



Master the Art of Customizing Netscape and Creating Sizzling **Web Pages**



BOOKS

JavaScript NETSCAPE WIZARDRY

Dan Shafer



publisher

keith weiskamp

EDITOR

DIANE GREEN COOK

COVER DESIGN

ANTHONY STOCK

INTERIOR DESIGN

michelle stroup

production

kim eoff

proofreader

CHARLOTTE ZUCCARINI

INDEXER

KIRSTEN DEWEY

Trademarks: Microsoft is a trademark and Windows is a registered trademark of Microsoft Corporation. JavaScript is a trademark of Sun Microsystems. All other brand names and product names included in this book are trademarks, registered trademarks, or trade names of their respective holders.

Copyright © 1996 by The Coriolis Group, Inc.

All rights reserved.

Reproduction or translation of any part of this work beyond that permitted by section 107 or 108 of the 1976 United States Copyright Act without the written permission of the copyright owner is unlawful. Requests for permission or further information should be addressed to The Coriolis Group, 7339 E. Acoma Rd., Suite 7, Scottsdale, Arizona 85260.

The Coriolis Group 7339 E. Acoma Drive, Suite 7 Scottsdale, AZ 85260 Phone: (602) 483-0192

Fax: (602) 483-0193

Web address: www.coriolis.com

ISBN 1-883577-86-1: \$34.99

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

preface

Netscape is cool. You probably already believe that or this book wouldn't even have found its way into your hands. But I just want to reassure you that Netscape really is cool. As one who has been described as a "rotund gray-hair of the software industry," I've been around the block a few times. I've seen a huge amount of technology in my day.

I remember quite clearly the first day I saw a World Wide Web browser. I was visiting the offices of the now-all-but-defunct Taligent Corp. researching a book that never got published. One of the senior technical people invited me into his office to see NCSA Mosaic. I was awestruck. I said then that it was the coolest piece of software I'd seen in 10 years.

I was wrong.

It was the coolest piece of software I'd ever seen.

And now there is Netscape, the younger but far more precocious brother of Mosaic, designed and created by some of the same amazing programmers who designed and created Mosaic. Now in a reasonably mature release, Netscape has established itself—at least for the foreseeable future—as *the* standard World Wide Web browser.

And it is still cool.

This book describes this coolness. If you have half as much fun exploring the new release of Netscape with this book as I had writing it, you're in for a real treat.

Who Should Read This Book?

This book is intended for people who have had some experience surfing the Web with earlier versions of Netscape (prior to 2.x) and who have at least a nodding acquaintence with HTML (Hypertext Markup Language). You don't

need to be an HTML guru capable of whipping out hundreds of pages a week of scintillating animations and whizzy graphics. Nor do you need to have any prior experience in programming or scripting.

You must, however, be curious. Curious about the deeper things that you can do with Netscape that other books and the user documentation either ignore or gloss over lightly. Because I take you into the depths of the wonder of Netscape in this book and to linger there long enough to benefit from it, you can't be someone who is just interested in how to load your favorite URL.

What's in This Book?

The first two chapters of this book look at the new release of Netscape to define what the coolest of the newest features are. In the process, I'll let you know where in the book those features are covered.

So rather than provide you with the obligatory chapter-by-chapter preview of what the book covers here, I'm going to try to give you some of the flavor of the book's contents.

This book is a little schizophrenic. I hate writing books that are like that, but I didn't feel I had much choice in this case. Because Netscape, when it released Version 2 and subsequent upgrades, really created a kind of split-personality product.

On the one hand, there are a number of new features that will appeal to the curious end user. (I refuse to use the word "power user." It is too imprecise and it leaves everyone who doesn't think they are a power user feeling powerless. There's enough powerlessness in the world already.) Such things as frames, the built-in ability to deal with mail and Internet news groups, and the use of the new and exciting plug-in architecture are there for the taking.

But the other side of the coin—and in many ways the more exciting—is JavaScript. I've been a fan and advocate of end-user scripting and programming languages and tools for longer than almost anybody in the industry by now. It's my raison d'etre, if you will. From the time I wrote my first best-selling book about Apple Computer's HyperTalk scripting language until today, some 40 books later, I remain excited by the prospects of scripting languages and tools. Moving the power center nearer and nearer to the user is my idea of what computing should be about.

