Java 8 In Action By Raoul Gabriel Urma

The manager's must-have guide to
excelling in all aspects of the job
Mind Tools for Managers helps new and
experienced leaders develop the skills
they need to be more effective in
everything they do. It brings together
the 100 most important leadership
skills—as voted for by 15,000 managers
and professionals worldwide—into a
single volume, providing an easy-access
solutions manual for people wanting to
be the best manager they can be. Each
chapter details a related group of
skills, providing links to additional
resources as needed, plus the tools you
need to put ideas into practice. Read
beginning-to-end, this guide provides a
crash course on the essential skills of
any effective manager; used as a
reference, its clear organization
allows you to find the solution you
need quickly and easily. Success in a
leadership position comes from results,
and results come from the effective
coordination of often competing needs:
your organization, your client, your
team, and your projects. These all

demand time, attention, and energy, and keeping everything running smoothly while making the important decisions is a lot to handle. This book shows you how to manage it all, and manage it well, with practical wisdom and expert guidance. Build your ideal team and keep them motivated Make better decisions and boost your strategy game Manage both time and stress to get more done with less Master effective communication, facilitate innovation, and much more Managers wear many hats and often operate under a tremendously diverse set of job duties. Delegation, prioritization, strategy, decision making, communication, problem solving, creativity, time management, project management and stress management are all part of your domain. Mind Tools for Managers helps you take control and get the best out of your team, your time, and yourself.

Level: Absolute beginner in Java. This book is for programmers who would love to learn Java quickly and firmly with hands on approach. After completing this book you will have core understanding of the Java programming

language and Java platform. The book offers comprehensive coverage of Java fundamentals explained in a simplified language supported by examples.The book is divided into 29 chapters where each major topic has it's own chapter and each chapter has multiple examples to support and provide clarity on the concept. The topics covered in this book are 1. What is Java? 2. JDK and JRE 3. Setting Path Variable 4. Complier and Interpreter 5. The First Program 6. The HelloWorld Program 7. Anatomy of HelloWorld Program 8. Multiple Main Methods 9. Public Class and File Name 1O. Runtime Execution 11. Alternate HelloWorld Program 12. Numeric Data Types 13. Non Numeric Data Types 14. Literal and Constant 15. Escape Sequence 16. Immutable String 17. StringBuilder Class 18. Wrapper Classes 19. IF... Else 2O. Switch... Case 21. For... Loop 22. While... Loop 23. Break and Continue 24. Conversion and Casting 25. Arithmetic and Relational Operators 26. Logical and Ternary Operators 27. Arrays 28. Jagged Array 29. For Each Loop Basically the book has lot of code(examples) for

clear and deeper understanding of Java programming language.
Whether you are a Java expert or at a beginner level, you'll benefit from this book, because it will teach you a brand new way of coding and thinking. The book starts with an explanation of what reactive programming is, why it is so appealing, and how we can integrate it in to Java. It continues by introducing the new Java 8 syntax features, such as lambdas and function references, and some functional programming basics. From this point on, the book focuses on RxJava in depth. It goes through creating Observables, transforming, filtering, and combining them, and concurrency and testing to finish with extending the library itself. This book is a definite tutorial in RxJava filled with a lot of well-described examples. It explains reactive programming concepts in plain and readable language, without scientific formulas and terms.
Summary Kafka Streams in Action teaches you everything you need to know to implement stream processing on data flowing into your Kafka platform,

allowing you to focus on getting more from your data without sacrificing time or effort. Foreword by Neha Narkhede, Cocreator of Apache Kafka Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Not all stream-based applications require a dedicated processing cluster. The lightweight Kafka Streams library provides exactly the power and simplicity you need for message handling in microservices and real-time event processing. With the Kafka Streams API, you filter and transform data streams with just Kafka and your application. About the Book Kafka Streams in Action teaches you to implement stream processing within the Kafka platform. In this easy-to-follow book, you'll explore real-world examples to collect, transform, and aggregate data, work with multiple processors, and handle real-time events. You'll even dive into streaming SQL with KSQL! Practical to the very end, it finishes with testing and operational aspects, such as monitoring and debugging. What's inside Using the

KStreams API Filtering, transforming, and splitting data Working with the Processor API Integrating with external systems About the Reader Assumes some experience with distributed systems. No knowledge of Kafka or streaming applications required. About the Author Bill Bejeck is a Kafka Streams contributor and Confluent engineer with over 15 years of software development experience. Table of Contents PART 1 - GETTING STARTED WITH KAFKA STREAMS Welcome to Kafka Streams Kafka quicklyPART 2 - KAFKA STREAMS DEVELOPMENT Developing Kafka Streams Streams and state The KTable API The Processor APIPART 3 - ADMINISTERING KAFKA STREAMS Monitoring and performance Testing a Kafka Streams applicationPART 4 - ADVANCED CONCEPTS WITH KAFKA STREAMS Advanced applications with Kafka StreamsAPPENDIXES Appendix A - Additional configuration information Appendix B - Exactly once semantics
Functional Programming in Java
Java Generics and Collections
Exam 1ZO-8O9
Java 8 Pocket Guide

