

## The Well Grounded Rubyist 2nd Edition

Become an accomplished Ruby programmer by understanding the design principles, best practices, and trade-offs involved in implementation approaches to keep your Ruby applications maintainable in the long term

**Key Features**

- Understand the design principles behind polished Ruby code and trade-offs between implementation approaches
- Use metaprogramming and DSLs to reduce the amount of code needed without decreasing maintainability
- Learn Ruby web application design principles and strategies for databases, security, and testing

**Book Description**

Most successful Ruby applications become difficult to maintain over time as the codebase grows in size. Polished Ruby Programming provides you with recommendations and advice for designing Ruby programs that are easy to maintain in the long term. This book takes you through implementation approaches for many common programming situations, the trade-offs inherent in each approach, and why you may choose to use different approaches in different situations. You'll start by learning fundamental Ruby programming principles, such as correctly using core classes, class and method design, variable usage, error handling, and code formatting. Moving on, you'll learn higher-level programming principles, such as library design, use of metaprogramming and domain-specific languages, and refactoring. Finally, you'll learn principles specific to web application development, such as how to choose a database and web framework, and how to use advanced security features. By the end of this Ruby programming book, you'll have gained the skills you need to design robust, high-performance, scalable, and maintainable Ruby applications. While most code examples and principles discussed in the book apply to all Ruby versions, some examples and principles are specific to Ruby 3.0, the latest release at the time of publication.

**What you will learn**

- Use Ruby's core classes and design custom classes effectively
- Explore the principles behind variable usage and method argument choice
- Implement advanced error handling approaches such as exponential backoff
- Design extensible libraries and plugin systems in Ruby
- Use metaprogramming and DSLs to avoid code redundancy
- Implement different approaches to testing and understand their trade-offs
- Discover design patterns, refactoring, and optimization with Ruby
- Explore database design principles and advanced web app security

**Who this book is for**

If you already know how to program in Ruby and want to learn more about the principles and best practices behind writing maintainable, scalable, optimized, and well-structured Ruby code, then this Ruby book is for you. Intermediate to advanced-level working knowledge of the Ruby programming language is expected to get the most out of this book.

**Annotation**

Everyone in the Ruby world seems to be talking about metaprogramming--how you can use it to remove duplication in your code and write elegant, beautiful programs. Now you can get in on the action as well. This book describes metaprogramming as an essential component of Ruby. Once you

understand the principles of Ruby, including the object model, scopes, and eigenclasses, you're on your way to applying metaprogramming both in your daily work and in your fun, after-hours projects. Learning metaprogramming doesn't have to be difficult or boring. By taking you on a Monday-through-Friday workweek adventure with a pair of programmers, Paolo Perrotta helps make mastering the art of metaprogramming both straightforward and entertaining. The book is packed with: Pragmatic examples of metaprogramming in action, many of which come straight from popular libraries or frameworks, such as Rails. Programming challenges that let you experiment and play with some of the most fun, "out-there" metaprogramming concepts. Metaprogramming "spells"--34 practical recipes and idioms that you can study and apply right now, to write code that is sure to impress. Whether you're a Ruby apprentice on the path to mastering the language or a Ruby wiz in search of new tips, this book is for you. Learning Ruby has never been this fast and easy, or fun! Veteran Codemy.com programmer John Elder walks you step by step through the ins and outs of Ruby Programming. Written for the absolute beginner, you don't need any programming experience to dive in and get started with this book. Follow along as John teaches you to set up a development environment and write your first program. You'll learn about Variables, Math, IF/THEN Statements, Array, Hashes, Loops, Methods and much more. By the end, you'll be well on your way to becoming a professional Ruby coder! Build on your skills with practice exercises at the end of each chapter and build a math flashcard game using all the skills you've learned throughout the book. It really is this easy to learn Ruby! \*AUTHOR UPDATE: C9, the development environment we used in the book, was purchased by Amazon and is no longer accepting new users unless you sign up through my education account at [Codemy.com/c9](http://Codemy.com/c9)

The Complete Guide to Writing More Maintainable, Manageable, Pleasing, and Powerful Ruby Applications Ruby's widely admired ease of use has a downside: Too many Ruby and Rails applications have been created without concern for their long-term maintenance or evolution. The Web is awash in Ruby code that is now virtually impossible to change or extend. This text helps you solve that problem by using powerful real-world object-oriented design techniques, which it thoroughly explains using simple and practical Ruby examples. Sandi Metz has distilled a lifetime of conversations and presentations about object-oriented design into a set of Ruby-focused practices for crafting manageable, extensible, and pleasing code. She shows you how to build new applications that can survive success and repair existing applications that have become impossible to change. Each technique is illustrated with extended examples, all downloadable from the companion Web site, [poodr.info](http://poodr.info). The first title to focus squarely on object-oriented Ruby application design, Practical Object-Oriented Design in Ruby will guide you to superior outcomes, whatever your previous Ruby experience. Novice Ruby programmers will find specific rules to live by; intermediate Ruby programmers will find valuable principles they can flexibly interpret and apply; and advanced

Ruby programmers will find a common language they can use to lead development and guide their colleagues. This guide will help you Understand how object-oriented programming can help you craft Ruby code that is easier to maintain and upgrade Decide what belongs in a single Ruby class Avoid entangling objects that should be kept separate Define flexible interfaces among objects Reduce programming overhead costs with duck typing Successfully apply inheritance Build objects via composition Design cost-effective tests Solve common problems associated with poorly designed Ruby code

Coding experts point to Ruby as one of the best languages to start with when you're learning coding. It's been a popular choice for schools and code camps who want to introduce coding to a younger audience. Ruby For Kids For Dummies helps teach the basics of coding and Ruby to kids who don't have the opportunity to take coding classes at school or in camp as well as those who simply prefer to learn on their own. Broken down into smaller, goal-oriented projects, Ruby For Kids For Dummies introduces core coding concepts as it walks the student through steps for creating applications. The book is ideal for early-to-pre-teen learners interested in expanding their technology skills as well as younger readers eager to learn via step-by-step instruction.

