The Joy Of Clojure Second Edition

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Functional Programming in Scala Paul Chiusano 2014-09-01 Summary Functional Programming in Scala is a serious tutorial for programmers looking to learn FP and apply it to the everyday business of coding. The book guides readers from basic techniques to advanced topics in a logical, concise, and clear progression. In it, you'll find concrete examples and exercises that open up the world of functional programming. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Functional programming (FP) is a style of software development emphasizing functions that don't depend on program state. Functional code is easier to test and reuse, simpler to

parallelize, and less prone to bugs than other code. Scala is an emerging JVM language that offers strong support for FP. Its familiar syntax and transparent interoperability with Java make Scala a great place to start learning FP. About the Book Functional Programming in Scala is a serious tutorial for programmers looking to learn FP and apply it to their everyday work. The book guides readers from basic techniques to advanced topics in a logical, concise, and clear progression. In it, you'll find concrete examples and exercises that open up the world of functional programming. This book assumes no prior experience with functional programming. Some prior exposure to Scala or Java is helpful. What's Inside Functional programming concepts The whys and hows of FP How to write multicore programs Exercises and checks for understanding About the Authors Paul Chiusano and Rúnar Bjarnason are recognized experts in functional programming with Scala and are core contributors to the Scalaz library. Table of Contents PART 1 INTRODUCTION TO FUNCTIONAL PROGRAMMING What is functional programming? Getting started with functional programming in Scala Functional data structures Handling errors without exceptions Strictness and laziness Purely functional state PART 2 FUNCTIONAL DESIGN AND COMBINATOR LIBRARIES Purely functional parallelism Property-based testing Parser combinators PART 3 COMMON STRUCTURES IN FUNCTIONAL DESIGN Monoids Monads Applicative and traversable functors PART 4 EFFECTS AND I/O External effects and I/O Local effects and mutable state Stream processing and incremental I/O *Object Oriented Programming with C++ 2/e* Sourav Sahay 2006-09-13

Designed to serve as a textbook for students pursuing a BTech or BE program in information technology or computer science, Object-Oriented Programming with C++ 2/e imparts a clear understanding of objects and the method of modelling them in the object-oriented programming system. The book would also be suitable for undergraduate as well as postgraduate students of computer applications. *Learn to Program* Chris Pine 2021-06-17 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. *Functional Thinking* Neal Ford 2014-06-30 If you're familiar with functional programming basics and want to gain a much deeper understanding, this in-depth guide takes you beyond syntax and demonstrates how you need to think in a new way. Software architect Neal Ford shows intermediate to advanced developers how functional coding allows you to step back a level of abstraction so you can see your programming problem with greater clarity. Each chapter shows you various examples of functional thinking, using numerous code examples from Java 8 and other JVM languages that include functional capabilities. This book may bend your mind, but you'll come away with a much better grasp of functional programming concepts. Understand why many imperative languages are adding functional capabilities Compare functional and imperative solutions to common problems Examine ways to cede control of routine chores to the runtime Learn how memoization and laziness eliminate hand-crafted solutions Explore functional approaches to design patterns and code reuse View real-world examples of functional thinking with Java 8, and in functional architectures and web frameworks Learn the pros and cons of living in a paradigmatically richer world If you're new to functional programming, check out

Josh Backfield's book Becoming Functional.
Lisp in Small Pieces Christian Queinnec 2003-12-04 This is a comprehensive account of the semantics and the implementation of the whole Lisp family of languages, namely Lisp, Scheme and related dialects. It describes 11 interpreters and 2 compilers, including very recent techniques of interpretation and compilation. The book is in two parts. The first starts from a simple evaluation function and enriches it with multiple name spaces, continuations and side-effects with commented variants, while at the same time the language used to define these features is reduced to a simple lambda-calculus. Denotational semantics is then naturally introduced. The second part focuses more on implementation techniques and discusses precompilation for fast interpretation: threaded code or bytecode; compilation towards C. Some extensions are also described such as dynamic evaluation, reflection, macros and objects. This will become the new standard reference for people wanting to know more about the Lisp family of languages: how they work, how they are implemented, what their variants are and why such variants exist. The full code is supplied (and also available over the Net). A large bibliography is given as well as a considerable number of exercises. Thus it may also be used by students to accompany second courses on Lisp or Scheme.
The Unicorn Project Gene Kim 2019-11-26 The Phoenix Project wowed over a half-million readers. Now comes the Wall Street Journal Bestselling The Unicorn Project! "The Unicorn Project is amazing, and I loved it 100 times more than The Phoenix Project…"—FERNANDO CORNAGO, Senior Director Platform Engineering, Adidas "Gene Kim does a masterful job of showing how … the efforts

many create lasting business advantages for all."—DR. STEVEN SPEAR, author of The High-Velocity Edge, Sr. Lecturer at MIT, and principal of HVE LLC. "The Unicorn Project is so clever, so good, so crazy enlightening!"--CORNELIA DAVIS, Vice President Of Technology at Pivotal Software, Inc., Author of Cloud Native Patterns This highly anticipated follow-up to the bestselling title The Phoenix Project takes another look at Parts Unlimited, this time from the perspective of software development. In The Unicorn Project, we follow Maxine, a senior lead developer and architect, as she is exiled to the Phoenix Project, to the horror of her friends and colleagues, as punishment for contributing to a payroll outage. She tries to survive in what feels like a heartless and uncaring bureaucracy and to work within a system where no one can get anything done without endless committees, paperwork, and approvals. One day, she is approached by a ragtag bunch of misfits who say they want to overthrow the existing order, to liberate developers, to bring joy back to technology work, and to enable the business to win in a time of digital disruption. To her surprise, she finds herself drawn ever further into this movement, eventually becoming one of the leaders of the Rebellion, which puts her in the crosshairs of some familiar and very dangerous enemies. The Age of Software is here, and another mass extinction event looms—this is a story about rebel developers and business leaders working together, racing against time to innovate, survive, and thrive in a time of unprecedented uncertainty...and opportunity. "The Unicorn Project provides insanely useful insights on how to improve your