Core Java SE 9 for the Impatient

Exam 1ZO-8O8

Beginning Java 8 Language Features covers essential and advanced features of the Java programming language such as the new lambda expressions (closures), inner classes, threads, I/O, Collections, garbage collection, streams, and more. Author Kishori Sharan provides over 60 diagrams and 290 complete programs to help you visualize and better understand the topics covered in this book. The book starts with a series of chapters on the essential language features provided by Java, including annotations, inner classes, reflection, and generics. These topics are then complemented by details of how to use lambda expressions, allowing you to build powerful and efficient Java programs. The chapter on threads follows this up and discusses everything from the very basic concepts of a thread to the most advanced topics such as synchronizers, the fork/join framework, and atomic variables. This book contains unmatched coverage of Java I/O, including NIO 2.0, the Path API, the FileVisitor API, the watch service and asynchronous file I/O. With this in-depth knowledge, your data- and file-management programs will be able to take advantage of every feature of Java's powerful I/O framework. Finally, you'll learn how to use the Stream API, a new, exciting addition to Java 8, to perform aggregate operations on collections of data elements using functional-style programming. You'll examine the details of stream processing such as creating streams from different data sources, learning the difference between sequential and parallel streams, applying the filter-map-reduce pattern, and dealing with optional values.

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

When you need quick answers for developing or debugging Java programs, this pocket guide provides a handy reference to standard features of the Java programming language and its platform. You'll find helpful programming examples, tables, figures, and lists, as well as Java 8 features such as Lambda Expressions and the Date and Time API. It's an ideal companion, whether you're in the office, in the lab, or on the road. This book also provides material to help you prepare for the Oracle Certified Associate Java Programmer exam. Quickly find Java language details, such as naming

conventions, types, statements and blocks, and object-oriented programming Get details on the Java SE platform, including development basics, memory management, concurrency, and generics Browse through information on basic input/output, NIO 2.0, the Java collections framework, and the Java Scripting API Get supplemental references to fluent APIs, third-party tools, and basics of the Unified Modeling Language (UML)

Write your first code in Java using simple, step-by-step examples that model real-word objects and events, making learning easy. With this book you'll be able to pick up the concepts without fuss. Java for Absolute Beginners teaches Java development in language anyone can understand, giving you the best possible start. You'll see clear code descriptions and layout so that you can get your code running as soon as possible. After reading this book, you'll come away with the basics to get started writing programs in Java. Author Iuliana Cosmina focuses on practical knowledge and getting up to speed quickly—all the bits and pieces a novice needs to get started programming in Java. First, you'll discover how Java is executed, what type of language it is, and what it is good for. With the theory out of the way, you'll install Java, choose an editor such as IntelliJ IDEA, and write your first simple Java program. Along the way you'll compile and execute this program so it can run on any platform that supports Java. As part of this tutorial you'll see how to write high-quality code by following conventions and respecting well-known programming principles, making your projects more professional and efficient. Finally, alongside the core features of Java, you'll learn skills in some of the newest and most exciting features of the language: Generics, Lambda

expressions, modular organization, local-variable type inference, and local variable syntax for Lambda expressions. Java for Absolute Beginners gives you all you need to start your Java 9+ programming journey. No experience necessary. What You'll Learn Use data types, operators, and the new stream API Install and use a build tool such as Gradle Build interactive Java applications with JavaFX Exchange data using the new JSON APIs Play with images using multi-resolution APIs Use the publish-subscribe framework Who This Book Is For Those who are new to programming and who want to start with Java.

A Beginner's Guide to Java Programming
The Java Language Specification
Java Performance
OCP: Oracle Certified Professional Java SE 8 Programmer II Study Guide
Real-World Software Development
Java 8 Lambdas

Full coverage of functional programming and all OCA Java Programmer exam objectives OCA, Oracle Certified Associate Java SE 8 Programmer I Study Guide, Exam 1Z0-808 is a comprehensive study guide for those taking the Oracle Certified Associate Java SE 8 Programmer I exam (1Z0-808). With complete coverage of 100% of the exam objectives, this book provides everything you need to know to confidently take the exam. The release of Java 8 brought the language's biggest changes to date, and for the first time, candidates are required to learn functional programming to pass the exam. This study guide has you covered, with thorough functional programming explanation and information on all key topic areas Java

programmers need to know. You'll cover Java inside and out, and learn how to apply it efficiently and effectively to create solutions applicable to real-world scenarios. Work confidently with operators, conditionals, and loops Understand object-oriented design principles and patterns Master functional programming fundamentals

Pro Java 8 Programming covers the core Java development kit. It takes advantage of the finer points of the core standard edition (SE) and development kit version 8. You'll discover the particulars of working with the Java language and APIs to develop applications in many different contexts. You will also delve into more advanced topics like lambda expressions, closures, new i/o (NIO.2), enums, generics, XML, metadata and the Swing APIs for GUI design and development. By the end of the book, you'll be fully prepared to take advantage of Java's ease of development, and able to create powerful, sophisticated Java applications.

