - cost of holding 322
  - managing 330–331
  - notes from 328–329
  - requirement-gathering 94–95
  - rules for 325–327

- running effectively 90, 96–97
  - scheduling 323
- Melzer, James 234–235
- mental models 117
- message architecture 154
- Messagefirst 132, 139–141
- methodologies 73–82
  - agile approaches 75–80
  - defined 73
  - further information on 81
  - impact on project design 81–82
  - milestones for stakeholders 82
  - modified waterfall approach 80–81, 164
  - steps in common 73–74
  - waterfall approach 74
- microsites 14, 15
- Millman, Debbie 281
- Minimum Viable Product (MVP) 77
- mobile sites and applications 21–29
  - advantages of 26
  - characteristics of 24–26
  - design principles for 26–27
  - examples of Cisco's 25
  - further information on 24, 27–28
  - proportion for 194–195
  - responsive design of 23–24, 254–255
  - smartphone gestures 28–29
  - when to use 22–23
- modified waterfall approach
  - about 80–81
  - overlapping phases in 164

## N

- names for personas 135
- nested menus 202
- New York Times, The* 214
- Nielsen, Jakob 87
- Norman, Don 198, 206
- notes from meetings 328–329
- numbering site maps 226–228

## O

- occupation of personas 136
- OmniGraffle templates 221
- Omniure analytic tools 33
- 100 Things Every Designer Needs to Know About People* (Weinschenk) 215
- Ordering Disorder* (Vinh) 196
- organizations for UX design 7–8

## P

- page elements 222
- page inventory 152–153
- page templates 154–155
- pages
  - alignment and spacing on site maps 225
  - numbering on site maps 226–228
- pagestack element 222–223
- paper prototypes 261–262, 276–277

- Paper Prototyping* (Snyder) 296
- passive observation 115
- performance
  - expectations of site 202–203
  - flow states and site 208–209
- personas 129–144
  - benefits of 129–131
  - content for 131, 134–136, 137–138
  - creating 131, 133, 143–144
  - data-driven 139
  - defined 130
  - developing 128, 141–143
  - example of 132
  - target audience group 140–141
  - types of 130
- photos for personas 134–135
- planning
  - project's activities and documentation 164, 181–183
  - remote research 287–288
  - space and equipment for usability testing 304
  - usability testing 295–299
  - user research 110
- postlaunch activities 317–319
- power distance 45–46
- principles. *See* design principles
- prioritizing features
  - balancing input from advocates 173–175
  - considerations for 178
  - further information on 180
  - managing conflict while 177–180
  - prioritization worksheet 172
  - team's roles in 169–173
  - UX designer's role in 170
- Pro JavaScript Techniques* (Resig) 271
- project glossary 96–97
- project manager 44, 170
- Project Manager prototype 276–277
- project objectives 68–73
  - developing into business requirements 83–86
  - prioritizing 71
  - site type and project 11
  - solidifying 68–71
  - SWOT sessions defining 71–73
- project overviews 54
- project sponsor 91
- project teams. *See* teams
- projects. *See also* prioritizing features; project objectives; proposals
  - about 10, 47
  - acknowledgement and sign-off for 63–64
  - additional costs of 60–61
  - building networks within company 41–42
  - common site map mistakes 224–228
  - conflict over features in 179–180
  - corporate history of 43–44
  - cost estimates of 61–62

projects (*continued*)

- creating design principles for 215–218
- cross-over 11, 19–21
- designer's roles on 30–42
- developing common language for 96–97
- e-commerce websites 19–20
- ecosystem of 10
- gathering requirements for 83–86
- heuristic analysis of 86–89
- identifying site type for 10–11
- lack of alignment on 178–179
- making wireframes for 249
- methodologies for 73–82
- mobile site and application 21–29
- payment schedules for 62–63
- prioritizing requirements for 164
- proposals defining approach of 55–56
- solidifying objectives of 68–71
- statement of work for 49, 65–66
- working within corporate hierarchy 45–46

proportion and balance 193–196

proposals 49–66

- acknowledgement and sign-off 63–64
- additional costs and fees 60–61
- assumptions in 57–58
- challenges of 49
- components of 51–52
- defining project approach 55–56
- enumerating deliverables for 58–59
- outlining scope of work 57
- ownership and rights 59–60
- payment schedules 62–63
- project estimates 61–62
- project overview for 54
- revision history for 53–54
- statement of work 49, 65–66
- title page for 52–53
- writing 50–51

prototype developers 275–276

prototypes 259–278.