technology business."—DOMINICA DEGRANDIS, author of Making Work Visible and Director of Digital Transformation at Tasktop ——— "My goal in writing The Unicorn Project was to explore and reveal the necessary but invisible structures required to make developers (and all engineers) productive, and reveal the devastating effects of technical debt and complexity. I hope this book can create common ground for technology and business leaders to leave the past behind, and co-create a better future together."—Gene Kim, November 2019 The Little LISPer Daniel P. Friedman 1989 **The Seasoned Schemer, second edition** Daniel P. Friedman 1995-12-21 The notion that "thinking about computing is one of the most exciting things the human mind can do" sets both The Little Schemer (formerly known as The Little LISPer) and its new companion volume, The Seasoned Schemer, apart from other books on LISP. The authors' enthusiasm for their subject is compelling as they present abstract concepts in a humorous and easy-to-grasp fashion. Together, these books will open new doors of thought to anyone who wants to find out what computing is really about. The Little Schemer introduces computing as an extension of arithmetic and algebra; things that everyone studies in grade school and high school. It introduces programs as recursive functions and briefly discusses the limits of what computers can do. The authors use the programming language Scheme, and interesting foods to illustrate these abstract ideas. The Seasoned Schemer informs the reader about additional dimensions of computing: functions as values, change of state, and exceptional cases. The Little LISPer has been a popular introduction to LISP for many years. It had appeared in French and

Japanese. The Little Schemer and The Seasoned Schemer are worthy successors and will prove equally popular as textbooks for Scheme courses as well as companion texts for any complete introductory course in Computer Science.

Get Programming with Haskell Will Kurt 2018-03-06 Summary Get Programming with Haskell leads you through short lessons, examples, and exercises designed to make Haskell your own. It has crystal-clear illustrations and guided practice. You will write and test dozens of interesting programs and dive into custom Haskell modules. You will gain a new perspective on programming plus the practical ability to use Haskell in the everyday world. (The 80 IQ points: not guaranteed.) Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Programming languages often differ only around the edges—a few keywords, libraries, or platform choices. Haskell gives you an entirely new point of view. To the software pioneer Alan Kay, a change in perspective can be worth 80 IQ points and Haskellers agree on the dramatic benefits of thinking the Haskell way—thinking functionally, with type safety, mathematical certainty, and more. In this hands-on book, that's exactly what you'll learn to do. What's Inside Thinking in Haskell Functional programming basics Programming in types Real-world applications for Haskell About the Reader Written for readers who know one or more programming languages. Table of Contents Lesson 1 Getting started with Haskell Unit 1 – FOUNDATIONS OF FUNCTIONAL PROGRAMMING Lesson 2 Functions and functional programming Lesson 3 Lambda functions and lexical scope Lesson 4 First-class functions Lesson 5

by using Aeson Lesson 41 Using databases in Haskell Lesson 42 Efficient, stateful arrays in Haskell Afterword - What's next? Appendix - Sample answers to exercise *The Reasoned Schemer, second edition* Daniel P. Friedman 2018-03-09 A new edition of a book, written in a humorous question-and-answer style, that shows how to implement and use an elegant little programming language for logic programming. The goal of this book is to show the beauty and elegance of relational programming, which captures the essence of logic programming. The book shows how to implement a relational programming language in Scheme, or in any other functional language, and demonstrates the remarkable flexibility of the resulting relational programs. As in the first edition, the pedagogical method is a series of questions and answers, which proceed with the characteristic humor that marked The Little Schemer and The Seasoned Schemer. Familiarity with a functional language or with the first five chapters of The Little Schemer is assumed. For this second edition, the authors have greatly simplified the programming language used in the book, as well as the implementation of the language. In addition to revising the text extensively, and simplifying and revising the "Laws" and "Commandments," they have added explicit "Translation" rules to ease translation of Scheme functions into relations.

Learn You a Haskell for Great Good! Miran Lipovaca 2011-04-15 It's all in the name: Learn You a Haskell for Great Good! is a hilarious, illustrated guide to this complex functional language. Packed with the author's original artwork, pop culture references, and most importantly, useful example code, this book teaches functional

fundamentals in a way you never thought possible. You'll start with the kid stuff: basic syntax, recursion, types and type classes. Then once you've got the basics down, the real black belt master-class begins: you'll learn to use applicative functors, monads, zippers, and all the other mythical Haskell constructs you've only read about in storybooks. As you work your way through the author's imaginative (and occasionally insane) examples, you'll learn to: -Laugh in the face of side effects as you wield purely functional programming techniques -Use the magic of Haskell's "laziness" to play with infinite sets of data -Organize your programs by creating your own types, type classes, and modules -Use Haskell's elegant input/output system to share the genius of your programs with the outside world Short of eating the author's brain, you will not find a better way to learn this powerful language than reading Learn You a Haskell for Great Good!