For nearly five years, one book has served as the definitive reference to Java for all serious developers: The Java Language Specification, by James Gosling, Bill Joy, and Guy Steele. Now, these world-renowned Java authorities (along with new co-author Gilad Bracha) have delivered a monumental update. This completely revised Second Edition covers the Java 2 Platform Standard Edition Version 1.3 with unprecedented depth and precision, offering the invaluable insights of Java's creators to every developer. There is no better source for learning everything about the Syntax and Semantics of the Java programming language. Developers will turn to this book again and again.

This book, written by one of the designers of generics,

is a thorough explanation of how to use generics, and particularly, the effect this facility has on the way developers use collections.
Learn Java 8 in a Week
A hands-on guide to creating clean web applications with code examples in Java
Java Concurrency in Practice
In-Depth Advice for Tuning and Programming Java 8, 11, and Beyond
The Rust Programming Language (Covers Rust 2018)
Java Programming in a Multicore World

If you're a developer with core Java SE skills, this hands-on book takes you through the language changes in Java 8 triggered by the addition of lambda expressions. You'll learn through code examples, exercises, and fluid explanations how these anonymous functions will help you write simple, clean, library-level code that solves business problems. Lambda expressions are a fairly simple change to Java, and the first part of the book shows you how to use them properly. Later chapters show you how lambda functions help you improve performance with parallelism, write simpler concurrent code, and model your domain more accurately, including building better DSLs. Use exercises in each chapter to

help you master lambda expressions in Java 8 quickly Explore streams, advanced collections, and other Java 8 library improvements Leverage multicore CPUs and improve performance with data parallelism Use techniques to "lambdify" your existing codebase or library code Learn practical solutions for lambda expression unit testing and debugging Implement SOLID principles of object-oriented programming with lambdas Write concurrent applications that efficiently perform message passing and non-blocking I/O Beginning Java 8 Games Development, written by Java expert and author Wallace Jackson, teaches you the fundamentals of building a highly illustrative game using the Java 8 programming language. In this book, you'll employ open source software as tools to help you quickly and efficiently build your Java game applications. You'll learn how to utilize vector and bit-wise graphics; create sprites and sprite animations; handle events; process inputs; create and insert multimedia and audio files; and more. Furthermore, you'll learn

about JavaFX 8, now integrated into
Java 8 and which gives you additional
APIs that will make your game
application more fun and dynamic as
well as give it a smaller foot-print;
so, your game application can run on
your PC, mobile and embedded devices.
After reading and using this tutorial,
you'll come away with a cool Java-based
2D game application template that you
can re-use and apply to your own game
making ambitions or for fun.
This book concisely introduces Java 8's
most valuable new features, including
lambda expressions (closures) and
streams. If you're an experienced Java
programmer, the author's practical
insights and sample code will help you
quickly take advantage of these and
other Java language and platform
improvements.
Complete, trusted preparation for the
Java Programmer II exam OCP: Oracle
Certified Professional Java SE 8
Programmer II Study Guide is your
comprehensive companion for preparing
for Exam 1ZO-8O9 as well as upgrade
Exam 1ZO-81O and Exam 1ZO-813. With
full coverage of 1OO% of exam

objectives, this invaluable guide
reinforces what you know, teaches you
what you don't know, and gives you the
hands-on practice you need to boost
your skills. Written by expert Java
developers, this book goes beyond mere
exam prep with the insight,
explanations and perspectives that come
from years of experience. You'll review
the basics of object-oriented
programming, understand functional
programming, apply your knowledge to
database work, and much more. From the
basic to the advanced, this guide walks
you through everything you need to know
to confidently take the OCP 1ZO-8O9
Exam and upgrade exams 1ZO-81O and
1ZO-813. Java 8 represents the biggest
changes to the language to date, and
the latest exam now requires that you
demonstrate functional programming
competence in order to pass. This guide
has you covered, with clear
explanations and expert advice.
Understand abstract classes,
interfaces, and class design Learn
object-oriented design principles and
patterns Delve into functional
programming, advanced strings, and

localization Master IO, NIO, and JDBC
with expert-led database practice If
you're ready to take the next step in
your IT career, OCP: Oracle Certified
Professional Java SE 8 Programmer II
Study Guide is your ideal companion on
the road to certification.
Instant Help for Java Programmers
Simple Solutions to Difficult Problems
in Java 8 and 9
Java SE 8 for the Really Impatient
A Project-Driven Guide to Fundamentals
in Java
Java for Absolute Beginners
Pro Java 8 Programming