A tutorial and reference to the object-oriented programming language for beginning to experienced programmers, updated for version 1.8, describes the language's structure, syntax, and operation, and explains how to build applications. Original. (Intermediate)

Does your Rails code suffer from bloat, brittleness, or inaccuracy? Cure these problems with the regular application of test-driven development. You'll use Rails 5.1, Minitest 5, and RSpec 3.6, as well as popular testing libraries such as `factory_girl` and `Cucumber`. Updates include Rails 5.1 system tests and `Webpack` integration. Do what the doctor ordered to make your applications feel all better. Side effects may include better code, fewer bugs, and happier developers. Your Ruby on Rails application is sick. Deadlines are looming, but every time you make the slightest change to the code, something else breaks. Nobody remembers what that tricky piece of code was supposed to do, and nobody can tell what it actually does. Plus, it has bugs. You need test-driven development: a process for improving the design, maintainability, and long-term viability of software. With both practical code examples and discussion of why testing works, this book starts with the most basic features delivered as part of core Ruby on Rails. Once you've integrated those features into your coding practice, work with popular third-party testing tools such as `RSpec`, `Jasmine`, `Cucumber`, and `factory_girl`. Test the component parts of a Rails application, including the back-end model logic and the front-end display logic. With Rails examples, use testing to enable your code to respond better to future change. Plus, see how to handle real-world testing situations. This new edition has been updated to Rails 5.1 and `RSpec` 3.6 and contains full coverage of new Rails features, including system tests and the `Webpack`-based JavaScript setup. What You Need: Ruby 2.4, Rails

## 5.1

Praise for Design Patterns in Ruby " Design Patterns in Ruby documents smart ways to resolve many problems that Ruby developers commonly encounter. Russ Olsen has done a great job of selecting classic patterns and augmenting these with newer patterns that have special relevance for Ruby. He clearly explains each idea, making a wealth of experience available to Ruby developers for their own daily work." —Steve Metsker, Managing Consultant with Dominion Digital, Inc. "This book provides a great demonstration of the key 'Gang of Four' design patterns without resorting to overly technical explanations. Written in a precise, yet almost informal style, this book covers enough ground that even those without prior exposure to design patterns will soon feel confident applying them using Ruby. Olsen has done a great job to make a book about a classically 'dry' subject into such an engaging and even occasionally humorous read." —Peter Cooper "This book renewed my interest in understanding patterns after a decade of good intentions. Russ picked the most useful patterns for Ruby and introduced them in a straightforward and logical manner, going beyond the GoF's patterns. This book has improved my use of Ruby, and encouraged me to blow off the dust covering the GoF book." —Mike Stok " Design Patterns in Ruby is a great way for programmers from statically typed objectoriented languages to learn how design patterns appear in a more dynamic, flexible language like Ruby." —Rob Sanheim, Ruby Ninja, Relevance Most design pattern books are based on C++ and Java. But Ruby is different—and the language's unique qualities make design patterns easier to implement and use. In this book, Russ Olsen demonstrates how to combine Ruby's power and elegance with patterns, and write more sophisticated, effective software with far fewer lines of code. After reviewing the history, concepts, and goals of design patterns, Olsen offers a quick tour of the Ruby language—enough to allow any experienced software developer to immediately utilize patterns with Ruby. The book especially calls attention to Ruby features that simplify the use of patterns, including dynamic typing, code closures, and "mixins" for easier code reuse. Fourteen of the classic "Gang of Four" patterns are considered from the Ruby point of view, explaining what problems each pattern solves, discussing whether traditional implementations make sense in the Ruby environment, and introducing Ruby-specific improvements. You'll discover opportunities to implement patterns in just one or two lines of code, instead of the endlessly repeated boilerplate that conventional languages often require. Design Patterns in Ruby also identifies innovative new patterns that have emerged from the Ruby community. These include ways to create custom objects with metaprogramming, as well as the ambitious Rails-based "Convention Over Configuration" pattern, designed to help integrate entire applications and frameworks. Engaging, practical, and accessible, Design Patterns in Ruby will help you build better software while making your Ruby programming experience more rewarding.

Summary The Well-Grounded Rubyist, Second Edition addresses both

newcomers to Ruby as well as Ruby programmers who want to deepen their understanding of the language. This beautifully written and totally revised second edition includes coverage of features that are new in Ruby 2.1, as well as expanded and updated coverage of aspects of the language that have changed. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology This is a good time for Ruby! It's powerful like Java or C++, and has dynamic features that let your code react gracefully to changes at runtime. And it's elegant, so creating applications, development tools, and administrative scripts is easier and more straightforward. With the long-awaited Ruby 2, an active development community, and countless libraries and productivity tools, Ruby has come into its own. About the Book The Well-Grounded Rubyist, Second Edition is a beautifully written tutorial that begins with your first Ruby program and goes on to explore sophisticated topics like callable objects, reflection, and threading. The book concentrates on the language, preparing you to use Ruby in any way you choose. This second edition includes coverage of new Ruby features such as keyword arguments, lazy enumerators, and `Module#prepend`, along with updated information on new and changed core classes and methods. What's Inside Clear explanations of Ruby concepts Numerous simple examples Updated for Ruby 2.1 Prepares you to use Ruby anywhere for any purpose About the Author David A. Black is an internationally known Ruby developer, author, trainer, speaker, event organizer, and founder of Ruby Central, as well as a Lead Consultant at Cyrus Innovation. Table of Contents PART 1 RUBY FOUNDATIONS Bootstrapping your Ruby literacy Objects, methods, and local variables Organizing objects with classes Modules and program organization The default object (self), scope, and visibility Control-flow techniques PART 2 BUILT-IN CLASSES AND MODULES Built-in essentials Strings, symbols, and other scalar objects Collection and container objects Collections central: Enumerable and Enumerator Regular expressions and regexp-based string operations File and I/O operations PART 3 RUBY DYNAMICS Object individuation Callable and runnable objects Callbacks, hooks, and runtime introspection

The Complete Guide to Avoiding and Fixing Common Rails 3 Code and Design Problems As developers worldwide have adopted the powerful Ruby on Rails web framework, many have fallen victim to common mistakes that reduce code quality, performance, reliability, stability, scalability, and maintainability. Rails™ AntiPatterns identifies these widespread Rails code and design problems, explains why they're bad and why they happen—and shows exactly what to do instead. The book is organized into concise, modular chapters—each outlines a single common AntiPattern and offers detailed, cookbook-style code solutions that were previously difficult or impossible to find. Leading Rails developers Chad Pytel and Tammer Saleh also offer specific guidance for refactoring existing bad code or design to reflect sound object-oriented principles and established Rails best practices. With their help, developers, architects, and testers can

dramatically improve new and existing applications, avoid future problems, and establish superior Rails coding standards throughout their organizations. This book will help you understand, avoid, and solve problems with Model layer code, from general object-oriented programming violations to complex SQL and excessive redundancy Domain modeling, including schema and database issues such as normalization and serialization View layer tools and conventions Controller-layer code, including RESTful code Service-related APIs, including timeouts, exceptions, backgrounding, and response codes Third-party code, including plug-ins and gems Testing, from test suites to test-driven development processes Scaling and deployment Database issues, including migrations and validations System design for “graceful degradation” in the real world

"Our tests are broken again!" "Why does the suite take so long to run?" "What value are we getting from these tests anyway?" Solve your testing problems by building and maintaining quality software with RSpec - the popular BDD-flavored Ruby testing framework. This definitive guide from RSpec's lead developer shows you how to use RSpec to drive more maintainable designs, specify and document expected behavior, and prevent regressions during refactoring. Build a project using RSpec to design, describe, and test the behavior of your code. Whether you're new to automated tests or have been using them for years, this book will help you write more effective tests. RSpec has been downloaded more than 100 million times and has inspired countless test frameworks in other languages. Use this influential Ruby testing framework to iteratively develop a project with the confidence that comes from well-tested code. This book guides you through creating a Ruby project with RSpec, and explores the individual components in detail. Start by learning the basics of installing and using RSpec. Then build a real-world JSON API, using RSpec throughout the process to drive a BDD-style outside-in workflow. Apply an effective test strategy to write fast, robust tests that support evolutionary design through refactoring. The rest of the book provides the definitive guide to RSpec's components. Use `rspec-core`'s metadata to slice and dice your spec suite. Dig into `rspec-expectations`' matchers: compose them in flexible ways, specify expected outcomes with precision, and diagnose problems quickly with the help of good failure messages. Write fast, isolated tests with `rspec-mocks`' test doubles while pushing your code toward simpler interfaces. The authors, with a combined 20 years of automated testing experience, share testing wisdom that will lead to a fun, productive testing experience. What You Need: To follow along with the book, you'll need Ruby 2.2+. The book will guide you through installing RSpec 3 and setting up a new project to use it.