Web Development with Clojure Dmitri Sotnikov 2016-07-14 Modern web applications deserve modern tools. Harness the JVM's rich infrastructure while taking advantage of the expressive power and brisk performance of a modern functional language. Exploit Clojure's unique advantages for web development. Step by step, apply the fundamentals of programming in Clojure to build real-world, professional web applications. This edition features new libraries, tools, and best practices, and focuses on developing modern single-page applications. Stop developing web apps with yesterday's tools. Today, developers are increasingly adopting Clojure as a web-development platform. See for yourself what makes Clojure so desirable as you create

a series of web apps of growing complexity, exhibiting the full process of web development using a modern functional language. Journey through all the steps in developing a rich Picture Gallery web application--from conception to packaging and deployment. You'll work hands-on with Clojure and build real-world, professional web apps. This fully updated second edition reveals the changes in the rapidly evolving Clojure ecosystem. Get up to speed on the many new libraries, tools, and best practices. Gain expertise in the popular Ring/Compojure stack using the Luminus framework. Learn how Clojure works with databases and speeds development of RESTful services. See why ClojureScript is rapidly becoming a popular front-end platform, and use ClojureScript with the popular Reagent library to build single-page applications. This book is for you, whether you're already familiar with Clojure or if you're completely new to the language. What You Need: The latest JVM, Clojure 1.6+, and the Leiningen build tool, as well as an editor such as Emacs, IntelliJ, Eclipse, Light Table, or VI.

Clojure High Performance Programming Shantanu Kumar 2015-09-29 Become an expert at writing fast and high performant code in Clojure 1.7.0 About This Book Enhance code performance by using appropriate Clojure features Improve the efficiency of applications and plan their deployment A hands-on guide to designing Clojure programs to get the best performance Who This Book Is For This book is intended for intermediate Clojure developers who are looking to get a good grip on achieving optimum performance. Having a basic knowledge of Java would be helpful. What You Will Learn Identify performance issues in

Clojure programs using different profiling tools Master techniques to achieve numerical performance in Clojure Use Criterium library to measure latency of Clojure expressions Exploit Java features in Clojure code to enhance performance Avoid reflection and boxing with type hints Understand Clojure's concurrency and state-management primitives in depth Measure and monitor performance, and understand optimization techniques In Detail Clojure treats code as data and has a macro system. It focuses on programming with immutable values and explicit progression-of-time constructs, which are intended to facilitate the development of more robust programs, particularly multithreaded ones. It is built with performance, pragmatism, and simplicity in mind. Like most general purpose languages, various Clojure features have different performance characteristics that one should know in order to write high performance code. This book shows you how to evaluate the performance implications of various Clojure abstractions, discover their underpinnings, and apply the right approach for optimum performance in real-world programs. It starts by helping you classify various use cases and the need for them with respect to performance and analysis of various performance aspects. You will also learn the performance vocabulary that experts use throughout the world and discover various Clojure data structures, abstractions, and their performance characteristics. Further, the book will guide you through enhancing performance by using Java interoperability and JVM-specific features from Clojure. It also highlights the importance of using the right concurrent data structure and Java concurrency

abstractions. This book also sheds light on performance metrics for measuring, how to measure, and how to visualize and monitor the collected data. At the end of the book, you will learn to run a performance profiler, identify bottlenecks, tune performance, and refactor code to get a better performance. Style and approach An easy-to-follow guide full of real-world examples and self-sufficient code snippets that will help you get your hands dirty with high performance programming with Clojure.
Clojure for the Brave and True Daniel Higginbotham 2015-10-15 For weeks, months—nay!—from the very moment you were born, you've felt it calling to you. At long last you'll be united with the programming language you've been longing for: Clojure! As a Lisp-style functional programming language, Clojure lets you write robust and elegant code, and because it runs on the Java Virtual Machine, you can take advantage of the vast Java ecosystem. Clojure for the Brave and True offers a "dessert-first" approach: you'll start playing with real programs immediately, as you steadily acclimate to the abstract but powerful features of Lisp and functional programming. Inside you'll find an offbeat, practical guide to Clojure, filled with quirky sample programs that catch cheese thieves and track glittery vampires. Learn how to: –Wield Clojure's core functions –Use Emacs for Clojure development –Write macros to modify Clojure itself –Use Clojure's tools to simplify concurrency and parallel programming Clojure for the Brave and True assumes no prior experience with Clojure, the Java Virtual Machine, or functional programming. Are you ready, brave reader, to meet your true destiny? Grab your best

parentheses—you're about to embark on an epic journey into the world of Clojure!

Clojure in Action Amit Rathore 2015-12-16 Summary A fully revised edition that covers the new features available in Clojure 1.6. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Clojure is a modern Lisp for the JVM. It has the strengths you expect: first-class functions, macros, and Lisp's clean programming style. It supports functional programming, making it ideal for concurrent programming and for creating domain-specific languages. Clojure lets you solve harder problems, make faster changes, and end up with a smaller code base. It's no wonder that there are so many Clojure success stories. About the Book Clojure in Action, Second Edition is an expanded and improved version that's been updated to cover the new features of Clojure 1.6. The book gives you a rapid introduction to the Clojure language, moving from abstract theory to practical examples. You'll start by learning how to use Clojure as a general-purpose language. Next, you'll explore Clojure's efficient concurrency model, based on the database concept of Software Transactional Memory (STM). You'll gain a new level of productivity through Clojure DSLs that can run on the JVM. Along the way, you'll learn countless tips, tricks, and techniques for writing smaller, safer, and faster code. What's Inside Functional programming basics Metaprogramming with Clojure's macros Interoperating with Java Covers Clojure 1.6 About the Reader Assumes readers are familiar with a programming language like C, Java, Ruby, or Python. Table of Contents Introducing Clojure Clojure elements: Data structures and functions

Building blocks of Clojure Multimethod polymorphism Exploring Clojure and Java interop State and the concurrent world Evolving Clojure through macros More on functional programming Protocols, records, and types Test-driven development and more More macros and DSL

The Joy of Clojure Michael Fogus 2011 Provides information on the features and functions of Clojure and describes how to create applications.