**The Pragmatic Programmers classic is back!
Freshly updated for modern software
development, Pragmatic Unit Testing in Java 8
With JUnit teaches you how to write and run
easily maintained unit tests in JUnit with
confidence. You'll learn mnemonics to help you
know what tests to write, how to remember all
the boundary conditions, and what the qualities
of a good test are. You'll see how unit tests can
pay off by allowing you to keep your system
code clean, and you'll learn how to handle the
stuff that seems too tough to test. Pragmatic
Unit Testing in Java 8 With JUnit steps you
through all the important unit testing topics. If**

you've never written a unit test, you'll see screen shots from Eclipse, IntelliJ IDEA, and NetBeans that will help you get past the hard part--getting set up and started. Once past the basics, you'll learn why you want to write unit tests and how to effectively use JUnit. But the meaty part of the book is its collected unit testing wisdom from people who've been there, done that on production systems for at least 15 years: veteran author and developer Jeff Langr, building on the wisdom of Pragmatic Programmers Andy Hunt and Dave Thomas. You'll learn: How to craft your unit tests to minimize your effort in maintaining them. How to use unit tests to help keep your system clean. How to test the tough stuff. Memorable mnemonics to help you remember what's important when writing unit tests. How to help your team reap and sustain the benefits of unit testing. You won't just learn about unit testing in theory--you'll work through numerous code examples. When it comes to programming, hands-on is the only way to learn! Summary Functional Programming in Java teaches Java developers how to incorporate the most powerful benefits of functional programming into new and existing Java code. You'll learn to think functionally about coding tasks in Java and use FP to make your applications easier to understand, optimize,

maintain, and scale. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Here's a bold statement: learn functional programming and you'll be a better Java developer. Fortunately, you don't have to master every aspect of FP to get a big payoff. If you take in a few core principles, you'll see an immediate boost in the scalability, readability, and maintainability of your code. And did we mention that you'll have fewer bugs? Let's get started! About the Book Functional Programming in Java teaches you how to incorporate the powerful benefits of functional programming into new and existing Java code. This book uses easy-to-grasp examples, exercises, and illustrations to teach core FP principles such as referential transparency, immutability, persistence, and laziness. Along the way, you'll discover which of the new functionally inspired features of Java 8 will help you most. What's Inside Writing code that's easier to read and reason about Safer concurrent and parallel programming Handling errors without exceptions Java 8 features like lambdas, method references, and functional interfaces About the Reader Written for Java developers with no previous FP experience. About the Author Pierre-Yves Saumont is a

seasoned Java developer with three decades of
experience designing and building enterprise
software. He is an R&D engineer at Alcatel-
Lucent Submarine Networks. Table of Contents
What is functional programming? Using
functions in Java Making Java more functional
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handling with trees Solving real problems with
advanced trees Handling state mutation in a
functional way Functional input/output Sharing
mutable state with actors Solving common
problems functionally
An Accessible Guide to the Java Language and
Libraries Modern Java introduces major
enhancements that impact the core Java
technologies and APIs at the heart of the Java
platform. Many old Java idioms are no longer
needed and new features such as
modularization make you far more effective.
However, navigating these changes can be
challenging. Core Java® SE 9 for the Impatient,
Second Edition, is a complete yet concise guide
that includes all the latest changes up to Java
SE 9. Written by Cay S. Horstmann–author of the
classic two-volume Core Java–this
indispensable tutorial offers a faster, easier

pathway for learning modern Java. Given Java SE 9's size and the scope of its enhancements, there's plenty to cover, but it's presented in small chunks organized for quick access and easy understanding. Horstmann's practical insights and sample code help you quickly take advantage of all that's new, from Java SE 9's long-awaited "Project Jigsaw" module system to the improvements first introduced in Java SE 8, including lambda expressions and streams. Use modules to simplify the development of well-performing complex systems Migrate applications to work with the modularized Java API and third-party modules Test code as you create it with the new JShell Read-Eval-Print Loop (REPL) Use lambda expressions to express actions more concisely Streamline and optimize data management with today's Streams API Leverage modern concurrent programming based on cooperating tasks Take advantage of a multitude of API improvements for working with collections, input/output, regular expressions, and processes Whether you're just getting started with modern Java or you're an experienced developer, this guide will help you write tomorrow's most robust, efficient, and secure Java code. Register your product at informit.com/register for convenient access to downloads, updates, and/or corrections as they

become available.
Are you looking for a deeper understanding of the Java™ programming language so that you can write code that is clearer, more correct, more robust, and more reusable? Look no further! Effective Java™, Second Edition, brings together seventy-eight indispensable programmer's rules of thumb: working, best-practice solutions for the programming challenges you encounter every day. This highly anticipated new edition of the classic, Jolt Award-winning work has been thoroughly updated to cover Java SE 5 and Java SE 6 features introduced since the first edition. Bloch explores new design patterns and language idioms, showing you how to make the most of features ranging from generics to enums, annotations to autoboxing. Each chapter in the book consists of several "items" presented in the form of a short, standalone essay that provides specific advice, insight into Java platform subtleties, and outstanding code examples. The comprehensive descriptions and explanations for each item illuminate what to do, what not to do, and why. Highlights include: New coverage of generics, enums, annotations, autoboxing, the for-each loop, varargs, concurrency utilities, and much more Updated techniques and best practices on classic topics,

including objects, classes, libraries, methods, and serialization How to avoid the traps and pitfalls of commonly misunderstood subtleties of the language Focus on the language and its most fundamental libraries: java.lang, java.util, and, to a lesser extent, java.util.concurrent and java.io Simply put, Effective Java™, Second Edition, presents the most practical, authoritative guidelines available for writing efficient, well-designed programs.