Summary Phoenix is a modern web framework built for the Elixir programming language. Elegant, fault-tolerant, and performant, Phoenix is as easy to use as Rails and as rock-solid as Elixir's Erlang-based foundation. Phoenix in Action builds on your existing web dev skills, teaching you the unique benefits of Phoenix along with just enough Elixir to get the job done. Foreword by Sasa

Juric, author of Elixir in Action, Second Edition. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Modern web applications need to be efficient to develop, lightning fast, and unfailingly reliable. Phoenix, a web framework for the Elixir programming language, delivers on all counts. Elegant and intuitive, Phoenix radically simplifies the dev process. Built for concurrency, Phoenix channels make short work of developing real-time applications. And as for reliability, Phoenix apps run on the battle-tested Erlang VM, so they're rock solid! About the Book Phoenix in Action is an example-based book that teaches you to build production-quality web apps. You'll handle business logic, database interactions, and app designs as you progressively create an online auction site. As you go, you'll build everything from the core components to the real-time user interactions where Phoenix really shines. What's inside Functional programming in a web environment An introduction to Elixir Database interactions with Ecto Real-time communication with channels About the Reader For web developers familiar with a framework like Rails or ASP.NET. No experience with Elixir or Phoenix required. About the Author Geoffrey Lessel is a seasoned web developer who speaks and blogs about Elixir and Phoenix. Table of Contents PART 1 - GETTING STARTED Ride the Phoenix Intro to Elixir A little Phoenix overview PART 2 - DIVING IN DEEP Phoenix is not your application Elixir application structure Bring in Phoenix Making changes with Ecto.Changeset Transforming data in your browser Plugs, assigns, and dealing with session data Associating records and accepting bids PART 3 - THOSE IMPORTANT EXTRAS Using Phoenix channels for real-time communication Building an API Testing in Elixir and Phoenix

Summary OAuth 2 in Action teaches you the practical use and deployment of this HTTP-based protocol from the perspectives of a client, authorization server, and resource server. You'll learn how to confidently and securely build and deploy OAuth on both the client and server sides. Foreword by Ian Glazer. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Think of OAuth 2 as the web version of a valet key. It is an HTTP-based security protocol that allows users of a service to enable applications to use that service on their behalf without handing over full control. And OAuth is used everywhere, from Facebook and Google, to startups and cloud services. About the Book OAuth 2 in Action teaches you practical use and deployment of OAuth 2 from the perspectives of a client, an authorization server, and a resource server. You'll begin with an overview of OAuth and its components and interactions. Next, you'll get hands-on and build an OAuth client, an authorization server, and a protected resource. Then you'll dig into tokens, dynamic client registration, and more advanced topics. By the end, you'll be able to confidently and securely build and deploy OAuth on both the client and server sides. What's Inside Covers OAuth 2 protocol and design Authorization with OAuth 2 OpenID Connect and User-

Managed Access Implementation risks JOSE, introspection, revocation, and registration Protecting and accessing REST APIs About the Reader Readers need basic programming skills and knowledge of HTTP and JSON. About the Author Justin Richer is a systems architect and software engineer. Antonio Sanso is a security software engineer and a security researcher. Both authors contribute to open standards and open source. Table of Contents Part 1 - First steps What is OAuth 2.0 and why should you care? The OAuth dance Part 2 - Building an OAuth 2 environment Building a simple OAuth client Building a simple OAuth protected resource Building a simple OAuth authorization server OAuth 2.0 in the real world Part 3 - OAuth 2 implementation and vulnerabilities Common client vulnerabilities Common protected resources vulnerabilities Common authorization server vulnerabilities Common OAuth token vulnerabilities Part 4 - Taking OAuth further OAuth tokens Dynamic client registration User authentication with OAuth 2.0 Protocols and profiles using OAuth 2.0 Beyond bearer tokens Summary and conclusions

Taking the interested novice to proficient practitioner, this beautifully written tutorial begins with the basic steps to get readers' first Ruby program up and running and goes on to explore sophisticated topics like callable objects, reflection, and threading.

The Well-Grounded Rubyist, Second Edition is a beautifully written tutorial that begins with your first Ruby program and goes on to explore sophisticated topics like callable objects, reflection, and threading. The book concentrates on the language, preparing you to use Ruby in any way you choose. This second edition includes coverage of new Ruby features such as keyword arguments, lazy enumerators, and `Module#prepend`, along with updated information on new and changed core classes and methods.

Learn Kubernetes in a Month of Lunches is your guide to getting up and running with Kubernetes. Summary In Learn Kubernetes in a Month of Lunches you'll go from "what's a Pod?" to automatically scaling clusters of containers and components in just 22 hands-on lessons, each short enough to fit into a lunch break. Every lesson is task-focused and covers an essential skill on the road to Kubernetes mastery. You'll learn how to smooth container management with Kubernetes, including securing your clusters, and upgrades and rollbacks with zero downtime. No development stack, platform, or background is assumed. Author Elton Stoneman describes all patterns generically, so you can easily apply them to your applications and port them to other projects! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Create apps that perform identically on your laptop, data center, and cloud! Kubernetes provides a consistent method for deploying applications on any platform, making it easy to grow. By efficiently orchestrating Docker containers, Kubernetes simplifies tasks like rolling upgrades, scaling, and self-healing. About the book Learn Kubernetes in a Month of Lunches is your guide to getting up and running with Kubernetes. You'll