The Joy of Kotlin Pierre-Yves Saumont 2019-04-21 Summary Maintaining poor legacy code, interpreting cryptic comments, and writing the same boilerplate over and over can suck the joy out of your life as a Java developer. Fear not! There's hope! Kotlin is an elegant JVM language with modern features and easy integration with Java. The Joy of Kotlin teaches you practical techniques to improve abstraction and design, to write comprehensible code, and to build maintainable bug-free applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Your programming language should be expressive, safe, flexible, and intuitive, and Kotlin checks all the boxes! This elegant JVM language integrates seamlessly with Java, and makes it a breeze to switch between OO and functional styles of programming. It's also fully supported by Google as a first-class Android language. Master the powerful techniques in this unique book, and you'll be able to take on new challenges with increased confidence and skill. About the Book The Joy of Kotlin teaches you to write comprehensible, easy-to-maintain, safe programs with Kotlin. In this expert guide, seasoned engineer Pierre-Yves Saumont teaches you to approach common programming challenges

with a fresh, FP-inspired perspective. As you work through the many examples, you'll dive deep into handling errors and data properly, managing state, and taking advantage of laziness. The author's down-to-earth examples and experience-driven insights will make you a better—and more joyful—developer! What's inside Programming with functions Dealing with optional data Safe handling of errors and exceptions Handling and sharing state mutation About the Reader Written for intermediate Java or Kotlin developers. About the Author Pierre-Yves Saumont is a senior software engineer at Alcatel-Submarine Networks. He's the author of Functional Programming in Java (Manning, 2017). Table of Contents Making programs safer Functional programming in Kotlin: An overview Programming with functions Recursion, corecursion, and memoization Data handling with lists Dealing with optional data Handling errors and exceptions Advanced list handling Working with laziness More data handling with trees Solving problems with advanced trees Functional input/output Sharing mutable states with actors Solving common problems functionally
Elements of Clojure Zachary Tellman 2019-02-21 This book tries to put words to what most experienced programmers already know. It provides a framework for making better design choices, and a vocabulary for teams to discuss the software they collaborate on.
Living Clojure Carin Meier 2015-04-14 If you're an experienced programmer who has not worked with Clojure before, this guide is the perfect thorough but gentle introduction for you. Author Carin Meier not only provides a practical overview of this JVM language and its functional

programming concepts, but also includes a complete hands-on training course to help you learn Clojure in a structured way. The first half of the book takes you through Clojure's unique design and lets you try your hand at two Clojure projects, including a web app. The holistic course in second half provides you with critical tools and resources, including ways to plug into the Clojure community. Understand the basic structure of a Clojure expression Learn how to shape and control code in a functional way Discover how Clojure handles real-world state and concurrency Take advantage of Java classes and learn how Clojure handles polymorphism Manage and use libraries in a Clojure project Use the core.async library for asynchronous and concurrent communication Explore the power of macros in Clojure programming Learn how to think in Clojure by following the book's seven-week training course

Clojure Cookbook Luke VanderHart 2014-03-05 With more than 150 detailed recipes, this cookbook shows experienced Clojure developers how to solve a variety of programming tasks with this JVM language. The solutions cover everything from building dynamic websites and working with databases to network communication, cloud computing, and advanced testing strategies. And more than 60 of the world's best Clojurians contributed recipes. Each recipe includes code that you can use right away, along with a discussion on how and why the solution works, so you can adapt these patterns, approaches, and techniques to situations not specifically covered in this cookbook. Master built-in primitive and composite data structures Create, develop and publish libraries, using

Leiningen tool Interact with the local computer that's running your application Manage network communication protocols and libraries Use techniques for connecting to and using a variety of databases Build and maintain dynamic websites, using the Ring HTTP server library Tackle application tasks such as packaging, distributing, profiling, and logging Take on cloud computing and heavyweight distributed data crunching Dive into unit, integration, simulation, and property-based testing Clojure Cookbook is a collaborative project with contributions from some of the world's best Clojurians, whose backgrounds range from aerospace to social media, banking to robotics, AI research to e-commerce.
Hands-On Reactive Programming with Clojure Konrad Szydlo 2019-01-25 Learn how to use RxClojure to deal with stateful computations Key FeaturesLeverage the features of Functional Reactive Programming using ClojureCreate dataflow-based systems that are the building blocks of Reactive ProgrammingUse different Functional Reactive Programming frameworks, techniques, and patterns to solve real-world problemsBook Description Reactive Programming is central to many concurrent systems, and can help make the process of developing highly concurrent, event-driven, and asynchronous applications simpler and less error-prone. This book will allow you to explore Reactive Programming in Clojure 1.9 and help you get to grips with some of its new features such as transducers, reader conditionals, additional string functions, direct linking, and socket servers. Hands-On Reactive Programming with Clojure starts by introducing you to Functional Reactive Programming (FRP) and its formulations, as well as showing you how

it inspired Compositional Event Systems (CES). It then guides you in understanding Reactive Programming as well as learning how to develop your ability to work with time-varying values thanks to examples of reactive applications implemented in different frameworks. You'll also gain insight into some interesting Reactive design patterns such as the simple component, circuit breaker, request-response, and multiple-master replication. Finally, the book introduces microservices-based architecture in Clojure and closes with examples of unit testing frameworks. By the end of the book, you will have gained all the knowledge you need to create applications using different Reactive Programming approaches. What you will learnUnderstand how to think in terms of time-varying values and event streamsCreate, compose, and transform observable sequences using Reactive extensionsBuild a CES framework from scratch using core.async as its foundationDevelop a simple ClojureScript game using ReagiIntegrate Om and RxJS in a web applicationImplement a reactive API in Amazon Web Services (AWS) Discover helpful approaches to backpressure and error handlingGet to grips with futures and their applicationsWho this book is for If you're interested in using Reactive Programming to build asynchronous and concurrent applications, this is the book for you. Basic knowledge of Clojure programming is necessary to understand the concepts covered in this book.
The Joy of Clojure Chris Houser 2014-05-28 Summary The Joy of Clojure, Second Edition is a deep look at the Clojure language. Fully updated for Clojure 1.6, this new edition goes beyond just syntax to show you the "why" of Clojure and how to write fluent Clojure code

