

Contexts

1. <i>Introductory Concepts</i>	7
1.1 Introducing the Tools	1
1.1.1 What Is an HTML Document?	1
1.1.2 What Is JavaScript?	3
1.1.3 How Do You Create HTML/JavaScript Documents?	4
1.1.4 Some Typographic Conventions Used in This Book	7
1.1.5 Where Should I Look for More Information about HTML and JavaScript?	7
1.2 Your First HTML/JavaScript Documents	8
1.3 Accessing HTML Documents on the Web	16
1.4 Another Example	18
2. <i>HTML Document Basics</i>	21
2.1 Documents, Elements, Attributes, and Values	21
2.1.1 Essential Elements	21
2.1.2 Some Other Important Elements	22
2.2 HTML Syntax and Style	29
2.3 Using the <code>script</code> Element	30
2.4 Creating and Organizing a Web Site	31
2.5 Selecting and Using Colors	35
2.6 Using Cascading Style Sheets	36
2.7 Another Example	42
3. <i>HTML Tables, Forms, and Lists</i>	43
3.1 The <code>table</code> Element	43
3.1.1 Basic Table Formatting	43
3.1.2 Merging Cells across Rows and Columns	45
3.2 The <code>form</code> Element	49
3.3 Creating Pull-Down Lists	53
3.4 Combining Tables and Forms	54
3.5 E-Mailing the Contents of Forms	57
3.6 The List Elements	59
3.7 Another Example	64

4. Fundamentals of the JavaScript Language.....	67
4.1 Capabilities of JavaScript.....	67
4.2 Some Essential Terminology	69
4.3 Structure of JavaScript Code.....	70
4.3.1 JavaScript Statements	70
4.3.2 Statement Blocks	71
4.3.3 Comments	71
4.4 Data and Objects	73
4.4.1 Data Declarations and Variables.....	73
4.4.2 Data Types	74
4.4.3 Literals	75
4.4.4 Case Sensitivity.....	75
4.4.5 Objects and Methods for Input and Output.....	76
4.4.6 String Methods.....	78
4.5 Tokens, Operators, Expressions, and Statements.....	80
4.5.1 Tokens.....	80
4.5.2 Arithmetic Operators	81
4.5.3 The Assignment Operator	82
4.5.4 Shorthand Arithmetic/Assignment Operators.....	83
4.6 The JavaScript <code>Math</code> Object.....	85
4.7 Comparison Operators and Decision-Making Structures.....	90
4.7.1 Relational and Logical Operators	90
4.7.2 The <code>if</code> Construct (Branching Structures).....	90
4.7.3 The <code>switch</code> Construct.....	95
4.8 Loop Structures	97
4.8.1 Count-Controlled Loops	97
4.8.2 Conditional Loops.....	99
4.9 Using JavaScript to Change Values in Form Fields.....	102
4.10 Another Example.....	105
5. Using Arrays in HTML/JavaScript.....	107
5.1 Basic Array Properties	107
5.2 Some Operations on Arrays	111
5.2.1 Manipulating Stacks and Queues.....	111
5.2.2 Sorting.....	114
5.3 Creating Two-Dimensional Arrays	115
5.4 Using Arrays to Access the Contents of Forms	118
5.4.1 Accessing Values of <code>type= text</code> Fields.....	118
5.4.2 Accessing <code>type="radio"</code> and <code>type="checkbox"</code> Fields.....	120
5.5 Hiding the Contents of a JavaScript Script	122
5.6 Another Example	124

- 6. JavaScript Functions*..... 127
 - 6.1 The Purpose of Functions in Programming..... 127
 - 6.2 Defining JavaScript Functions 128
 - 6.3 Using JavaScript Functions with HTML Forms 131
 - 6.3.1 Using Numerical Values as Input 132
 - 6.3.2 Using Field Name `value` Attributes as Input..... 135
 - 6.3.3 Using Field Names as Input..... 135
 - 6.3.4 Using Entire Forms as Input 136
 - 6.4 Some Global Methods and Event Handlers 140
 - 6.4.1 Global Methods 140
 - 6.4.2 Using Event Handlers with Forms and Functions 143
 - 6.5 Recursive Functions 144
 - 6.6 Passing Values from One Document to Another 149
 - 6.7 Revisiting the JavaScript `sort()` Method 151
 - 6.8 More Examples 152

- Glossary*..... 161

- Appendices* 169
 - A.1 HTML Document Examples 169
 - A.2 Displaying Special Characters in an HTML Document 171

- Exercises*..... 173

- Index*..... 193



<http://www.springer.com/978-1-84628-656-8>

An Introduction to HTML and JavaScript
for Scientists and Engineers

Brooks, D.R.

2007, XI, 200 p. 6 illus. in color. With online
files/update., Softcover

ISBN: 978-1-84628-656-8