100 Ways to be a Better Boss

Pragmatic Functional Programming

Learn to Program the Fundamentals the Java 9+ Way

Beginning Java 8 Language Features

Mastering Lambdas

Harnessing the Power Of Java 8 Lambda Expressions

Java 8 in Action

Summary Manning's bestselling Java 8 book has been revised for Java 9! In Modern Java in Action, you'll build on your existing Java language skills with the newest features and techniques. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Modern applications take advantage of

innovative designs, including microservices, reactive architectures, and streaming data. Modern Java features like lambdas, streams, and the long-awaited Java Module System make implementing these designs significantly easier. It's time to upgrade your skills and meet these challenges head on! About the Book Modern Java in Action connects new features of the Java language with their practical applications. Using crystal-clear examples and careful attention to detail, this book respects your time. It will help you expand your existing knowledge of core Java as you master modern additions like the Streams API and the Java Module System, explore new approaches to concurrency, and learn how functional concepts can help you write code that's easier to read and maintain. What's inside Thoroughly revised edition of Manning's bestselling Java 8 in Action New features in Java 8, Java 9, and beyond Streaming data and reactive programming The Java Module System About the Reader Written for developers familiar with core Java features. About the Author Raoul-Gabriel

Urma is CEO of Cambridge Spark. Mario Fusco is a senior software engineer at Red Hat. Alan Mycroft is a University of Cambridge computer science professor; he cofounded the Raspberry Pi Foundation. Table of Contents PART 1 - FUNDAMENTALS Java 8, 9, 10, and 11: what's happening? Passing code with behavior parameterization Lambda expressions PART 2 - FUNCTIONAL-STYLE DATA PROCESSING WITH STREAMS Introducing streams Working with streams Collecting data with streams Parallel data processing and performance PART 3 - EFFECTIVE PROGRAMMING WITH STREAMS AND LAMBDAS Collection API enhancements Refactoring, testing, and debugging Domain-specific languages using lambdas PART 4 - EVERYDAY JAVA Using Optional as a better alternative to null New Date and Time API Default methods The Java Module System PART 5 - ENHANCED JAVA CONCURRENCY Concepts behind CompletableFuture and reactive programming CompletableFuture: composable asynchronous programming Reactive programming PART 6 - FUNCTIONAL

*PROGRAMMING AND FUTURE JAVA
EVOLUTION Thinking functionally
Functional programming techniques
Blending OOP and FP: Comparing Java
and Scala Conclusions and where next
for Java
Rust in Action introduces the Rust
programming language by exploring
numerous systems programming
concepts and techniques.You'll be
learning Rust by delving into how
computers work under the hood. You'll
find yourself playing with persistent
storage, memory, networking and even
tinkering with CPU instructions. The
book takes you through using Rust to
extend other applications and teaches
you tricks to write blindingly fast code.
You'll also discover parallel and
concurrent programming. Purchase of
the print book includes a free eBook in
PDF, Kindle, and ePub formats from
Manning Publications.
Intermediate level, for programmers
fairly familiar with Java, but new to the
functional style of programming and
lambda expressions. Get ready to
program in a whole new way. Functional
Programming in Java will help you*

quickly get on top of the new, essential Java 8 language features and the functional style that will change and improve your code. This short, targeted book will help you make the paradigm shift from the old imperative way to a less error-prone, more elegant, and concise coding style that's also a breeze to parallelize. You'll explore the syntax and semantics of lambda expressions, method and constructor references, and functional interfaces. You'll design and write applications better using the new standards in Java 8 and the JDK. Lambda expressions are lightweight, highly concise anonymous methods backed by functional interfaces in Java 8. You can use them to leap forward into a whole new world of programming in Java. With functional programming capabilities, which have been around for decades in other languages, you can now write elegant, concise, less error-prone code using standard Java. This book will guide you though the paradigm change, offer the essential details about the new features, and show you how to transition from your old way of coding to an improved style. In this book you'll see

popular design patterns, such as decorator, builder, and strategy, come to life to solve common design problems, but with little ceremony and effort. With these new capabilities in hand, Functional Programming in Java will help you pick up techniques to implement designs that were beyond easy reach in earlier versions of Java. You'll see how you can reap the benefits of tail call optimization, memoization, and effortless parallelization techniques. Java 8 will change the way you write applications. If you're eager to take advantage of the new features in the language, this is the book for you. What you need: Java 8 with support for lambda expressions and the JDK is required to make use of the concepts and the examples in this book.
What's New in Java 8
Beginning Java 9 Fundamentals
Modular Programming in Java 9
Java 8 in Action