You'll learn functional and declarative approaches to programming and will master the techniques that make Clojure so elegant and efficient. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The Clojure programming language is a dialect of Lisp that runs on the Java Virtual Machine and JavaScript runtimes. It is a functional programming language that offers great performance, expressive power, and stability by design. It gives you built-in concurrency and the predictable precision of immutable and persistent data structures. And it's really, really fast. The instant you see long blocks of Java or Ruby dissolve into a few lines of Clojure, you'll know why the authors of this book call it a "joyful language." It's no wonder that enterprises like Staples are betting their infrastructure on Clojure. About the Book The Joy of Clojure, Second Edition is a deep account of the Clojure language. Fully updated for Clojure 1.6, this new edition goes beyond the syntax to show you how to write fluent Clojure code. You'll learn functional and declarative approaches to programming and will master techniques that make Clojure elegant and efficient. The book shows you how to solve hard problems related to concurrency, interoperability, and performance, and how great it can be to think in the Clojure way. Appropriate for readers with some experience using Clojure or common Lisp. What's Inside Build web apps using ClojureScript Master functional programming techniques Simplify concurrency Covers Clojure 1.6 About the Authors Michael Fogus and Chris Houser are contributors to the Clojure and ClojureScript programming languages

and the authors of various Clojure libraries and language features. Table of Contents PART 1 FOUNDATIONS Clojure philosophy Drinking from the Clojure fire hose Dipping your toes in the pool PART 2 DATA TYPES On scalars Collection types PART 3 FUNCTIONAL PROGRAMMING Being lazy and set in your ways Functional programming PART 4 LARGE-SCALE DESIGN Macros Combining data and code Mutation and concurrency Parallelism PART 5 HOST SYMBIOSIS Java.next Why ClojureScript? PART 6 TANGENTIAL CONSIDERATIONS Data-oriented programming Performance Thinking programs Clojure changes the way you think Clojure for Data Science Henry Garner 2015-09-03 Statistics, big data, and machine learning for Clojure programmers About This Book Write code using Clojure to harness the power of your data Discover the libraries and frameworks that will help you succeed A practical guide to understanding how the Clojure programming language can be used to derive insights from data Who This Book Is For This book is aimed at developers who are already productive in Clojure but who are overwhelmed by the breadth and depth of understanding required to be effective in the field of data science. Whether you're tasked with delivering a specific analytics project or simply suspect that you could be deriving more value from your data, this book will inspire you with the opportunities-and inform you of the risks-that exist in data of all shapes and sizes. What You Will Learn Perform hypothesis testing and understand feature selection and statistical significance to interpret your results with confidence Implement the core machine learning techniques of regression, classification,

clustering and
recommendation
Understand the
importance of the value
of simple statistics and
distributions in
exploratory data
analysis Scale
algorithms to web-sized
datasets efficiently
using distributed
programming models on
Hadoop and Spark Apply
suitable analytic
approaches for text,
graph, and time series
data Interpret the
terminology that you
will encounter in
technical papers Import
libraries from other JVM
languages such as Java
and Scala Communicate
your findings clearly
and convincingly to
nontechnical colleagues
In Detail The term "data
science" has been widely
used to define this new
profession that is
expected to interpret
vast datasets and
translate them to
improved decision-making
and performance. Clojure
is a powerful language
that combines the
interactivity of a
scripting language with
the speed of a compiled

language. Together with
its rich ecosystem of
native libraries and an
extremely simple and
consistent functional
approach to data
manipulation, which maps
closely to mathematical
formula, it is an ideal,
practical, and flexible
language to meet a data
scientist's diverse
needs. Taking you on a
journey from simple
summary statistics to
sophisticated machine
learning algorithms,
this book shows how the
Clojure programming
language can be used to
derive insights from
data. Data scientists
often forge a novel
path, and you'll see how
to make use of Clojure's
Java interoperability
capabilities to access
libraries such as Mahout
and Mllib for which
Clojure wrappers don't
yet exist. Even seasoned
Clojure developers will
develop a deeper
appreciation for their
language's flexibility!
You'll learn how to
apply statistical
thinking to your own
data and use Clojure to
explore, analyze, and

visualize it in a technically and statistically robust way. You can also use Incanter for local data processing and ClojureScript to present interactive visualisations and understand how distributed platforms such as Hadoop sand Spark's MapReduce and GraphX's BSP solve the challenges of data analysis at scale, and how to explain algorithms using those programming models. Above all, by following the explanations in this book, you'll learn not just how to be effective using the current state-of-the-art methods in data science, but why such methods work so that you can continue to be productive as the field evolves into the future. Style and approach This is a practical guide to data science that teaches theory by example through the libraries and frameworks accessible from the Clojure programming language.