progress from Kubernetes basics to essential skills, learning to model, deploy, and manage applications in production. Exercises demonstrate how Kubernetes works with multiple languages and frameworks. You'll also practice with new apps, legacy code, and serverless functions. What's inside Deploying applications on Kubernetes clusters Understanding the Kubernetes app lifecycle, from packaging to rollbacks Self-healing and scalable apps Using Kubernetes as a platform for new technologies About the reader For readers familiar with Docker and containerization. About the author Elton Stoneman is a Docker Captain, a 11-time Microsoft MVP, and the author of Learn Docker in a Month of Lunches. Table of Contents PART 1 - FAST TRACK TO KUBERNETES 1 Before you begin 2 Running containers in Kubernetes with Pods and Deployments 3 Connecting Pods over the network with Services 4 Configuring applications with ConfigMaps and Secrets 5 Storing data with volumes, mounts, and claims 6 Scaling applications across multiple Pods with controllers PART 2 - KUBERNETES IN THE REAL WORLD 7 Extending applications with multicontainer Pods 8 Running data-heavy apps with StatefulSets and Jobs 9 Managing app releases with rollouts and rollbacks 10 Packaging and managing apps with Helm 11 App development—Developer workflows and CI/CD PART 3 - PREPARING FOR PRODUCTION 12 Empowering self-healing apps 13 Centralizing logs with Fluentd and Elasticsearch 14 Monitoring applications with Kubernetes with Prometheus 15 Managing incoming traffic with Ingress 16 Securing applications with policies, contexts, and admission control PART 4 - PURE AND APPLIED KUBERNETES 17 Securing resources with role-based access control 18 Deploying Kubernetes: Multinode and multiarchitecture clusters 19 Controlling workload placement and automatic scaling 20 Extending Kubernetes with custom resources and Operators 21 Running serverless functions in Kubernetes 22 Never the end

If you're an experienced Ruby programmer, Effective Ruby will help you harness Ruby's full power to write more robust, efficient, maintainable, and well-performing code. Drawing on nearly a decade of Ruby experience, Peter J. Jones brings together 48 Ruby best practices, expert tips, and shortcuts—all supported by realistic code examples. Jones offers practical advice for each major area of Ruby development, from modules to memory to metaprogramming. Throughout, he uncovers little-known idioms, quirks, pitfalls, and intricacies that powerfully impact code behavior and performance. Each item contains specific, actionable, clearly organized guidelines; careful advice; detailed technical arguments; and illuminating code examples. When multiple options exist, Jones shows you how to choose the one that will work best in your situation. Effective Ruby will help you systematically improve your code—not by blindly following rules, but by thoroughly understanding Ruby programming techniques. Key features of this concise guide include How to avoid pitfalls associated with Ruby's sometimes surprising idiosyncrasies What you should know about inheritance hierarchies to successfully use Rails (and other large frameworks) How to use

misunderstood methods to do amazingly useful things with collections Better ways to use exceptions to improve code reliability Powerful metaprogramming approaches (and techniques to avoid) Practical, efficient testing solutions, including MiniTest Unit and Spec Testing How to reliably manage RubyGem dependencies How to make the most of Ruby's memory management and profiling tools How to improve code efficiency by understanding the Ruby interpreter's internals

The Well-Grounded Rubyist Manning Publications

The “Bible” for Rails Development: Fully Updated for Rails 5 “When I read The Rails Way for the first time, I felt like I truly understood Rails for the first time.” —Steve Klabnik, Rails contributor and mentor The Rails™ 5 Way is the comprehensive, authoritative reference guide for professionals delivering production-quality code using modern Ruby on Rails. Obie Fernandez illuminates the entire Rails 5 API, its most powerful idioms, design approaches, and libraries. He presents new and updated content on Action Cable, RSpec 3.4, Turbolinks 5.0, the Attributes API, and many other enhancements, both major and subtle. Through detailed code examples, you'll dive deep into Ruby on Rails, discover why it's designed as it is, and learn to make it do exactly what you want. Proven in thousands of production systems, the knowledge in this book will maximize your productivity and help you build more successful solutions. Build powerful, scalable, REST-compliant back-end services Program complex program flows using Action Controller Represent models, relationships, and operations in Active Record, and apply advanced Active Record techniques Smoothly evolve database schema via Migrations Craft front-ends with ActionView and the Asset Pipeline Optimize performance and scalability with caching and Turbolinks 5.0 Improve your productivity using Haml HTML templating Secure your systems against attacks like SQL Injection, XSS, and XSRF Integrate email using Action Mailer Enable real-time, websockets-based browser behavior with Action Cable Improve responsiveness with background processing Build “API-only” back-end projects that speak JSON Leverage enhancements to Active Job, serialization, and Ajax support

Why spend time on coding problems that others have already solved when you could be making real progress on your Ruby project? This updated cookbook provides more than 350 recipes for solving common problems, on topics ranging from basic data structures, classes, and objects, to web development, distributed programming, and multithreading. Revised for Ruby 2.1, each recipe includes a discussion on why and how the solution works. You'll find recipes suitable for all skill levels, from Ruby newbies to experts who need an occasional reference. With Ruby Cookbook, you'll not only save time, but keep your brain percolating with new ideas as well. Recipes cover: Data structures including strings, numbers, date and time, arrays, hashes, files and directories Using Ruby's code blocks, also known as closures OOP features such as classes, methods, objects, and modules XML and HTML, databases and persistence, and graphics and other formats Web development with Rails and Sinatra Internet services, web services, and distributed programming Software testing, debugging, packaging, and distributing Multitasking, multithreading, and extending Ruby with other languages

For more than a decade, Ruby developers have turned to The Ruby Way for reliable

“how-to” guidance on effective Ruby programming. Now, Hal Fulton and André Arko have thoroughly updated this classic guide to cover new language enhancements and developers’ experiences through Ruby 2.1. The new edition illuminates Ruby 2.1 through 400+ examples, each answering the question: “How do I do this in Ruby?” For each example, they present both a task description and realistic technical constraints. Next, they walk step-by-step through presenting one good solution, offering detailed explanations to promote deeper understanding. Conveniently organized by topic, *The Ruby Way, Third Edition* makes it easier than ever to find the specific solution you want—and to write better code by reflecting Ruby’s unique philosophy and spirit. Coverage includes Ruby 2.1 overview: terminology, philosophy, and basic principles Best practices for strings and regular expressions Efficiently internationalizing your code Performing calculations (including trigonometry, calculus, statistics, and time/date calculations) Working with “Rubyesque” objects such as symbols and ranges Using arrays, hashes, stacks, queues, trees, graphs, and other data structures Efficiently storing data with YAML, JSON, and SQLite3 Leveraging object-oriented and dynamic features, from multiple constructors to program inspection Building GUIs with Shoes 4, Ruby/Tk, Ruby/GTK3, QtRuby, and other toolkits Improving thread performance by understanding Ruby’s synchronization methods and avoiding its pitfalls Automating system administration with Ruby Data formats: JSON, XML, RSS, Atom, RMagick, PDF, and more Testing and debugging with RSpec, Minitest, Cucumber, byebug, and pry Measuring Ruby program performance Packaging and distributing code, and managing dependencies with Bundler Network programming: clients, time servers, POP, SMTP, IMAP, Open-URI Web applications: HTTP servers, Rails, Sinatra, HTML generation, and more Writing distributed Ruby software with drb Choosing modern development tools that maximize your productivity All source code for this book may be downloaded at [www.rubyhacker.com](http://www.rubyhacker.com). [informit.com/aw](http://informit.com/aw) [informit.com/ruby](http://informit.com/ruby) [rubyhacker.com/therubyway](http://rubyhacker.com/therubyway) [therubyway.io](http://therubyway.io)