Get Your Hands Dirty on Clean Architecture

This blistering novel—from the bestselling, Pulitzer Prize-winning author of The

Road—returns to the Texas-Mexico border, setting of the famed Border Trilogy. The time is our own, when rustlers have given way to drug-runners and small towns have become free-fire zones. One day, a good old boy named Llewellyn Moss finds a pickup truck surrounded by a bodyguard of dead men. A load of heroin and two million dollars in cash are still in the back. When Moss takes the money, he sets off a chain reaction of catastrophic violence that not even the law-in the person of aging, disillusioned Sheriff Bell-can contain. As Moss tries to evade his pursuers-in particular a mysterious mastermind who flips coins for human lives-McCarthy simultaneously strips down the American crime novel and broadens its concerns to encompass themes as ancient as the Bible and as bloodily contemporary as this morning's headlines. No Country for Old Men is a triumph.

Threads are a fundamental part of the Java platform. As multicore processors become the norm, using concurrency effectively becomes essential for building high-performance applications. Java SE 5 and 6 are a huge step forward for the development of concurrent applications, with improvements to the Java Virtual Machine to support high-performance, highly scalable concurrent classes and a rich set of new concurrency building blocks. In Java Concurrency in Practice , the creators of these new facilities explain not only how they work and how to use them, but also the

motivation and design patterns behind them.
However, developing, testing, and debugging
multithreaded programs can still be very
difficult; it is all too easy to create
concurrent programs that appear to work, but
fail when it matters most: in production,
under heavy load. Java Concurrency in
Practice arms readers with both the
theoretical underpinnings and concrete
techniques for building reliable, scalable,
maintainable concurrent applications. Rather
than simply offering an inventory of
concurrency APIs and mechanisms, it provides
design rules, patterns, and mental models
that make it easier to build concurrent
programs that are both correct and
performant. This book covers: Basic concepts
of concurrency and thread safety Techniques
for building and composing thread-safe
classes Using the concurrency building blocks
in java.util.concurrent Performance
optimization dos and don'ts Testing
concurrent programs Advanced topics such as
atomic variables, nonblocking algorithms, and
the Java Memory Model
Gain insight into how hexagonal architecture
can help to keep the cost of development low
over the complete lifetime of an application
Key FeaturesExplore ways to make your
software flexible, extensible, and
adaptableLearn new concepts that you can
easily blend with your own software
development styleDevelop the mindset of
building maintainable solutions instead of

taking shortcutsBook Description We would all like to build software architecture that yields adaptable and flexible software with low development costs. But, unreasonable deadlines and shortcuts make it very hard to create such an architecture. Get Your Hands Dirty on Clean Architecture starts with a discussion about the conventional layered architecture style and its disadvantages. It also talks about the advantages of the domain-centric architecture styles of Robert C. Martin's Clean Architecture and Alistair Cockburn's Hexagonal Architecture. Then, the book dives into hands-on chapters that show you how to manifest a hexagonal architecture in actual code. You'll learn in detail about different mapping strategies between the layers of a hexagonal architecture and see how to assemble the architecture elements into an application. The later chapters demonstrate how to enforce architecture boundaries. You'll also learn what shortcuts produce what types of technical debt and how, sometimes, it is a good idea to willingly take on those debts. After reading this book, you'll have all the knowledge you need to create applications using the hexagonal architecture style of web development. What you will learnIdentify potential shortcomings of using a layered architectureApply methods to enforce architecture boundariesFind out how potential shortcuts can affect the software architectureProduce arguments for when to use which style of

architectureStructure your code according to the architectureApply various types of tests that will cover each element of the architectureWho this book is for This book is for you if you care about the architecture of the software you are building. To get the most out of this book, you must have some experience with web development. The code examples in this book are in Java. If you are not a Java programmer but can read object-oriented code in other languages, you will be fine. In the few places where Java or framework specifics are needed, they are thoroughly explained.

Master the principles and techniques of multithreaded programming with the Java 8 Concurrency API About This Book Implement concurrent applications using the Java 8 Concurrency API and its new components Improve the performance of your applications or process more data at the same time, taking advantage of all of your resources. Construct real-world examples related to machine learning, data mining, image processing, and client/server environments Who This Book Is For If you are a competent Java developer with a good understanding of concurrency but have no knowledge of how to effectively implement concurrent programs or use streams to make processes more efficient, then this book is for you. What You Will Learn Design concurrent applications by converting a sequential algorithm into a concurrent one Discover how to avoid all the possible

problems you can get in concurrent algorithms Use the Executor framework to manage concurrent tasks without creating threads Extend and modify Executors to adapt their behavior to your needs Solve problems using the divide and conquer technique and the Fork/Join framework Process massive data sets with parallel streams and Map/Reduce implementation Control data-race conditions using concurrent data structures and synchronization mechanisms Test and monitor concurrent applications In Detail Concurrency programming allows several large tasks to be divided into smaller sub-tasks, which are further processed as individual tasks that run in parallel. All the sub-tasks are combined together once the required results are achieved; they are then merged to get the final output. The whole process is very complex. This process goes from the design of concurrent algorithms to the testing phase where concurrent applications need extra attention. Java includes a comprehensive API with a lot of ready-to-use components to implement powerful concurrency applications in an easy way, but with a high flexibility to adapt these components to your needs. The book starts with a full description of design principles of concurrent applications and how to parallelize a sequential algorithm. We'll show you how to use all the components of the Java Concurrency API from basics to the most advanced techniques to implement them in powerful concurrency applications in Java.