Functional JavaScript Michael Fogus 2013-06-01 How can you overcome JavaScript language oddities and unsafe features? With this book, you'll learn how to create code that's beautiful, safe, and simple to understand and test by using JavaScript's functional programming support. Author Michael Fogus shows you how to apply functional-style concepts with Underscore.js, a JavaScript library that facilitates functional programming techniques. Sample code is available on GitHub at https://github.com/funjs/book-source. Fogus helps you think in a functional way to help you minimize complexity in the programs you build. If you're a JavaScript programmer hoping to learn functional programming techniques, or a functional programmer looking to learn JavaScript, this book is the ideal introduction. Use applicative

programming techniques

with first-class functions Understand how and why you might leverage variable scoping and closures Delve into higher-order functions—and learn how they take other functions as arguments for maximum advantage Explore ways to compose new functions from existing functions Get around JavaScript's limitations for using recursive functions Reduce, hide, or eliminate the footprint of state change in your programs Practice flow-based programming with chains and functional pipelines Discover how to code without using classes

JavaScript Allongé
Reginald Braithwaite 2013-10-04 JavaScript Allongé solves two important problems for the ambitious JavaScript programmer. First, JavaScript Allongé gives you the tools to deal with JavaScript bugs, hitches, edge cases, and other potential pitfalls. There are plenty of good directions for how to write JavaScript programs. If you follow them without alteration or deviation, you will be satisfied. Unfortunately, software is a complex thing, full of interactions and side-effects. Two perfectly reasonable pieces of advice when taken separately may conflict with each other when taken together. An approach may seem sound at the outset of a project, but need to be revised when new requirements are discovered. When you "leave the path" of the directions, you discover their limitations. In order to solve the problems that occur at the edges, in order to adapt and deal with changes, in order to refactor and rewrite as needed, you need to understand the underlying principles of the JavaScript programming language in detail. You need to understand why the directions work so that you can understand how to modify them to work properly at, or beyond,

their original
limitations. That's
where JavaScript Allongé
comes in. JavaScript
Allongé is a book about
programming with
functions, because
JavaScript is a
programming language
built on flexible and
powerful functions.
JavaScript Allongé
begins at the beginning,
with values and
expressions, and builds
from there to discuss
types, identity,
functions, closures,
scopes, and many more
subjects up to working
with classes and
instances. In each case,
JavaScript Allongé takes
care to explain exactly
how things work so that
when you encounter a
problem, you'll know
exactly what is
happening and how to fix
it. Second, JavaScript
Allongé provides recipes
for using functions to
write software that is
simpler, cleaner, and
less complicated than
alternative approaches
that are object-centric
or code-centric.
JavaScript idioms like
function combinators and
decorators leverage
JavaScript's power to
make code easier to
read, modify, debug and
refactor, thus avoiding
problems before they
happen. JavaScript
Allongé teaches you how
to handle complex code,
and it also teaches you
how to simplify code
without dumbing it down.
As a result, JavaScript
Allongé is a rich read
releasing many of
JavaScript's subtleties,
much like the Café
Allongé beloved by
coffee enthusiasts
everywhere. License: CC
BY-SA 3.0 Source is
available from Github *
https://github.com/justi
nkelly/javascript-
allonge
The Joy of Clojure
Michael Fogus 2013-06-26
Summary The Joy of
Clojure, Second Edition
is a deep look at the
Clojure language. Fully
updated for Clojure 1.6,
this new edition goes
beyond just syntax to
show you the "why" of
Clojure and how to write
fluent Clojure code.
You'll learn functional
and declarative
approaches to

programming and will master the techniques that make Clojure so elegant and efficient. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The Clojure programming language is a dialect of Lisp that runs on the Java Virtual Machine and JavaScript runtimes. It is a functional programming language that offers great performance, expressive power, and stability by design. It gives you built-in concurrency and the predictable precision of immutable and persistent data structures. And it's really, really fast. The instant you see long blocks of Java or Ruby dissolve into a few lines of Clojure, you'll know why the authors of this book call it a "joyful language." It's no wonder that enterprises like Staples are betting their infrastructure on Clojure. About the Book The Joy of Clojure,

Second Edition is a deep account of the Clojure language. Fully updated for Clojure 1.6, this new edition goes beyond the syntax to show you how to write fluent Clojure code. You'll learn functional and declarative approaches to programming and will master techniques that make Clojure elegant and efficient. The book shows you how to solve hard problems related to concurrency, interoperability, and performance, and how great it can be to think in the Clojure way. Appropriate for readers with some experience using Clojure or common Lisp. What's Inside Build web apps using ClojureScript Master functional programming techniques Simplify concurrency Covers Clojure 1.6 About the Authors Michael Fogus and Chris Houser are contributors to the Clojure and ClojureScript programming languages and the authors of various Clojure libraries and language

features. Table of Contents PART 1 FOUNDATIONS Clojure philosophy Drinking from the Clojure fire hose Dipping your toes in the pool PART 2 DATA TYPES On scalars Collection types PART 3 FUNCTIONAL PROGRAMMING Being lazy and set in your ways Functional programming PART 4 LARGE-SCALE DESIGN Macros Combining data and code Mutation and concurrency Parallelism PART 5 HOST SYMBIOSIS Java.next Why ClojureScript? PART 6 TANGENTIAL CONSIDERATIONS Data-oriented programming Performance Thinking programs Clojure changes the way you think Programming Concurrency on the JVM Venkat Subramaniam 2011-08-26 More than ever, learning to program concurrency is critical to creating faster, responsive applications. Speedy and affordable multicore hardware is driving the demand for high-performing applications, and you can leverage the Java platform to bring these applications to life. Concurrency on the Java platform has evolved, from the synchronization model of JDK to software transactional memory (STM) and actor-based concurrency. This book is the first to show you all these concurrency styles so you can compare and choose what works best for your applications. You'll learn the benefits of each of these models, when and how to use them, and what their limitations are. Through hands-on exercises, you'll learn how to avoid shared mutable state and how to write good, elegant, explicit synchronization-free programs so you can create easy and safe concurrent applications. The techniques you learn in this book will take you from dreading concurrency to mastering and enjoying it. Best of all, you can work with Java or a JVM language of your choice - Clojure, JRuby, Groovy, or Scala - to reap the growing power of multicore hardware.

you are a Java programmer, you'd need JDK 1.5 or later and the Akka 1.0 library. In addition, if you program in Scala, Clojure, Groovy or JRuby you'd need the latest version of your preferred language. Groovy programmers will also need GPars.