The expert guide to building Ruby on Rails applications *Ruby on Rails* strips complexity from the development process, enabling professional developers to focus on what matters most: delivering business value. Now, for the first time, there’s a comprehensive, authoritative guide to building production-quality software with Rails. Pioneering Rails developer Obie Fernandez and a team of experts illuminate the entire Rails API, along with the Ruby idioms, design approaches, libraries, and plug-ins that make Rails so valuable. Drawing on their unsurpassed experience, they address the real challenges development teams face, showing how to use Rails’ tools and best practices to maximize productivity and build polished applications users will enjoy. Using detailed code examples, Obie systematically covers Rails’ key capabilities and subsystems. He presents advanced programming techniques, introduces open source libraries that facilitate easy Rails adoption, and offers important insights into testing and production deployment. Dive deep into the Rails codebase together, discovering why Rails behaves as it does—and how to make it behave the way you want it to. This book will help you Increase your productivity as a web developer Realize the overall joy of programming with Ruby on Rails Learn what’s new in Rails 2.0 Drive design and protect long-term maintainability with TestUnit and RSpec Understand and manage complex program flow in Rails controllers Leverage Rails’ support for designing REST-compliant APIs Master sophisticated Rails routing concepts and techniques Examine

and troubleshoot Rails routing Make the most of ActiveRecord object-relational mapping Utilize Ajax within your Rails applications Incorporate logins and authentication into your application Extend Rails with the best third-party plug-ins and write your own Integrate email services into your applications with ActionMailer Choose the right Rails production configurations Streamline deployment with Capistrano

“One of the most significant books in my life.” –Obie Fernandez, Author, *The Rails Way* “Twenty years ago, the first edition of *The Pragmatic Programmer* completely changed the trajectory of my career. This new edition could do the same for yours.” –Mike Cohn, Author of *Succeeding with Agile*, *Agile Estimating and Planning*, and *User Stories Applied* “. . . filled with practical advice, both technical and professional, that will serve you and your projects well for years to come.” –Andrea Goulet, CEO, Corgibytes, Founder, LegacyCode.Rocks “. . . lightning does strike twice, and this book is proof.” –VM (Vicky) Brasseur, Director of Open Source Strategy, Juniper Networks

*The Pragmatic Programmer* is one of those rare tech books you’ll read, re-read, and read again over the years. Whether you’re new to the field or an experienced practitioner, you’ll come away with fresh insights each and every time. Dave Thomas and Andy Hunt wrote the first edition of this influential book in 1999 to help their clients create better software and rediscover the joy of coding. These lessons have helped a generation of programmers examine the very essence of software development, independent of any particular language, framework, or methodology, and the Pragmatic philosophy has spawned hundreds of books, screencasts, and audio books, as well as thousands of careers and success stories. Now, twenty years later, this new edition re-examines what it means to be a modern programmer. Topics range from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you’ll learn how to: Fight software rot Learn continuously Avoid the trap of duplicating knowledge Write flexible, dynamic, and adaptable code Harness the power of basic tools Avoid programming by coincidence Learn real requirements Solve the underlying problems of concurrent code Guard against security vulnerabilities Build teams of Pragmatic Programmers Take responsibility for your work and career Test ruthlessly and effectively, including property-based testing Implement the Pragmatic Starter Kit Delight your users

Written as a series of self-contained sections and filled with classic and fresh anecdotes, thoughtful examples, and interesting analogies, *The Pragmatic Programmer* illustrates the best approaches and major pitfalls of many different aspects of software development. Whether you’re a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you’ll quickly see improvements in personal productivity, accuracy, and job satisfaction. You’ll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You’ll become a Pragmatic Programmer. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Unlock the secrets to creating random mazes! Whether you're a game developer, an algorithm connoisseur, or simply in search of a new puzzle, you're about to level up. Learn algorithms to randomly generate mazes in a variety of shapes, sizes, and dimensions. Bend them into Moebius strips, fold them into cubes, and wrap them around spheres. Stretch them into other dimensions, squeeze them into arbitrary

outlines, and tile them in a dizzying variety of ways. From twelve little algorithms, you'll discover a vast reservoir of ideas and inspiration. From video games to movies, mazes are ubiquitous. Explore a dozen algorithms for generating these puzzles randomly, from Binary Tree to Eller's, each copiously illustrated and accompanied by working implementations in Ruby. You'll learn their pros and cons, and how to choose the right one for the job. You'll start by learning six maze algorithms and transition from making mazes on paper to writing programs that generate and draw them. You'll be introduced to Dijkstra's algorithm and see how it can help solve, analyze, and visualize mazes. Part 2 shows you how to constrain your mazes to different shapes and outlines, such as text, circles, hex and triangle grids, and more. You'll learn techniques for culling dead-ends, and for making your passages weave over and under each other. Part 3 looks at six more algorithms, taking it all to the next level. You'll learn how to build your mazes in multiple dimensions, and even on curved surfaces. Through it all, you'll discover yourself brimming with ideas, the best medicine for programmer's block, burn-out, and the grayest of days. By the time you're done, you'll be energized and full of maze-related possibilities! What You Need: The example code requires version 2 of the Ruby programming language. Some examples depend on the ChunkyPNG library to generate PNG images, and one chapter uses POV-Ray version 3.7 to render 3D graphics.

Coding and testing are generally considered separate areas of expertise. In this practical book, Java expert Scott Oaks takes the approach that anyone who works with Java should be adept at understanding how code behaves in the Java Virtual Machine—including the tunings likely to help performance. This updated second edition helps you gain in-depth knowledge of Java application performance using both the JVM and the Java platform. Developers and performance engineers alike will learn a variety of features, tools, and processes for improving the way the Java 8 and 11 LTS releases perform. While the emphasis is on production-supported releases and features, this book also features previews of exciting new technologies such as ahead-of-time compilation and experimental garbage collections. Understand how various Java platforms and compilers affect performance Learn how Java garbage collection works Apply four principles to obtain best results from performance testing Use the JDK and other tools to learn how a Java application is performing Minimize the garbage collector's impact through tuning and programming practices Tackle performance issues in Java APIs Improve Java-driven database application performance It's easy to write correct Ruby code, but to gain the fluency needed to write great Ruby code, you must go beyond syntax and absorb the “Ruby way” of thinking and problem solving. In Eloquent Ruby, Russ Olsen helps you write Ruby like true Rubyists do—so you can leverage its immense, surprising power. Olsen draws on years of experience internalizing the Ruby culture and teaching Ruby to other programmers. He guides you to the “Ah Ha!” moments when it suddenly becomes clear why Ruby works the way it does, and how you can take advantage of this language's elegance and expressiveness. Eloquent Ruby starts small, answering tactical questions focused on a single statement, method, test, or bug. You'll learn how to write code that actually looks like Ruby (not Java or C#); why Ruby has so many control structures; how to use strings, expressions, and symbols; and what dynamic typing is really good for. Next, the book addresses bigger questions related to building methods and classes. You'll

discover why Ruby classes contain so many tiny methods, when to use operator overloading, and when to avoid it. Olsen explains how to write Ruby code that writes its own code—and why you’ll want to. He concludes with powerful project-level features and techniques ranging from gems to Domain Specific Languages. A part of the renowned Addison-Wesley Professional Ruby Series, Eloquent Ruby will help you “put on your Ruby-colored glasses” and get results that make you a true believer.