JavaScript, even in its first release, is an exciting tool. It can do some perfectly awesome stuff. That's why something more than half of this book is devoted to JavaScript, including a fairly significant number of examples of the use of the language. I scoured the world of JavaScript online for Chapter 12 and found some gems that do stuff in JavaScript that even the folks who wrote JavaScript are probably surprised about. (It's a fundamental principle of this industry that the people who write the tools almost never predict with any accuracy what people will actually *do* with them.)

So the book deals with both end-user and scripting-level enhancements to the first releases of Netscape. It focuses on what's new, what's cool, why you should learn about it, and what it can do.

A Word About 'Netscapisms'

Given that this book is about Netscape, it is inevitable that there are some features of World Wide Web browsers included here that are not, at this writing, supported by any other browsers. These features have come to be known as "Netscapisms." There is a lot of consternation in the Webmaster community, of which I am an entrenched member, over the issue of whether it is wise or fair or appropriate to include such features on a Web page.

The Web began life as a serious attempt to achieve cross-platform and browser-independent access to the trillions of bytes of data that live on the Internet or are accessible directly from it. In the early days of World Wide Web design, Webmasters agreed that we should keep things very simple, minimize the use of graphics, accommodate text-only browsers, and stay within the HTML 1.0 specification.

All that has long since changed, due in large part to the success of the Web, which in turn is due in large part to the success of Netscape. At this writing, estimates are that Netscape controls between 60 percent and 75 percent of the total market for desktop Web browsers. It appears that Microsoft's challenge with its own excellent Internet Explorer has already begun to make some inroads into that base, but even the most optimistic Microsoft supporters doubt that Netscape's share of this market will fall below 50 percent before mid-1997.

The situation is so out of control that the governing bodies of the Web have all but given up trying to create a single, monolithic standard for HTML. The planned HTML 2.0 specification, in draft at this writing, may in fact never see

the light of day as a single document released at one time. Instead, we may well see standards for various aspects of the World Wide Web and HTML emerge as the market drives the decisions.

All of this means that there is only a relatively little danger in designing your Web sites for Netscape. There are, as I'll point out, ways to accommodate non-Netscape browsers in such a way that your pages don't "break" when viewed with them.

My advice—which we follow at SALON Internet, Inc. (http://www.salon1999.com) where I am Senior Webmaster and Director of Technology—is to use the Netscapisms but be sure not to lock out any other graphical browser. Try to accommodate the textual browsers as much as possible, but don't compromise design and quality to do so.

That's not a view that everyone will find acceptable, but that's what makes a circus.

Contacting the Author

I love hearing from my readers. Email is definitely the best way to contact me. Now that I have a permanent address with my own Internet domain, you can be sure that even if I switch Internet Service Providers, this address will be good as long as I'm online. So send me email "valentines and vituperations" (to borrow a phrase from the magazine where I work) at: dan@gui.com.

I'll look forward to hearing from you!

acknowledgments

I appreciate the help and support of the following people, without whom this book would have been more difficult or even impossible:

- Keith Weiskamp, publisher at The Coriolis Group and a long-time and valued friend, for suggesting the idea, seeing it through to completion, working with me personally, and putting up with my delays.
- Tony Potts of The Coriolis Group who worked with me on technical issues, searched out the stuff for the CD-ROM and constructed it.
- The Coriolis Group Production and Editorial Staff consisting of Michelle Stroup, Kim Eoff, Anthony Stock, Gary Smith, Ron Pronk, Denise Constantine, and Brad Grannis, who performed heroic service in shepherding this book so quickly through the editorial and production maze.
- Brendan Eich of Netscape, Inc., who answered technical questions, pointed out errors in samples, and generally provided support at a hectic time in his life and Netscape's growth.
- JavaScript experts and authors from all over the world whose work appears on the Web and from whom I have learned and even borrowed (hopefully with appropriate attribution). I'm particularly grateful to those JavaScripters whose work appears in this book through their generosity and kindness: Jason Bloomberg, Thomas van der Heijden, Kouichirou Eto, Jim Tipton, Steven Weinberger, Stephen Heise, and Cameron Gregory.
- David Zweig and David Talbot, publisher and editor, respectively, of SA-LON, the online magazine of books, the arts, and ideas where I earn my daily bread these days, for understanding my need to keep writing these books and listening to me enthuse about this one over lunch and around the old water cooler.
- My wife, Carolyn, who was busy building a business of her own while I
 was writing this book and who showed her usual calm support and enthusiasm even on those days when I was railing against my computer and the
 universe.

