

Preface

Most popular programming languages support regular expressions, and there's a good reason for that: regular expressions are incredibly powerful at text processing. With regular expressions, you can greatly reduce the time and effort required for complex string parsing tasks that would otherwise take dozens of lines of code.

But, as a JavaScript developer, you may not need to jump into writing regular expression patterns whenever you need to process texts. JavaScript already provides excellent built-in tools that meet many of your text manipulation needs.

In this book, you'll explore when and how to use each tool by working through real-world scenarios. You'll learn the mechanics of JavaScript's regex in detail via cookbook-style recipes for various text manipulation tasks.

Make sure you actually type and execute the code examples as you follow along in the book. Some examples may appear simple, but there's a big difference between reading the code and being able to write it on your own.

Who Is This Book For?

This book is geared toward the needs of both client- and server-side programmers. Whether you're a beginner or an advanced programmer, this guide will save you a ton of time when dealing with textual data. We'll focus squarely on the practical aspects of text processing with JavaScript—that is, what each technique is designed to accomplish and how to use it in your program.

Readers who have experience with regular expressions will still benefit from this book as it contains a wealth of detail on JavaScript's regular expression flavor as well as features recently introduced. By the end of this book, you will be able to solve a great many complex validation, modification, and search-and-replace problems rapidly and efficiently.

What You Should Know

To use this book, you should already know basic JavaScript, HTML, and CSS syntax. Use of HTML and CSS will be infrequent and fairly basic, and I'll explain each JavaScript example in detail. So even if your knowledge is rusty, you'll understand how the code works.

To run the examples, you'll need a JavaScript environment that supports the newest version of the ECMAScript standard (ECMAScript is the official standard that defines the specification of JavaScript). So, whether you're running the examples in your browser's console or the Node.js environment, make sure you have the latest software version installed.

Certain recipes use APIs that are only available in the browser environment, such as `fetch()`. As a result, you can run those recipes only in a browser. We'll warn you about the lack of browser/environment support whenever necessary.

What's in This Book?

We've organized the book as a cookbook, so you can quickly jump to different recipes. But if you read the book cover to cover, you'll become a master chef of text processing. There are three primary parts in this book:

- Part 1 contains recipes that solve various text processing problems with JavaScript's built-in methods.
- Part 2 covers JavaScript's flavor of regex, provides an in-depth discussion of the syntax, and gives various examples of using them.
- Part 3 provides solutions to a wide range of retrieval and alteration tasks. These recipes will give you the helping hand you need to become a regular expression expert.

Online Resources

To download the example code used in the book, please visit the Pragmatic Bookshelf website.¹ You can submit feedback and errata entries, get up-to-date information, and join in the discussions on the book's forum page. If you're reading the book in PDF format, you can view or download a specific example by clicking on the little gray box above the code.

1. <https://pragprog.com/titles/fkjavascript/text-processing-with-javascript/#resources>