What will you learn from this book? What’s all the buzz about this Ruby language? Is it right for you? Well, ask yourself: are you tired of all those extra declarations, keywords, and compilation steps in your other language? Do you want to be a more productive programmer? Then you’ll love Ruby. With this unique hands-on learning experience, you’ll discover how Ruby takes care of all the details for you, so you can simply have fun and get more done with less code. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Ruby uses a visually rich format to engage your mind, rather than a text-heavy approach to put you to sleep. Why waste your time struggling with new concepts? This multi-sensory learning experience is designed for the way your brain really works.

Use Components to Improve Maintainability, Reduce Complexity, and Accelerate Testing in Large Rails Applications “This book gives Ruby pros a comprehensive guide for increasing the sophistication of their designs, without having to forsake the principles of elegance that keep them in our corner of the software world.”

—Obie Fernandez, author, The Rails™ 5 Way, Fourth Edition As Rails applications grow, even experienced developers find it difficult to navigate code bases, implement new features, and keep tests fast. Components are the solution, and Component-Based Rails Applications shows how to make the most of them.

Writing for programmers and software team leads who are comfortable with Ruby and Rails, Stephan Hagemann introduces a practical, start-to-finish methodology for modernizing and restructuring existing Rails applications. One step at a time, Hagemann demonstrates how to revamp Rails applications to exhibit visible, provably independent, and explicitly connected parts—thereby simplifying them and making them far easier for teams to manage, change, and test. Throughout, he introduces design concepts and techniques you can use to improve applications of many kinds, even if they weren’t built with Rails or Ruby. Learn how components clarify intent, improve collaboration, and simplify innovation and maintenance Create a full Rails application within a component, from first steps to migrations and dependency management Test component-based applications, manage assets and dependencies, and deploy your application to production Identify the seams in an existing Rails application, and refactor it to extract components Master a scripted, repeatable approach for refactoring Rails applications of any size Use component-based Rails with two popular structural patterns: hexagonal and DCI architecture Leverage your new component skills with other frameworks and languages Overcome the unique challenges that arise as you componentize Rails applications If you’re ready to simplify and revitalize your complex Rails systems, you’re ready for Component-Based Rails Applications . Register your book for convenient access to downloads, updates,

and/or corrections as they become available. See inside book for details.

Docker does for DevOps what Rails did for web development--it gives you a new set of superpowers. Gone are "works on my machine" woes and lengthy setup tasks, replaced instead by a simple, consistent, Docker-based development environment that will have your team up and running in seconds. Gain hands-on, real-world experience with a tool that's rapidly becoming fundamental to software development. Go from zero all the way to production as Docker transforms the massive leap of deploying your app in the cloud into a baby step. Docker makes life as a Ruby and Rails developer easier. It helps build, ship, and run your applications, solving major problems you face every day. It allows you to run applications at scale, adding new resources as needed. Docker provides a reliable, consistent environment that's guaranteed to work the same everywhere. Docker lets you do all things DevOps without needing a PhD in infrastructure and operations. Want to spin up a cluster to run your app? No problem. Scale it up or down at will? You bet. Start by running a Ruby script without having Ruby installed on the local machine. Then Dockerize a Rails application and run it using containers, including creating your own custom Docker images tailored for running Rails apps. Describe your app declaratively using Docker Compose, specifying the software dependencies along with everything needed to run the application. Then set up continuous integration, as well as your deployment pipeline and infrastructure. Along the way, find out the best practices for using Docker in development and production environments. This book gives you a solid foundation on using Docker and fitting it into your development workflow and deployment process. What You Need: All you need is a Windows, Mac OS X or Linux machine to do development on. This book guides you through the process of installing Docker. Some basic familiarity with Linux/Unix is recommended even if you're using a Windows machine.

**Summary** This third revision of Manning's popular *The Quick Python Book* offers a clear, crisp updated introduction to the elegant Python programming language and its famously easy-to-read syntax. Written for programmers new to Python, this latest edition includes new exercises throughout. It covers features common to other languages concisely, while introducing Python's comprehensive standard functions library and unique features in detail. Foreword by Nicholas Tollervey, Python Software Foundation. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Initially Guido van Rossum's 1989 holiday project, Python has grown into an amazing computer language. It's a joy to learn and read, and powerful enough to handle everything from low-level system resources to advanced applications like deep learning. Elegantly simple and complete, it also boasts a massive ecosystem of libraries and frameworks. Python programmers are in high demand/ndash;you can't afford not to be fluent! About the Book *The Quick Python Book, Third Edition* is a comprehensive guide to the Python language by a Python authority, Naomi Ceder. With the personal touch of a skilled teacher,

she beautifully balances details of the language with the insights and advice you need to handle any task. Extensive, relevant examples and learn-by-doing exercises help you master each important concept the first time through. Whether you're scraping websites or playing around with nested tuples, you'll appreciate this book's clarity, focus, and attention to detail. What's Inside Clear coverage of Python 3 Core libraries, packages, and tools In-depth exercises Five new data science-related chapters About the Reader Written for readers familiar with programming concepts--no Python experience assumed. About the Author Naomi Ceder is chair of the Python Software Foundation. She has been learning, using, and teaching Python since 2001. Table of Contents PART 1 - STARTING OUT 1. About Python 2. Getting started 3. The Quick Python overview PART 2 - THE ESSENTIALS 4. The absolute basics 5. Lists, tuples, and sets 6. Strings 7. Dictionaries 8. Control flow 9. Functions 10. Modules and scoping rules 11. Python programs 12. Using the filesystem 13. Reading and writing files 14. Exceptions PART 3 - ADVANCED LANGUAGE FEATURES 15. Classes and object-oriented programming 16. Regular expressions 17. Data types as objects 18. Packages 19. Using Python libraries PART 4 - WORKING WITH DATA 20. Basic file wrangling 21. Processing data files 22. Data over the network 23. Saving data 24. Exploring data

