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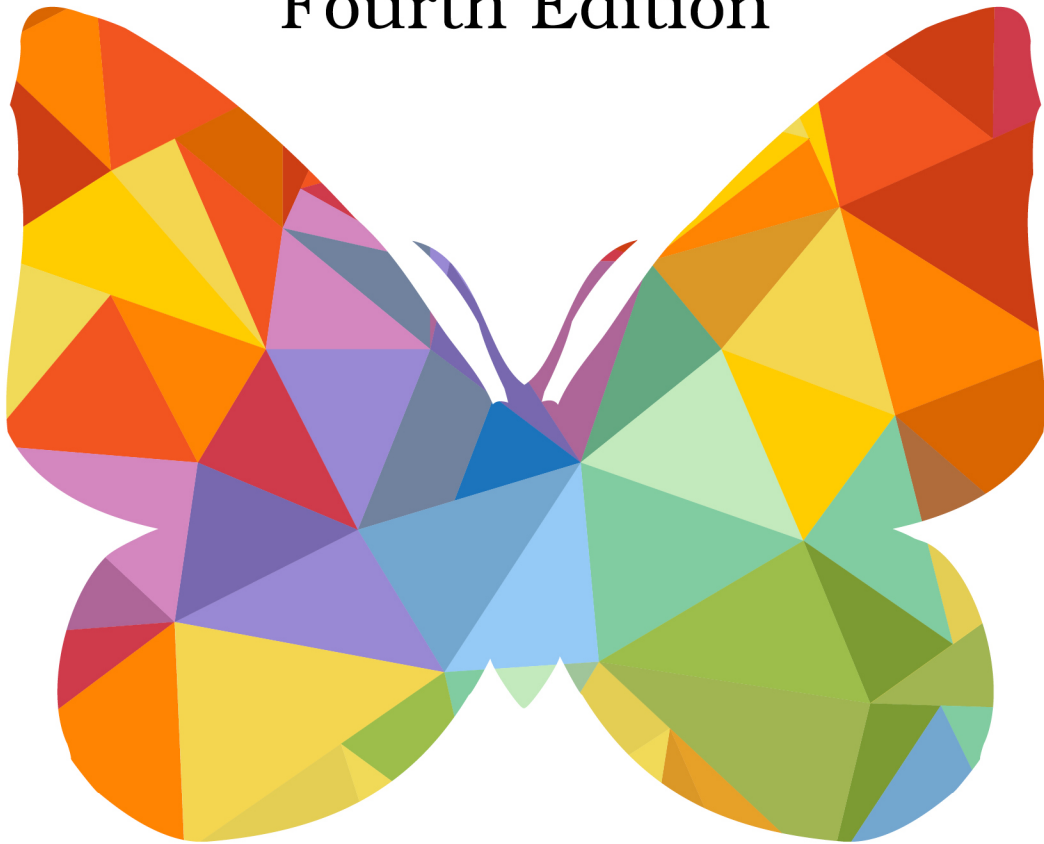
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Modern Perl

Fourth Edition



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The Classic Reference, Updated for Perl 5.22

Modern Perl, Fourth Edition

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Preface

Larry Wall released the first version of Perl in 1987. The language grew from its niche as a tool for system administrators who needed something more powerful than shell scripting and easier to use than C programming into a general-purpose programming language. Perl has a solid history of pragmatism and, in recent years, a disciplined approach to enhancement and backward compatibility.

Over Perl's long history—Perl 5 has been continually refined over the past twenty years—our understanding of what makes great Perl programs has changed. While you can write productive programs that never take advantage of all the language has to offer, the global Perl community has invented, borrowed, enhanced, and polished ideas and made them available to anyone willing to learn them.

Modern Perl is a mindset. It's an approach to writing great software with the Perl programming language. It's how effective Perl programmers write powerful, maintainable, scalable, concise, and excellent code. It takes advantage of Perl's extensive library of free software (the CPAN) and language features designed to multiply your productivity.

You'll benefit most from this book if you already have some experience with Perl or another programming language. If you're comfortable writing and executing programs (and happy to consult the documentation when it's mentioned), you'll get the most from this book.

Running Modern Perl

The `Modern::Perl` module from the CPAN (see [The CPAN, on page ?](#)) tells Perl to warn you of typos and other potential problems. It also enables new features introduced in Modern Perl releases. Unless otherwise mentioned, the code snippets in this book assume you've started with this basic program skeleton:

```
#!/usr/bin/env perl

use Modern::Perl '2015';
use autodie;
```

If you don't have `Modern::Perl` installed, you could write the following instead:

```
#!/usr/bin/env perl

use 5.016;      # implies "use strict;"
use warnings;
use autodie;
```

Some examples use testing functions such as `ok()`, `like()`, and `is()` ([Testing on page ?](#)). The skeleton for these examples is shown here:

```
#!/usr/bin/env perl

use Modern::Perl;
use Test::More;

# example code here

done_testing();
```

At the time of writing, the current stable major Perl release is Perl 5.22. If you're using an older version of Perl, you may not be able to run all of the examples in this book unmodified. The examples in this book work best with Perl 5.16.0 or newer, though we recommend at least Perl 5.20. While the term *Modern Perl* has traditionally referred to any version of Perl from 5.10.1, the language has improved dramatically over the past several years.

Although Perl comes preinstalled on many operating systems, you may need to install a more modern version. Windows users, download Strawberry Perl from <http://www.strawberryperl.com/> or ActivePerl from <http://www.activestate.com/activeperl>. Users of other operating systems with Perl already installed (and a C compiler and the other development tools), start by installing the CPAN module `App::perlbrew`.¹

1. <http://search.cpan.org/perl/doc?App::perlbrew>

perlbrew manages multiple Perl installations, so that you can switch between versions for testing and deployment. You can also install CPAN modules in your home directory without affecting the system installation. If you've ever had to beg a system administrator for permission to install software, you'll appreciate this.

Credits

This book would not have been possible without questions, comments, suggestions, advice, wisdom, and encouragement from many, many people. In particular, the author thanks this edition's tech reviewers Andy Lester, Sean Lindsay, and Mohsen Jokar as well as Michael Swaine, editor of this edition. Contributors to this and previous editions include the following:

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Any remaining errors are the fault of the stubborn author.