You will be using real-world examples of
complex algorithms related to machine
learning, data mining, natural language
processing, image processing in client /
server environments. Next, you will learn how
to use the most important components of the
Java 8 Concurrency API: the Executor
framework to execute multiple tasks in your
applications, the phaser class to implement
concurrent tasks divided into phases, and the
Fork/Join framework to implement concurrent
tasks that can be split into smaller problems
(using the divide and conquer technique).
Toward the end, we will cover the new
inclusions in Java 8 API, the Map and Reduce
model, and the Map and Collect model. The
book will also teach you about the data
structures and synchronization utilities to
avoid data-race conditions and other critical
problems. Finally, the book ends with a
detailed description of the tools and
techniques that you can use to test a Java
concurrent application. Style and approach A
complete guide implementing real-world
examples with algorithms related to machine
learning, data mining, and natural language
processing in client/server environments. All
the examples are explained in a step-by-step
approach.
Functionnal Programming for the Masses
Rust in Action
OCA: Oracle Certified Associate Java SE 8
Programmer I Study Guide
Beginning Java 8 Games Development

Mind Tools for Managers
Modern Java in Action

The official book on the Rust programming language,
written by the Rust development team at the Mozilla
Foundation, fully updated for Rust 2018. The Rust
Programming Language is the official book on Rust: an
open source systems programming language that helps
you write faster, more reliable software. Rust offers
control over low-level details (such as memory usage)
in combination with high-level ergonomics, eliminating
the hassle traditionally associated with low-level
languages. The authors of The Rust Programming
Language, members of the Rust Core Team, share their
knowledge and experience to show you how to take
full advantage of Rust's features--from installation to
creating robust and scalable programs. You'll begin
with basics like creating functions, choosing data types,
and binding variables and then move on to more
advanced concepts, such as: • Ownership and
borrowing, lifetimes, and traits • Using Rust's memory
safety guarantees to build fast, safe programs •
Testing, error handling, and effective refactoring •
Generics, smart pointers, multithreading, trait objects,
and advanced pattern matching • Using Cargo, Rust's
built-in package manager, to build, test, and document
your code and manage dependencies • How best to
use Rust's advanced compiler with compiler-led
programming techniques You'll find plenty of code
examples throughout the book, as well as three
chapters dedicated to building complete projects to
test your learning: a number guessing game, a Rust

implementation of a command line tool, and a multithreaded server. New to this edition: An extended section on Rust macros, an expanded chapter on modules, and appendixes on Rust development tools and editions.

Explore the latest Java-based software development techniques and methodologies through the project-based approach in this practical guide. Unlike books that use abstract examples and lots of theory, Real-World Software Development shows you how to develop several relevant projects while learning best practices along the way. With this engaging approach, junior developers capable of writing basic Java code will learn about state-of-the-art software development practices for building modern, robust and maintainable Java software. You'll work with many different software development topics that are often excluded from software develop how-to references. Featuring real-world examples, this book teaches you techniques and methodologies for functional programming, automated testing, security, architecture, and distributed systems.

Learn the basics of Java 9, including basic programming concepts and the object-oriented fundamentals necessary at all levels of Java development. Author Kishori Sharan walks you through writing your first Java program step-by-step. Armed with that practical experience, you'll be ready to learn the core of the Java language. Beginning Java 9 Fundamentals provides over 90 diagrams and 240 complete programs to help you learn the topics faster. The book continues with a

series of foundation topics, including using data types, working with operators, and writing statements in Java. These basics lead onto the heart of the Java language: object-oriented programming. By learning topics such as classes, objects, interfaces, and inheritance you'll have a good understanding ofJava's object-oriented model. The final collection of topics takes what you've learned and turns you into a real Java programmer. You'll see how to take the power of object-oriented programming and write programs that can handle errors and exceptions, process strings and dates, format data, and work with arrays to manipulate data. This book is a companion to two other books also by Sharan focusing on APIs and advanced Java topics. What You'll Learn Write your first Java programs with an emphasis on learning object-oriented programming in Java Work with data types, operators, statements, classes and objects Handle exceptions, assertions, strings and dates, and object formatting Use regular expressions Work with arrays, interfaces, enums, and inheritance Take advantage of the new JShell REPL tool Who This Book Is For Those who are new to Java programming, who may have some or even no prior programming experience.