- See also digital prototypes;
- HTML prototypes
- digital 262–274
- examples of 276–278
- gaging needs for 260–261
- iterative process for 259–260
- log-in process 271–273
- paper 261–262, 276–277
- tools for 274–275
- using for design goals 278
- wireframes vs. 238, 256
- working with developers 275–276

psychology design principles 205–215

- about 186
- attractive design 205–207
- flow and game design 207–212
- focusing on positive responses 204
- further information on 215
- providing social proof 212–214

## Q

qualitative approaches

- qualitative audits 153
- research 285
- usability testing 293–294

quantitative approaches

- quantitative audits 152–153
- research 285
- testing 293–294

## R

rapid development approach 75–80

recording usability test results 304

Reisg, John 271

remote research

- automated tools and 288–290
- benefits of 287
- design testing as 286–287
- planning for 287–288
- tools for 287, 291

*Remote Research* (Bolt and Talthimutte) 287

remote sorts 127

requirements-gathering meetings 94–97

research. See user research

responsive design 23–24, 254–255

*Responsive Web Design* (Marcotte) 23–24, 254

revision history for proposals 53–54

Ries, Eric 76–77

roles

- outlining project 90–92
- screeners 302–303

rules for meetings 325–327

## S

Saffer, Dan 28, 217

Schell, Jesse 209

scope of work 57

*Seductive Interaction Design* (Anderson) 215

Seiden, Josh 130

sign-off for projects 63–64

simple site maps 228

Simpson, Brad 254

site maps

- aligning elements of 225–226
- basic elements in 222–224
- common mistakes in 224–228
- creative 230–231
- defined 219–220
- developing advanced 228–230
- illustrated 220
- numbering on 226–228
- simple 228
- text on 226

sketching

- converting to digital wireframe 251–253
- responsive design 255
- sketchboard templates 249
- user experience 250–251

- Sketching User Experiences* (Greenburg, Carpendale, Marquardt, and Buxton) 250, 296
  - Slavin, Tim 155
  - smartphones. *See also* mobile sites and applications
    - gestures for 28–29
    - sales of 21
  - Snyder, Carolyn 296
  - social interaction 5
  - social networking applications 21
  - social proof 212–214
  - software
    - required for remote research 287–288
    - site map and task flow 221–224
    - wireframe design 241–242
  - Software Usability Measurement Inventory (SUMI) 119
  - Soucy, Kyle 288
  - space and equipment for usability testing 304
  - Spool, Jared 144, 180, 217
  - sprints. *See* iterations
  - staffing usability tests 304
  - stakeholders
    - defined 91
    - developing project requirements with 84–86
    - finding right 92–93
    - gathering ideas from 90–97
    - listening to 97
    - milestone approval from 82
    - prioritizing user group attributes 105–107
  - statement of work (SOW) 49, 65–66
  - status icons 192
  - stencils 242
  - storyboarding 166–169
    - brainstorming team for 166–167
    - developing storyboard 167–169
    - preparing for 166
    - questions for 167
  - structuring websites. *See also* prototypes; wireframes
    - site maps 219–220, 222–231
    - task flows 219–220, 222–224, 227, 232–236
  - support for users 316
  - surveys
    - software for 119, 291
    - using 108, 118–120
  - swimlanes 234–236
  - SWOT analysis 71–73
- T**
- tablets
    - developing mobile-optimized 25
    - portrait and landscape mode for 193–194
  - tags in HTML documents 268–269
  - target audience personas 140–141
  - task-based application websites
    - common uses of 18
    - defined 11
    - design goals for 19
  - task flows
    - basic elements for 222–224
    - defined 219–220
    - examples of 232–233
    - illustrated 220, 232–233
    - numbering 227
    - swimlanes 234–236
    - uses for 231, 234
  - Tatum, Keith 276
  - teams
    - collaboration among 81
    - common terminology among 96–97
    - conflict in 177–180
    - design principles focusing 216
    - developing storyboards 166–169
    - kickoff meetings for 68
    - lack of alignment in 178–179
    - positive tension among 173–175
    - prioritization by 170–173
    - prioritizing features 164, 169–173
    - project roles for 30–42
    - responsibilities and roles of 90–92
    - sketching user experience 250
    - using Lean UX approach 79
    - working with prototype developers 275–276
  - templates
    - content 154–155
    - Empathy Map 142
    - OmniGraffle 221
    - sketchboard 249
    - wireframe 242–243
  - test participants
    - compensating 110, 300–301
    - interviewing 107, 111–114, 304
    - number of 294
    - screening 302–303
  - testing. *See* design testing; remote research; usability testing
  - Texas Instruments microsite 15
  - text on site maps 226
  - Theory of Fun, A* (Koster) 210
  - Thomas, Mark A. 196
  - time
    - documentation 182
    - required for digital prototypes 263
    - visualizing business requirements 165–166
  - title page for proposals 52–53
  - Tognazzini, Bruce 88
  - tools
    - analytics 33
    - body language as 123
    - prototyping 274–275
    - remote research 287, 291