Web Development with Clojure Dmitri Sotnikov 2021-06-30 Today, developers are increasingly adopting Clojure as a web-development platform. See for yourself what makes Clojure so desirable, as you create a series of web apps of growing complexity, exploring the full process of web development using a modern functional language. This fully updated third edition reveals the changes in the rapidly evolving Clojure ecosystem and provides a practical, complete walkthrough of the Clojure web-stack. Stop developing web apps with yesterday's tools. Today, developers are increasingly adopting Clojure as a web-development platform. See for yourself what makes Clojure so desirable, as you work hands-on with Clojure and build a series of web apps of increasing size and scope, culminating in a professional grade web app using all the techniques you've learned along the way. This fully updated third edition will get you up to speed on the changes in the rapidly evolving Clojure ecosystem - the many new libraries, tools, and best practices. Build a fully featured SPA app with re-frame, a popular front-end framework for ClojureScript supporting a functional style MVC approach for managing the UI state in Single-Page Application-style applications. Gain expertise in the popular Ring/Compojure stack using the Luminus framework. Learn how Clojure works with databases and speeds development of RESTful services. See why ClojureScript is rapidly

becoming a popular front-end platform, and use ClojureScript with the popular re-frame library to build single-page applications. Whether you're already familiar with Clojure or completely new to the language, you'll be able to write web applications with Clojure at a professional level.

Programming Clojure Alex Miller 2018-02-23 Drowning in unnecessary complexity, unmanaged state, and tangles of spaghetti code? In the best tradition of Lisp, Clojure gets out of your way so you can focus on expressing simple solutions to hard problems. Clojure cuts through complexity by providing a set of composable tools-- immutable data, functions, macros, and the interactive REPL. Written by members of the Clojure core team, this book is the essential, definitive guide to Clojure. This new edition includes information on all the newest features of Clojure, such as transducers and specs. Clojure joins the flexibility and agility of Lisp with the reach, stability, and performance of Java. Combine Clojure's tools for maximum effectiveness as you work with immutable data, functional programming, and safe concurrency to write programs that solve real-world problems. Start by reading and understanding Clojure syntax and see how Clojure is evaluated. From there, find out about the sequence abstraction, which combines immutable collections with functional programming to create truly reusable data transformation code. Clojure is a functional language; learn how to write programs in a functional style, and when and how to use recursion to your advantage. Discover Clojure's unique approach to state and identity, techniques for polymorphism and open systems using

multimethods and protocols, and how to leverage Clojure's metaprogramming capabilities via macros. Finally, put all the pieces together in a real program. New to this edition is coverage of Clojure's spec library, one of the most interesting new features of Clojure for describing both data and functions. You can use Clojure spec to validate data, destructure data, explain invalid data, and generate large numbers of tests to verify the correctness of your code. With this book, you'll learn how to think in Clojure, and how to take advantage of its combined strengths to build powerful programs quickly. What You Need: Java 6 or higher Clojure 1.9 **C++ All-in-One For Dummies** John Paul Mueller 2021-01-07 Get ready for C++20 with all you need to know for complete mastery! Your comprehensive and updated guide to one of the world's most popular programming languages is here! Whether you're a novice or expert, you'll find what you need to get going with the latest features of C++20. The workhorse of programming languages, C++ gives you the utmost control of data usage and interface and resource allocation. If your job involves data, proficiency in C++ means you're indispensable! This edition gives you 8 books in 1 for total C++ mastery. Inside, internationally renowned expert John Paul Mueller takes you from the fundamentals of working with objects and classes to writing applications that use paradigms not normally associated with C++, such as those used for functional programming strategies. The book also includes online resources such as source code. You discover how to use a C++ GNU compiler to build applications and even how to use your mobile device for coding. Conquer advanced programming and troubleshooting Streamline your code

with lambda expressions
Use C++ where you need
it: for gaming,
enterprise applications,
and Web services Uncover
object secrets including
the use of design
patterns Discover how to
use functional
programming techniques
to make code concise and
easy to read If you want
to be your
organization's C++ guru,
C++ All-In-One for
Dummies is where it's
at!

Eloquent Ruby Russ Olsen
2011-02-07 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.
Getting Clojure Russ
Olsen 2018-05-09 Behind
every programming
language lies a vision
of how programs should
be built. The vision
behind Clojure is of a
radically simple
language framework
holding together a
sophisticated collection
of programming features.
Learning Clojure
involves much more than
just learning the
mechanics of the
language. To really get
Clojure you need to
understand the ideas
underlying this
structure of framework
and features. You need
this book: an accessible
introduction to Clojure
that focuses on the
ideas behind the
language as well as the
practical details of
writing code. Clojure
attracts developers on
the cutting edge and is
arguably the best
language for learning to
program in the
functional style without
compromise. But this
comes with a steep
learning curve. Getting
Clojure directly
addresses this by
teaching you how to
think functionally as it
teaches you the
language. You'll learn
about Clojure's powerful
data structures and
high-level functions,
but you'll also learn
what it means for a
language to be
functional, and how to
think in Clojure's
functional way. Each
chapter of Getting
Clojure takes a feature
or two or three from the
language, explains the
syntax and the mechanics
behind that feature so
that you can make it
work before digging into
the deeper questions:
What is the thinking
behind the feature? And
how does it fit in with
the rest of the
language? In Getting
Clojure you'll learn
Clojure's very simple
syntax, but you'll also
learn why that syntax is
integral the way the
language is constructed.
You'll discover how the

most data structures in Clojure are immutable, but also why that leads to more reliable programs. And you'll see how easy it is to write Clojure functions and also how you can use those functions to build complex and capable systems. With real-world examples of how working Clojure programmers use the language, Getting Clojure will help you see the challenges of programming through the eye of experienced Clojure developers. What You Need: You will need to some background in programming. To follow along with the examples in the book, you will need Java 6 or new, Clojure 1.8 or 1.9, and Leiningen 2.