*Exploits the finer points of core and standard editions of Java 2 *Updated to include the final Java 2SE 5.0 (Tiger) release * *Ideal for experienced non-Java and Java programmers who need intermediate level book
Modern Java Recipes
Kafka Streams in Action
Arrays, Objects, Modules, JShell, and Regular

Expressions

No Country for Old Men

An Unofficial Guide

Lambda Expressions, Inner Classes, Threads, I/O, Collections, and Streams

Kick-start your modular programming journey and gear up for the future of Java development About This Book Master design patterns and best practices to build truly modular applications in Java 9 Upgrade your old Java code to Java 9 with ease Build and run a smooth functioning multi-module application. Who This Book Is For This book is written for Java developers who are interested in learning and understanding the techniques and best practices to build modular applications in Java. The book assumes some previous programming experience in Java 8 or earlier, familiarity with the basic Java types such as classes and interfaces, as well as experience in compiling and executing Java programs. What You Will Learn Get introduced to the concept of modules and modular programming by working on a fully modular Java application Build and configure your own Java 9 modules Work with multiple modules and establish inter-module dependencies Understand and use the principles of encapsulation, readability, and accessibility Use jlink to generate fully loaded custom runtime images like a pro Discover the best practices to help you write awesome modules that are a joy to use and maintain

Upgrade your old Java code to use the new Java 9 module system In Detail The Java 9 module system is an important addition to the language that affects the way we design, write, and organize code and libraries in Java. It provides a new way to achieve maintainable code by the encapsulation of Java types, as well as a way to write better libraries that have clear interfaces. Effectively using the module system requires an understanding of how modules work and what the best practices of creating modules are. This book will give you step-by-step instructions to create new modules as well as migrate code from earlier versions of Java to the Java 9 module system. You'll be working on a fully modular sample application and add features to it as you learn about Java modules. You'll learn how to create module definitions, setup inter-module dependencies, and use the built-in modules from the modular JDK. You will also learn about module resolution and how to use jlink to generate custom runtime images. We will end our journey by taking a look at the road ahead. You will learn some powerful best practices that will help you as you start building modular applications. You will also learn how to upgrade an existing Java 8 codebase to Java 9, handle issues with libraries, and how to test Java 9 applications. Style and Approach The book is a step-by-step guide to understanding Modularity and building a complete application using a modular

design.
The introduction of functional programming concepts in Java SE 8 was a drastic change for this venerable object-oriented language. Lambda expressions, method references, and streams fundamentally changed the idioms of the language, and many developers have been trying to catch up ever since. This cookbook will help. With more than 70 detailed recipes, author Ken Kousen shows you how to use the newest features of Java to solve a wide range of problems. For developers comfortable with previous Java versions, this guide covers nearly all of Java SE 8, and includes a chapter focused on changes coming in Java 9. Need to understand how functional idioms will change the way you write code? This cookbook—chock full of use cases—is for you. Recipes cover: The basics of lambda expressions and method references Interfaces in the java.util.function package Stream operations for transforming and filtering data Comparators and Collectors for sorting and converting streaming data Combining lambdas, method references, and streams Creating instances and extract values from Java's Optional type New I/O capabilities that support functional streams The Date-Time API that replaces the legacy Date and Calendar classes Mechanisms for experimenting with concurrency and parallelism
"Java 8 in Action is a clearly written guide to the new

features of Java 8. It begins with a practical introduction to lambdas, using real-world Java code. Next, it covers the new Streams API and shows how you can use it to make collection-based code radically easier to understand and maintain. It also explains other major Java 8 features including default methods, Optional, CompletableFuture, and the new Date and Time API ... This book/course is written for programmers familiar with Java and basic OO programming."-- Resource description page. Java 8 is a giant step forward for the Java language. In Project Lambda, Java gets a new closure syntax (lambda expressions), method-references, and default and static methods on interfaces. It manages to add many of the features of functional languages without losing the clarity and simplicity Java developers have come to expect. In addition, many of the existing Java core library classes have been enhanced with the new Streams API. This book will help you understand Java 8, including: Project Lambda, the new Date-Time API, Streams, default methods, the Nashorn Javascript engine, and more. Build large scale applications using Java modularity and Project Jigsaw
Effective Java
Pro Java Programming
Lambdas, streams, functional and reactive programming
On Java 8

Learning Reactive Programming with Java 8
The Definitive Guide to Lambda Expressions Mastering
Lambdas: Java Programming in a Multicore World
describes how the lambda-related features of Java SE 8
will enable Java to meet the challenges of next-
generation parallel hardware architectures. The book
explains how to write lambdas, and how to use them in
streams and in collection processing, providing code
examples throughout. You'll learn how to use lambda
expressions to take full advantage of performance
improvements provided by today's multicore hardware.
This Oracle Press book covers: Why lambdas were
needed, and how they will change Java programming
Syntax of lambda expressions The basic operation of
streams and pipelines Using collectors and reduction to
end pipelines Creating streams Spliterators, the fork/join
framework, and exceptions Examining stream
performance with microbenchmarking API evolution
using default methods
How functional techniques improve your Java programs
Mastering Concurrency Programming with Java 8
Real-time apps and microservices with the Kafka
Streams API
Pragmatic Unit Testing in Java 8 with JUnit