

THE EXPERT'S VOICE® IN WEB DEVELOPMENT

Supports all
current Java™ versions,
including 5 and 6!

Practical Ajax Projects with Java™ Technology

*Accelerate your learning with professional
Ajax projects, powered by Java™ technologies!*

Frank W. Zammetti

Apress®

Contents

About the Author	xi
About the Technical Reviewer	xiii
About the Illustrator	xv
Acknowledgments	xvi
Introduction	xvii

PART 1 Programming Using Ajax and Java

CHAPTER 1	Ajax: The Brave New World	3
	A Brief History of Web Development: The “Classic” Model	3
	What Is “Wrong” with the Classic Web?	9
	Enter Ajax	12
	Why Is Ajax a Paradigm Shift? On the Road to RIAs	16
	Let’s Get to It: Our First Ajax Example	19
	Choices in Ajax Toolkits	26
	Alternatives to Ajax	27
	Summary	30
CHAPTER 2	The Pillars of Ajax	33
	JavaScript Basics	34
	Object-Oriented JavaScript, or Making JavaScript “Non-Kiddie-Like”	49
	The Document Object Model and Scripting: Manipulating Content on the Fly	56
	XML: The Language of Languages	62
	Parsing XML in JavaScript	64
	Cascading Stylesheets	72
	Summary	82

CHAPTER 3	The Server Side of the Equation	83
	The Project Development Environment	83
	Ant: Building Java Applications the Open Source Way	84
	Apache Tomcat: Something for Nothing!	93
	Webapps, Servlets, JSPs, and Parsing XML on the Server	96
	Installing and Playing with the Applications	111
	Summary	112

PART 2 ■■■ The Projects

CHAPTER 4	Karnak: Type-Ahead Suggestions	115
	Requirements and Goals	115
	How We Will Pull It Off	116
	Visualizing the Finish Line	121
	Dissecting the Solution	123
	Suggested Exercises	142
	Summary	142
CHAPTER 5	InstaMail: An Ajax-Based Webmail Client	143
	Requirements and Goals	143
	How We Will Pull It Off	144
	Visualizing the Finish Line	147
	Dissecting the Solution	152
	Suggested Exercises	201
	Summary	201
CHAPTER 6	AjaxReader: Because Every Ajax Book Has to Have One!	203
	Requirements and Goals	203
	How We Will Pull It Off	204
	Visualizing the Finish Line	206
	Dissecting the Solution	210
	Suggested Exercises	251
	Summary	251

CHAPTER 7	PhotoShare: Share Your Visual Life with Your Friends	253
	Requirements and Goals	253
	How We Will Pull It Off	254
	Visualizing the Finish Line	258
	Dissecting the Solution	262
	Suggested Exercises	312
	Summary	312
CHAPTER 8	The Organizer: Get Yourself Organized Now!	313
	Requirements and Goals	313
	How We Will Pull It Off	314
	Visualizing the Finish Line	321
	Dissecting the Solution	324
	Suggested Exercises	352
	Summary	352
CHAPTER 9	AjaxChat: Chatting, the Ajax Way!	353
	Requirements and Goals	353
	How We Will Pull It Off	354
	Visualizing the Finish Line	365
	Dissecting the Solution	367
	Suggested Exercises	406
	Summary	406
CHAPTER 10	AJAX Warrior: Back to the Future in a Fun Way!	407
	Requirements and Goals	407
	How We Will Pull It Off	408
	Visualizing the Finish Line	413
	Dissecting the Solution	417
	Suggested Exercises	476
	Summary	477

APPENDIX A	The XMLHttpRequest Object	479
	What Is the XMLHttpRequest Object?	479
	What Browsers Support the XMLHttpRequest Object?	479
	Is the XMLHttpRequest Object a W3C Standard? (Or Any Other Kind of Standard for That Matter!)	480
	How Do I Use the XMLHttpRequest Object?	480
	XMLHttpRequest Object Method and Properties Reference	481
	XMLHttpRequest Object Status Codes	482
APPENDIX B	Libraries, Websites, and Books, Oh My!	483
	Libraries/Toolkits/Products	483
	Websites	485
	Books	486
INDEX		489