- tools (*continued*)
    - software for UX design 221
    - surveying 119–120
    - used by content strategists 152–156
    - wireframe 241–243
  - touch gestures 28–29
  - troubleshooting remote research sessions 288
  - trust 206
  - Tufte, Edward 192, 193
  - Tulathimutte, Tony 287
- U**
- unified design 187–188
  - usability testing
    - analyzing results of 308–310
    - attractive products and 206
    - compensation for 110, 300–301
    - data gathered in 109, 127, 297–298
    - discussion guides for 304–306
    - facilitating 306–308
    - focus groups and 121
    - further information on 296
    - number of participants in 294
    - planning research for 295–299
    - prototypes for 278
    - qualitative vs. quantitative methods in 293–294
    - recommendations from 310
    - recruiting users for 299–300
    - screening participants in 302–303
    - space and equipment for 304
    - steps in 293
    - terminating interviews for 304
    - tools for 291
    - user acceptance testing vs. 292
    - visual design 190
  - Usability.gov website 305
  - user acceptance testing 292
  - user advocates 169, 173–175
  - user experiences. *See also* UX design
    - importance of tangible and online 4–5
    - sketching 250–251
  - user groups
    - defining 102–107
    - example user model 106–107
    - listing attributes of 103–105
    - prioritizing attributes of 105–107
  - user interviews 107, 111–114, 304
  - user models 106, 107
  - user requirements
    - adding to business requirements 102
    - prioritizing for project 164
    - visualizing features for 166–169
  - user research. *See also* usability testing
    - about 101
    - card sorting 109, 116–117, 124–127
    - choosing techniques for 102, 107–109
    - contextual inquiry 108, 114–117
    - defining groups for 102–107
    - designing from user models 107
    - developing persona from 131
    - focus groups 109, 121–124
    - further information on 111
    - incorporating in site design 11
    - listing group attributes 103–105
    - planning 110
    - prioritizing group attributes for 105–107
    - reviewing 128
    - selecting types of 110–111
    - steps in 102
    - surveys 108 118–120
    - tools for surveying 119–120
    - usability testing 109, 127
    - user interviews 107, 111–114, 304
  - user research plan 295–298
  - user researcher 32–34
  - user stories 81
  - userglue website 247
  - users
    - compensating for usability testing 110, 300–301
    - conflicts between requirements and needs of 99–100
    - customer experience of brand 12
    - defining documentation's 182
    - economy of motion and action by 200–202
    - flow states of 207–208
    - knowing audience 189
    - listing advantages for 316
    - number in usability testing 294
    - recruiting for usability testing 299–300
    - screening usability testing 302–303
    - site responses to action 202–204
    - surveying satisfaction of 298–299
    - tailoring microsites to experience of 15
  - UX design. *See also* design goals; design principles; software
    - basing only on user models 107
    - building support network for 40–42
    - conducting heuristic analysis of 86–89
    - continuing education in 7
    - defined 3, 6
    - ensuring production of quality 312–314
    - evaluating user adoption of 315–317
    - final design testing in 315
    - focusing on digital experience design 5
    - importance of tangible experiences 4
    - making case for 33
    - methodology's impact on project 81–82
    - organizations for 7–8
    - planning mobile-optimized sites 23–26, 317–319
    - postlaunch activities in 317–319
    - steps in design launch 315–317
    - storyboarding for 166–169
    - SWOT analysis in 71–73

