Java 8 The Fundamentals

Enhance your career options with this well-crafted object-oriented programming language that enjoys the support of an enormous ecosystem of tools and libraries Key Features Get introduced to Java, its features, and its ecosystem Understand how Java uses object-oriented programming Become an expert Java exception handler Book Description Since its inception, Java has stormed the programming world. Its features and functionalities provide developers with the tools needed to write robust cross-platform applications. Java Fundamentals introduces you to these tools and functionalities that will enable you to create Java programs. The book begins with an introduction to the language, its philosophy, and evolution over time, until the latest release. You'll learn how the javac/java tools work and what Java packages are - the way a Java program is usually organized. Once you are comfortable with this, you'll be introduced to advanced concepts of the language, such as control flow keywords. You'll explore object-oriented programming and the part it plays in making Java what it is. In the concluding chapters, you'll get to grips with classes, typecasting, and interfaces, and understand the use of data structures, arrays, strings, handling exceptions, and creating generics. By the end of this book, you will have learned to write programs, automate tasks, and follow advanced courses on algorithms and data structures or explore more advanced Java courses. What you will learn Create and run Java programs Use data types, data structures, and control flow in your code Implement best practices while creating objects Work with constructors and inheritance Understand advanced data structures to organize and store data Employ generics for stronger check-types during compilation Learn to handle exceptions in your code Who this book is for Java Fundamentals is designed for tech enthusiasts who are familiar with some programming languages and want a quick introduction to the most important principles of Java.

Beginning Java 8 Fundamentals provides a comprehensive approach to learning the Java programming language, especially the object-oriented fundamentals necessary at all levels of Java development. Author Kishori Sharan provides over 90 diagrams and 240 complete programs to help beginners and intermediate level programmers learn the topics faster. Starting with basic programming concepts, the author 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. 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 of Java'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.

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 10. 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 20. 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.

Learning a complex new language is no easy task especially when it s an object-oriented computer programming language like Java. You might think the problem is your brain. It seems to have a mind of its own, a mind that doesn't always want to take in the dry, technical stuff you're forced to study. The fact is your brain craves novelty. It's constantly searching, scanning, waiting for something unusual to happen. After all, that's the way it was built to help you stay alive. It takes all the routine, ordinary, dull stuff and filters it to the background so it won't interfere with your brain's real work--recording things that matter. How does your brain know what matters? It's like the creators of the Head First approach say, suppose you're out for a hike and a tiger jumps in front of you, what happens in your brain? Neurons fire. Emotions crank up. Chemicals surge. That's how your brain knows. And that's how your brain will learn Java. Head First Java combines puzzles, strong visuals, mysteries, and soul-searching interviews with famous Java objects to engage you in many different ways. It's fast, it's fun, and it's effective. And, despite its playful appearance, Head First Java is serious stuff: a complete introduction to object-oriented programming and Java. You'll learn everything from the fundamentals to advanced topics, including threads, network sockets, and distributed programming with RMI. And the new. second edition focuses on Java 5.0, the latest version of the Java language and development platform. Because Java 5.0 is a major update to the platform, with deep, code-level changes, even more careful study and implementation is required. So learning the Head First way is more important than ever. If you've read a Head First book, you know what to expect--a visually rich format designed for the way your brain works. If you haven't, you're in for a treat. You'll see why people say it's unlike any other Java book you've ever read. By exploiting how your brain works, Head First Java compresses the time it takes to learn and retain--complex information. Its unique approach not only shows you what you need to know about Java syntax, it teaches you to think like a Java programmer. If you want to be bored, buy some other book. But if you want to understand Java, this book's for you.

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.

Last Updated: 1st April 2020 Full coverage of all OCA Java Programmer 8 Certification Exam objectives with focus on fundamental concepts. OCA, Oracle Certified Associate Java SE 8 Programmer Fundamentals, 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. Written by expert with more than 15 years of industry experience, the book also helps you ace technical interviews by making you aware of things that technical managers focus on. The Java 8 exam requires you to learn new features of the language including functional programming. This book covers all such topics thoroughly. The also book includes coding exercises that will get you moving on "write a lot of code" front. It perfectly complements Enthuware mock exams. The book makes it easy to get your doubts cleared by including links to existing discussion on a particular topic. If the existing discussion doesn't address your doubt, you can see more clarification from the Author. IMPORTANT - The book DOES NOT include mock exams and should be used as a study guide before or while attempting Enthuware Mock Exams.

Focusing 100% on the exam objectives, OCA: Oracle Certified Associate Java SE 8 Programmer I Study Guide is designed to make you fully prepared for this challenging exam. Between Java 7 and Java 8, Oracle has made the biggest changes to the language in a long time. In particular, developers will need to learn functional programming for the first time to pass the certification. This comprehensive study guide covers all of the key topic areas Java programmers will need to be familiar with, including: Java basics Operators, conditionals and loops String and StringBuilder, Array and ArrayList Methods and encapsulation Inheriting abstract classes and interfaces Exceptions Class design Object-Oriented design principles and design patterns Generics and collections Functional programming Advanced strings and localization Exceptions and assertions IO and NIO Threads Concurrency JDBC With this complete Study Guide, Java developers will gain the information, understanding, and practice they need to pass the OCAJP 8 exam.