Learn Rails the way the Rails core team recommends it, along with the tens of thousands of developers who have used this broad, far-reaching tutorial and reference. If you're new to Rails, you'll get step-by-step guidance. If you're an experienced developer, get the comprehensive, insider information you need for the latest version of Ruby on Rails. The new edition of this award-winning classic is completely updated for Rails 6 and Ruby 2.6, with information on system testing, Webpack, and advanced JavaScript. Ruby on Rails helps you produce high-quality, beautiful-looking web applications quickly - you concentrate on creating the application, and Rails takes care of the details. Rails 6 brings many improvements, and this edition is updated to cover the new features and changes in best practices. We start with a step-by-step walkthrough of building a real application, and in-depth chapters look at the built-in Rails features. Follow along with an extended tutorial as you write a web-based store application. Eliminate tedious configuration and housekeeping, seamlessly incorporate Ajax and JavaScript, send and receive emails, manage background jobs with ActiveJob, and build real-time features using WebSockets and ActionCable. Test your applications as you write them using the built-in unit, integration, and system testing frameworks, internationalize your applications, and deploy your applications easily and securely. New in this edition is coverage of Action Mailer, which allows you to receive emails in your app as well as ActionText, a zero-configuration rich text editing feature. Rails 1.0 was released in December 2005. This book was there from the start, and didn't just evolve alongside Rails, it evolved with Rails. It has been developed in consultation with the Rails core team. In fact, Rails itself is tested against the code in this book. What You Need:

All you need is a Windows, Mac OS X, or Linux machine to do development on. This book will take you through the steps to install Rails and its dependencies. If you aren't familiar with the Ruby programming language, this book contains a chapter that covers the basics necessary to understand the material in the book. "An under-the-hood look at how the Ruby programming language runs code. Extensively illustrated with complete explanations and hands-on experiments. Covers Ruby 2.x"--

The Complete Guide to Writing Maintainable, Manageable, Pleasing, and Powerful Object-Oriented Applications Object-oriented programming languages exist to help you create beautiful, straightforward applications that are easy to change and simple to extend. Unfortunately, the world is awash with object-oriented (OO) applications that are difficult to understand and expensive to change. Practical Object-Oriented Design, Second Edition, immerses you in an OO mindset and teaches you powerful, real-world, object-oriented design techniques with simple and practical examples. Sandi Metz demonstrates how to build new applications that can "survive success" and repair existing applications that have become impossible to change. Each technique is illustrated with extended examples in the easy-to-understand Ruby programming language, all downloadable from the companion website, [poodr.com](http://poodr.com). Fully updated for Ruby 2.5, this guide shows how to Decide what belongs in a single class Avoid entangling objects that should be kept separate Define flexible interfaces among objects Reduce programming overhead costs with duck typing Successfully apply inheritance Build objects via composition Whatever your previous object-oriented experience, this concise guide will help you achieve the superior outcomes you're looking for. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

It's easier to learn how to program a computer than it has ever been before. Now everyone can learn to write programs for themselves - no previous experience is necessary. Chris Pine takes a thorough, but lighthearted approach that teaches you the fundamentals of computer programming, with a minimum of fuss or bother. Whether you are interested in a new hobby or a new career, this book is your doorway into the world of programming. Computers are everywhere, and being able to program them is more important than it has ever been. But since most books on programming are written for other programmers, it can be hard to break in. At least it used to be. Chris Pine will teach you how to program. You'll learn to use your computer better, to get it to do what you want it to do. Starting with small, simple one-line programs to calculate your age in seconds, you'll see how to write interactive programs, to use APIs to fetch live data from the internet, to rename your photos from your digital camera, and more. You'll learn the same technology used to drive modern dynamic websites and large, professional applications. Whether you are looking for a fun new hobby or are interested in entering the tech world as a professional, this book gives you a solid foundation

in programming. Chris teaches the basics, but also shows you how to think like a programmer. You'll learn through tons of examples, and through programming challenges throughout the book. When you finish, you'll know how and where to learn more - you'll be on your way. What You Need: All you need to learn how to program is a computer (Windows, macOS, or Linux) and an internet connection. Chris Pine will lead you through setting set up with the software you will need to start writing programs of your own.

Shows how everyone has the capacity to succeed and how most use only a small portion of their talents.

What others in the trenches say about *The Pragmatic Programmer*... “The cool thing about this book is that it’s great for keeping the programming process fresh. The book helps you to continue to grow and clearly comes from people who have been there.” —Kent Beck, author of *Extreme Programming Explained: Embrace Change* “I found this book to be a great mix of solid advice and wonderful analogies!” —Martin Fowler, author of *Refactoring* and *UML Distilled* “I would buy a copy, read it twice, then tell all my colleagues to run out and grab a copy. This is a book I would never loan because I would worry about it being lost.” —Kevin Ruland, Management Science, MSG-Logistics “The wisdom and practical experience of the authors is obvious. The topics presented are relevant and useful.... By far its greatest strength for me has been the outstanding analogies—tracer bullets, broken windows, and the fabulous helicopter-based explanation of the need for orthogonality, especially in a crisis situation. I have little doubt that this book will eventually become an excellent source of useful information for journeymen programmers and expert mentors alike.” —John Lakos, author of *Large-Scale C++ Software Design* “This is the sort of book I will buy a dozen copies of when it comes out so I can give it to my clients.” —Eric Vought, Software Engineer “Most modern books on software development fail to cover the basics of what makes a great software developer, instead spending their time on syntax or technology where in reality the greatest leverage possible for any software team is in having talented developers who really know their craft well. An excellent book.” —Pete McBreen, Independent Consultant “Since reading this book, I have implemented many of the practical suggestions and tips it contains. Across the board, they have saved my company time and money while helping me get my job done quicker! This should be a desktop reference for everyone who works with code for a living.” —Jared Richardson, Senior Software Developer, iRenaissance, Inc. “I would like to see this issued to every new employee at my company....” —Chris Cleeland, Senior Software Engineer, Object Computing, Inc. “If I’m putting together a project, it’s the authors of this book that I want. . . . And failing that I’d settle for people who’ve read their book.” —Ward Cunningham Straight from the programming trenches, *The Pragmatic Programmer* cuts through the increasing specialization and technicalities of modern software development to examine the core process--taking a requirement and producing working, maintainable code that delights its users. It