UX experts  
Brad Simpson 254  
Christopher Fahey 313  
Jeff Gothelf 78–79  
Laura Creekmore 64–65, 146–147, 160  
Matthew Grocki 146–147, 148, 149  
Sarah Krznarich 151, 161  
Tim Frick 158–159, 162  
Todd Zaki Warfel 132, 249, 250, 278  
UX organizations 8

## V

value proposition 15  
variation in design 187–188  
Vinh, Khoi 196  
visual design 186–196  
about 186  
correlating page number to site map 227  
economy in elements 191–192  
exploring mock-ups of 283–284  
further information on 193, 196  
hierarchy and dominance 189–191  
miscues in 200  
proportion and balance in 193–196  
unity and variety in 187–188  
visual designers  
passing wireframes to 253  
role of 39–41  
working from wireframes 258  
*Visual Display of Quantitative Information, The* (Tuftte) 193  
Visual Vocabulary for Information Architecture 222–224

## W

Warfel, Todd Zaki 132, 249, 250, 278  
waterfall approach 74  
Web Accessibility Initiative (WAI) 187  
Website Analysis and MeasureMent Inventory (WAMMI) 119  
websites. See also mobile sites and applications;  
wireframes  
accessibility of 187  
analytics for postlaunch 318  
attractiveness of 205–207  
baby-naming 135  
brand presence 11–14  
common site map mistakes 224–228  
content source 11, 16–18  
creating wireframes from site maps 244  
e-commerce 19–20  
economy of motion for 200–202  
element hierarchy and dominance for 189–191, 199  
flow and game design for 207–212  
gamification of 210–211

interaction design for 196–204  
maintaining 59, 319–320  
marketing campaign 14–16  
microsites 14–15  
mobile-optimized vs. multiple mobile apps 26  
paper prototypes of 261–262, 276–277  
planning mobile-optimized sites 23–26  
postlaunch activities for 317–319  
remote research tools for 291  
responses to user action 202–204  
responsive design for 23–24, 254–255  
SEO value of content 160  
sketching experience of 250–251  
social networking applications 21  
tab associations for 197–198  
task-based application 11, 18–19  
types of 10–11  
unity and variety in design 187–188  
usability heuristics for 87  
visual design for 186–196  
visual miscues on 200  
WebTrends analytic tools 33  
Weinschenk, Susan 215  
wireframes 237–258  
annotations on 239, 246–248  
converting sketches to digital 251–253  
correlating site map number to 227  
creating 240–241  
defined 238  
developing iterations in 256–257  
getting started on 245–246  
passing to visual designer 253  
presenting to clients 257–258  
project information needed for 249  
prototypes vs. 238, 256  
responsive design using 254–255  
sketching user experience 250–251  
tools for creating 241–243  
uses of 237, 239–240  
working from site maps 244  
work for hire 59  
writing  
annotations 239  
copywriters' role in 38–39  
proposals 50–51  
usability test discussion guides 304–306  
user stories 81  
Wroblewski, Luke 22  
**Y**  
YooHoo & Friends 203  
Young, Indi 117  
**Z**  
Zichermann, Gabe 212