Practical Haskell
Alejandro Serrano Mena 2019-04-27 Get a practical, hands-on introduction to the Haskell language, its libraries and environment, and to the functional programming paradigm that is fast growing in importance in the software industry. This book contains excellent coverage of the Haskell ecosystem and supporting tools, include Cabal and Stack for managing projects, HUnit and QuickCheck for software testing, the Spock framework for developing web applications, Persistent and Esqueleto for database access, and parallel and distributed programming libraries. You'll see how functional programming is gathering momentum, allowing you to express yourself in a more concise way, reducing boilerplate, and increasing the safety of your code. Haskell is an elegant and noise-free pure functional language with a long history, having a huge number of library contributors and an active community. This makes Haskell the best tool for both learning and applying functional programming, and Practical Haskell takes advantage of this to show off the language and what it can do. What You Will Learn Get started programming with Haskell Examine the

different parts of the language Gain an overview of the most important libraries and tools in the Haskell ecosystem Apply functional patterns in real-world scenarios Understand monads and monad transformers Proficiently use laziness and resource management Who This Book Is For Experienced programmers who may be new to the Haskell programming language. However, some prior exposure to Haskell is recommended.

The Rails Way Obie Fernandez 2007-11-16 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 Clojure Programming Chas Emerick 2012-03-30 "Clojure programming ... This functional programming language not only lets you take advantage of Java libraries, services, and other JVM resources, it rivals other dynamic languages such as Ruby and Python. With this comprehensive guide, you'll learn Clojure fundamentals with examples that relate it to languages you already know"--P. [4] of cover. **R for Marketing Research and Analytics** Chris Chapman 2015-03-09 This book is a complete introduction to the power of R for marketing research practitioners. The text describes statistical models from a conceptual point of view with a minimal amount of mathematics, presuming only an introductory knowledge of statistics. Hands-on chapters accelerate the learning curve by asking readers to interact with R from the beginning. Core topics include the R language, basic statistics, linear modeling, and data visualization, which is presented throughout as an integral part of analysis. Later chapters cover more advanced

topics yet are intended to be approachable for all analysts. These sections examine logistic regression, customer segmentation, hierarchical linear modeling, market basket analysis, structural equation modeling, and conjoint analysis in R. The text uniquely presents Bayesian models with a minimally complex approach, demonstrating and explaining Bayesian methods alongside traditional analyses for analysis of variance, linear models, and metric and choice-based conjoint analysis. With its emphasis on data visualization, model assessment, and development of statistical intuition, this book provides guidance for any analyst looking to develop or improve skills in R for marketing applications. **ClojureScript: Up and Running** Stuart Sierra 2012-10-25 Learn how to build complete client-side applications with ClojureScript, the Clojure language variant that compiles to optimized JavaScript. This hands-on introduction shows you how ClojureScript not only has similarities to JavaScript—without the flaws—but also supports the full semantics of its parent language. You'll delve into ClojureScript's immutable data structures, lazy sequences, first-class functions, macros, and support for JavaScript libraries. No previous experience with Clojure or ClojureScript is necessary. If you're familiar with JavaScript, HTML, CSS, and the DOM, you'll quickly discover that ClojureScript has the same reach as JavaScript, but with more power. Start writing ClojureScript code with the Leiningen build system Learn how the ClojureScript compiler works to produce optimized JavaScript Use JavaScript functions and libraries directly from ClojureScript code Explore functions in Clojure's sequence

library such as map,
reduce, and filter Use
macros to define new
control structures or
embed domain-specific
languages Compile
manually or script your
own workflow with
ClojureScript's compiler
tools Integrate
ClojureScript with
Clojure on the JVM to
build powerful client-
server applications
Clojure Renzo Borgatti
2020-01-06 The Clojure
standard library is a
treasure trove of
functions and macros
that have been battle-
tested over the years to
solve the most
challenging programming
problems. Clojure: The
Essential Reference is
an extensive reference
to the standard library
but it doesn't read as a
dull list of functions.
In addition to providing
clear explanations for
each topic, this guide
is full of real-world
examples, links, and
background information.
Purchase of the print
book includes a free
eBook in PDF, Kindle,
and ePub formats from
Manning Publications.

The Pragmatic Programmer
Andrew Hunt 1999-10-20
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 so

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. *The Joy of Clojure* Michael Fogus 2014 "The Joy of Clojure, Second Edition is a deep account of the Clojure language. Fully updated for Clojure 1.6, this edition goes beyond the syntax to show you how to write fluent Clojure code. You'll learn functional and declarative approaches to programming and will master techniques that make Clojure elegant and efficient. The book

shows you how to solve hard problems related to concurrency, interoperability, and performance, and how great it can be to think in the Clojure way. The Clojure programming language is a dialect of Lisp that runs on the Java Virtual Machine and JavaScript runtimes. It is a functional programming language that offers great performance, expressive power, and stability by design. It gives you built-in concurrency and the predictable precision of immutable and persistent data structures. And it's really, really fast. The instant you see long blocks of Java or Ruby dissolve into a few lines of Clojure, you'll know why the authors of this book call it a "joyful language." It's no wonder that enterprises like Staples are betting their infrastructure on Clojure."--Resource description page.