CONTENTS

preface XI

chapter 1 what's new in netscape? 1

END-USER FEATURES 2

INTEGRATED EMAIL 2

INTEGRATED NEWSGROUP MANAGEMENT 3

MULTIMEDIA ENHANCEMENTS 4

FILE UPLOAD CAPABILITY 6

ENHANCED BOOKMARKS 6

WEBMASTER-ORIENTED FEATURES 7

chapter 2 the New Netscape: a better Browser 9

Internet Functionality 10

ELECTRONIC MAIL AND MAILING LISTS 11

NEWSGROUPS 15

FILE UPLOADS 17

ENHANCED BOOKMARKS AND ADDRESSING 19

EXTENDED MULTIMEDIA DISPLAY 20

Progressive JPEG Images 21

GIF Animation 22

Multiple, Simultaneous Streaming Data Types 23

Client-Side Image Mapping 24

chapter 3 frames 25

LOOKING AT FRAMES 26

Navigation with Frames 29

WHY BOTHER WITH FRAMES? 29

Frames Can Provide Context 30

Banners and Webvertising 31

COMPLEMENTARY CONTENT 31

A FINAL, SPEEDY NOTE 32

Basic Frame Syntax 33

FRAMESET ESSENTIALS 34

Using and Combining Attributes 36

OTHER FRAME ATTRIBUTES 48

SUPPORTING OLDER STYLE BROWSERS 51

chapter 4 client-side image maps 53

OLD-STYLE IMAGE MAPS 54

CREATING AN OLD-STYLE MAP 54

HANDLING OLD-STYLE IMAGE MAPS 56

WHAT THE USER SAW 56

OTHER PROBLEMS 57

CLIENT-SIDE IMAGE MAPS 58

CREATING CLIENT-SIDE IMAGE MAPS 58

WHAT THE USER SEES 61

OTHER ADVANTAGES 61

Chapter 5 using plugins 63

WHAT'S A PLUG-IN? 64

THE DOWNSIDE OF HELPER APPLICATIONS 66
ALONG CAME PLUG-INS 67

OBTAINING AND USING PLUG-INS 68

Sources for Plug-Ins 68 Placing Plug-Ins 68

SOME SAMPLE PLUG-INS 70

ACROBAT AMBER 71
LIGHTNING STRIKE 72
QUICKTIME PLAYER AND MOVIESTAR 74
REALAUDIO PLAYER 75
SHOCKWAYE 79

chapter 6 Javascript overview 83

WHAT IS JAVASCRIPT? 84

JAVASCRIPT AS A LANGUAGE 86
THE JAVASCRIPT OBJECT MODEL 87
CONTROLLING THE DOCUMENT WITH JAVASCRIPT 88
TAILORING THE EXPERIENCE 89
EXTENDING THE EXPERIENCE 89
VALIDATING INPUT 89