covers topics ranging from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you'll learn how to Fight software rot; Avoid the trap of duplicating knowledge; Write flexible, dynamic, and adaptable code; Avoid programming by coincidence; Bullet-proof your code with contracts, assertions, and exceptions; Capture real requirements; Test ruthlessly and effectively; Delight your users; Build teams of pragmatic programmers; and Make your developments more precise with automation. Written as a series of self-contained sections and filled with entertaining anecdotes, thoughtful examples, and interesting analogies, *The Pragmatic Programmer* illustrates the best practices and major pitfalls of many different aspects of software development. Whether you're a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you'll quickly see improvements in personal productivity, accuracy, and job satisfaction. You'll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You'll become a Pragmatic Programmer.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Used by sites as varied as Twitter, GitHub, Disney, and Airbnb, Ruby on Rails is one of the most popular frameworks for developing web applications, but it can be challenging to learn and use. Whether you're new to web development or new only to Rails, *Ruby on Rails™ Tutorial, Fourth Edition*, is the solution. Best-selling author and leading Rails developer Michael Hartl teaches Rails by guiding you through the development of three example applications of increasing sophistication. The tutorial's examples focus on the general principles of web development needed for virtually any kind of website. The updates to this edition include full compatibility with Rails 5, a division of the largest chapters into more manageable units, and a huge number of new exercises interspersed in each chapter for maximum reinforcement of the material. This indispensable guide provides integrated tutorials not only for Rails, but also for the essential Ruby, HTML, CSS, and SQL skills you need when developing web applications. Hartl explains how each new technique solves a real-world problem, and then he demonstrates it with bite-sized code that's simple enough to understand, yet novel enough to be useful. Whatever your previous web development experience, this book will guide you to true Rails mastery. This book will help you Install and set up your Rails development environment, including pre-installed integrated development environment (IDE) in the cloud Go beyond generated code to truly understand how to build Rails applications from scratch Learn testing and test-driven development (TDD) Effectively use the Model-View-Controller (MVC) pattern Structure applications using the REST architecture Build static pages and transform them into dynamic ones Master the Ruby programming skills all Rails developers need Create high-quality site layouts and data models Implement registration and authentication systems, including validation and secure passwords Update, display, and delete users Upload images in production using a cloud storage service Implement account activation and password reset, including sending email with Rails Add social features and microblogging, including an introduction to Ajax Record version changes with Git and create a secure remote repository at Bitbucket Deploy your applications early and often with Heroku

Summary *The Well-Grounded Rubyist, Third Edition* is a beautifully written tutorial that begins with your first Ruby program and takes you all the way to sophisticated topics like reflection, threading, and recursion. Ruby masters David A. Black and Joe Leo distill their years of

knowledge for you, concentrating on the language and its uses so you can use Ruby in any way you choose. Updated for Ruby 2.5. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Designed for developer productivity, Ruby is an easy-to-learn dynamic language perfect for creating virtually any kind of software. Its famously friendly development community, countless libraries, and amazing tools, like the Rails framework, have established it as the language of choice for high-profile companies, including GitHub, SlideShare, and Shopify. The future is bright for the well-grounded Rubyist! About the Book In The Well-Grounded Rubyist, Third Edition, expert authors David A. Black and Joseph Leo deliver Ruby mastery in an easy-to-read, casual style. You'll lock in core principles as you write your first Ruby programs. Then, you'll progressively build up to topics like reflection, threading, and recursion, cementing your knowledge with high-value exercises to practice your skills along the way. What's Inside Basic Ruby syntax Running Ruby extensions FP concepts like currying, side-effect-free code, and recursion Ruby 2.5 updates About the Reader For readers with beginner-level programming skills. About the Authors David A. Black is an internationally known Ruby developer and author, and a cofounder of Ruby Central. Ruby teacher and advocate Joseph Leo III is the founder of Def Method and lead organizer of the Gotham Ruby Conference. Table of Contents PART 1 RUBY FOUNDATIONS Bootstrapping your Ruby literacy Objects, methods, and local variables Organizing objects with classes Modules and program organization The default object (self), scope, and visibility Control-flow techniques PART 2 BUILT-IN CLASSES AND MODULES Built-in essentials Strings, symbols, and other scalar objects Collection and container objects Collections central: Enumerable and Enumerator Regular expressions and regexp-based string operations File and I/O operations PART 3 RUBY DYNAMICS Object individuation Callable and runnable objects Callbacks, hooks, and runtime introspection Ruby and functional programming

Summary The Well-Grounded Java Developer offers a fresh and practical look at new Java 7 features, new JVM languages, and the array of supporting technologies you need for the next generation of Java-based software. About the Book The Well-Grounded Java Developer starts with thorough coverage of Java 7 features like try-with-resources and NIO.2. You'll then explore a cross-section of emerging JVM-based languages, including Groovy, Scala, and Clojure. You will find clear examples that are practical and that help you dig into dozens of valuable development techniques showcasing modern approaches to the dev process, concurrency, performance, and much more. Written for readers familiar with Java. No experience with Java 7 or new JVM languages required. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside New Java 7 features Tutorials on Groovy, Scala, and Clojure Discovering multicore processing and concurrency Functional programming with new JVM languages Modern approaches to testing, build, and CI Table of Contents PART 1 DEVELOPING WITH JAVA 7 Introducing Java 7 New I/O PART 2 VITAL TECHNIQUES Dependency Injection Modern concurrency Class files and bytecode Understanding performance tuning PART 3 POLYGLOT PROGRAMMING ON THE JVM Alternative JVM languages Groovy: Java's dynamic friend Scala: powerful and concise Clojure: safer programming PART 4 CRAFTING THE POLYGLOT PROJECT Test-driven development Build and continuous integration Rapid web development Staying well-grounded

"Once again, the definitive book on Ruby from David Black. A must-have!" William Wheeler, TekSystems The Well-Grounded Rubyist, Second Edition addresses both newcomers to Ruby as well as Ruby programmers who want to deepen their understanding of the language. This beautifully written tutorial begins with your first Ruby program and goes on to explore sophisticated topics like callable objects, reflection, and threading. It concentrates on the language, preparing you to use Ruby in any way you choose. This edition includes coverage of

## Download Ebook The Well Grounded Rubyist 2nd Edition

Ruby features such as keyword arguments, lazy enumerators, and `Module#prepend`. This is a good time for Ruby! It's powerful like Java or C++, and has dynamic features that let your code react gracefully to changes at runtime. And it's elegant, so creating applications, development tools, and administrative scripts is easier and more straightforward. With an active development community and countless libraries and productivity tools, Ruby has come into its own. Inside: Clear explanations of Ruby concepts Numerous simple examples Updated for Ruby 2.1 Prepares you to use Ruby anywhere for any purpose David A. Black is an internationally known Ruby developer, author, trainer, speaker, event organizer, and founder of Ruby Central, as well as a Lead Consultant at Cyrus Innovation. All wheat, no chaff-takes you from Ruby programmer to full-fledged Rubyist. Doug Sparling, Andrews McMeel Universal Provides powerful insights and digs into Ruby's quirks. Revelatory. Ted Roche, Ted Roche & Associates, LLC The best way to learn Ruby fundamentals. Derek Sivers, sivers.org  
NARRATED BY MARK THOMAS.

Flexible Rails is a unique, application-based guide for using Ruby on Rails 2 and Adobe Flex 3 to build rich Internet applications (RIAs). It is not an exhaustive Ruby on Rails or Flex reference. Instead, it is an extensive tutorial in which the reader builds multiple iterations of an interesting RIA using Flex and Rails together. Author Peter Armstrong walks readers through eleven iterations in which the sample application—pomodo—is variously built, refactored, debugged, sliced, diced and otherwise explored from every conceivable angle with respect to Ruby on Rails and Adobe Flex. The book unfolds both the application and the Flex-on-Rails approach side-by-side. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.

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