ADDING JAVASCRIPTS TO

Your Pages 90

HIDING SCRIPTS 91

WHEN JAVASCRIPTS EXECUTE 93

DEFINING AND CALLING FUNCTIONS 94

Calling Scripts Directly 95
Using Events to Call Scripts 97

RULES OF THE JAVASCRIPT ROAD 100

chapter 7 the Javascript object model 103

THE WORLD OF OBJECTS 105

A Sample Page's Objects 106

THE Navigator Object 108

THE WINDOW OBJECT 109

WINDOW PROPERTIES 110

WINDOW METHODS 111

THE DOCUMENT OBJECT 116

DOCUMENT PROPERTIES 117

DOCUMENT METHODS 119

THE FORM OBJECT 120

FORM PROPERTIES 121

FORM METHODS 122

OBJECTS CONTAINED IN FORMS 122

HYPERTEXT-RELATED FORM OBJECTS 124

DATA-RELATED FORM OBJECTS 124

ACTION-TRIGGERING FORM OBJECTS 129

THE STRING OBJECT 130

STRING OBJECT PROPERTY 131

STRING OBJECT METHODS 131

MATH OBJECTS 137

MATH OBJECT PROPERTIES 137

MATH OBJECT METHODS 137

THE DATE OBJECT 139

DATE OBJECT METHODS 139

THE LOCATION OBJECT 140

-			
OCATION	ODIECT	PROPERTIES	111
LUCATION	CISIFCI	FRUPERILES	141

THE HISTORY OBJECT 141

HISTORY OBJECT PROPERTY 141

HISTORY OBJECT METHODS 142

Chapter 8 Javascript Basics 143

REFERENCING AND NAMING JAVASCRIPT ITEMS 144

OBJECT NAMING AND REFERENCING 145

VARIABLE NAMING AND REFERENCING 145

LITERAL NAMING AND REFERENCING 147

DATA TYPES IN JAVASCRIPT 150

EXPRESSIONS AND BUILT-IN OPERATORS 159

EXPRESSIONS 152

BUILT-IN OPERATORS 153

FUNCTIONS AND STATEMENTS 157

SCRIPTS CONTRASTED WITH FUNCTIONS 158

JAVASCRIPT STATEMENTS 159

Creating Your Own Objects 162

DEFINING NEW OBJECT TYPES 162

Creating New Objects 163

Accessing Properties 163

OBJECTS AS PROPERTIES 163

OBJECTS CONTRASTED WITH. INSTANCES 164

CONDITIONAL PROCESSING 165

BASICS OF IF... ELSE PROCESSING 165

REPEATED EXECUTION IN LOOPS 166

THE "FOR" LOOP 166

THE "FOR...IN" LOOP 167

THE "WHILE" LOOP 168

LOOP CONTROL WITH "BREAK" AND "CONTINUE" 169

Using Frames in JavaScripts 170

THE KEY IDEA: TARGET 170 SAMPLE SCRIPTING 171

Events and Event Handlers 173

Basic Event Concepts 174
Creating Event Handlers 175
Built-In Events 175

Chapter 9 Javascript in action 177

TODAY'S CAFETERIA MENU 178

THE PROBLEM 179
DESIGNING A SOLUTION 179
THE CODE 179

KIOSK WINDOW DISPLAY 184

THE PROBLEM 184
DESIGNING THE SOLUTION 185
THE CODE 187

STATUS SCROLLER 189

THE PROBLEM 189
DESIGNING THE SOLUTION 190
THE CODE 191

Dynamic Form Emailer 196

THE PROBLEM 196
DESIGNING THE SOLUTION 197
THE CODE 199

chapter 10 using Java applets 211

WHAT IS JAVA, ANYWAY? 212

JAVA AND C++ 213

Java's Origins and Introduction 213
Java's Characteristics 214

APPLICATIONS AND APPLETS 215

INCORPORATING JAVA APPLETS 215

OTHER ATTRIBUTES 217

Some Sample Applets 221

HANGMAN, JAVA STYLE 221

WATCH 'EM SORT! 224

SLICK STOCK QUOTATION PAGE 224

COOL DYNAMIC GRAPH 229

chapter 11 calling cgis and external applications 233

CALLING CGI APPLICATIONS 234

NETSCAPE AND OLE 235

NETSCAPE AS OLE CLIENT 235

NAVIGATOR AS SERVER 237

Chapter 12 Javascript on the web 239

JAVASCRIPT JUMP STATIONS 241

JAVASCRIPT 411 242

JAVASCRIPT INDEX 244

Unofficial JavaScript Resource Guide 244

NETSCAPE'S JAVASCRIPT RESOURCES PAGE 246

GAMELAN'S JAVASCRIPT SITE 248

COOL SITES 251

TERTIUS THE SCRIBE 252
CHARLES GOODIN'S COLLECTION 253
A NEURAL NETWORK IN JAVASCRIPT? 253
AN HTML EDITOR IN JAVASCRIPT 254

Source Code Examples 256

FADING BACKGROUNDS 256
RANDOM COLOR GENERATOR 260
AN "INVISIBLE" MAZE 264
A DIFFERENT MAZE 269
FIVE-CARD STUD POKER 276
SOUNDEX GENERATOR 284
TICKER TAPE 288

APPENDIX A 293

APPENDIX B 333

What's on the cd? 353

INDEX 357

TSONE?

此人成族,需要完整PDF请访问: www.ertongbook.com