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.

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 Recipes offers solutions to common programming problems encountered while developing Java-based applications. Fully updated with the newest features and techniques available, Java 8 Recipes provides code examples involving Lambdas, embedded scripting with Nashorn, the new date-time API, stream support, functional interfaces, and much more. Especial emphasis is given to features such as lambdas that are newly introduced in Java 8. Content is presented in the popular problem-solution format: Look up the programming problem that you want to solve. Read the solution. Apply the solution directly in your own code. Problem solved! The problem-solution approach sets Java 8 Recipes apart. Java 8 Recipes is focused less on the language itself and more on what you can do with it that is useful. The book respects your time by always focusing on a task that you might want to perform using the language. Solutions come first. Explanations come later. You are free to crib from the book and apply the code examples directly to your own projects. Covers the newly-released Java 8, including a brand new chapter on lambdas Focuses especially on up-and-coming technologies such as Project Nashorn and Java FX 2.0 Respects your time by focusing on practical solutions you can implement in your own code

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.

A definitive guide to Java's most powerful features for enterprise and desktop application development.

Java Programming for Beginners is an introduction to Java programming, taking you through the Java syntax and the fundamentals of object-oriented programming. About This Book Learn the basics of Java programming in a step-by-step manner Simple, yet thorough steps that beginners can follow Teaches you transferable skills, such as flow control and object-oriented programming Who This Book Is For This book is for anyone wanting to start learning the Java language, whether you're a student, casual learner, or existing programmer looking to add a new language to your skillset. No previous experience of Java or programming in general is required. What You Will Learn Learn the core Java language for both Java 8 and Java 9 Set up your Java programming environment in the most efficient way Get to know the basic syntax of Java Understand object-oriented programming and the benefits that it can bring Familiarize yourself with the workings of some of Java's core classes Design and develop a basic GUI Use industry-standard XML for passing data between applications In Detail Java is an object-oriented programming language, and is one of the most widely accepted languages because of its design and programming features, particularly in its promise that you can write a program once and run it anywhere. Java Programming for Beginners is an excellent introduction to the world of Java programming, taking you through the basics of Java syntax and the complexities of object-oriented programming. You'll gain a full understanding of Java SE programming and will be able to write Java programs with

graphical user interfaces that run on PC, Mac, or Linux machines. This book is full of informative and entertaining content, challenging exercises, and dozens of code examples you can run and learn from. By reading this book, you'll move from understanding the data types in Java, through loops and conditionals, and on to functions, classes, and file handling. The book finishes with a look at GUI development and training on how to work with XML. The book takes an efficient route through the Java landscape, covering all of the core topics that a Java developer needs. Whether you're an absolute beginner to programming, or a seasoned programmer approaching an object-oriented language for the first time, Java Programming for Beginners delivers the focused training you need to become a Java developer. Style and approach This book takes a very hands-on approach, carefully building on lessons learned with snippets and tutorials to build real projects.

The upcoming Java 9 module system will affect existing applications and offer new ways of creating modular and maintainable applications. With this hands-on book, Java developers will learn not only about the joys of modularity, but also about the patterns needed to create truly modular and reliable applications. Authors Sander Mak and Paul Bakker teach you the concepts behind the Java 9 module system, along with the new tools it offers. You'll also gain learn how to modularize existing code and how to build new Java applications in a modular way. Understand Java 9 module system concepts Master the patterns and practices for building truly modular applications Migrate existing applications and libraries to Java 9 modules Use JDK 9 tools for modular development and migration

Computer programming with Java is easier than it looks. In just 24 lessons of one hour or less, you can learn to write computer programs in Java. Using a straightforward, step-by-step approach, popular author Rogers Cadenhead helps you master the skills and technology you need to create desktop and web programs, web services, an Android app, and even Minecraft mods in Java. Each lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Full-color figures and clear step-by-step instructions visually show you how to program with Java. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes, Tips, and Cautions provide related information, advice, and warnings. Learn how to… • Set up your Java programming environment • Write your first working program in just minutes • Control program decisions and behavior • Store and work with information • Build straightforward user interfaces • Create interactive web programs • Use threading to build more responsive programs • Read and write files and XML data • Master best practices for object-oriented programming • Use Java 9's new HTTP client • Use Java to create an Android app • Expand your skills with closures • Create Minecraft mods with Java Contents at a Glance Part I Getting Started 1 Becoming a Programmer 2 Writing Your First Program 3 Vacationing in Java 4 Understanding How Java Programs Work Part II Learning the Basics of Programming 5 Storing and Changing Information in a Program 6 Using Strings to Communicate 7 Using Conditional Tests to Make Decisions 8 Repeating an Action with Loops Part III Working with Information in New Ways 9 Storing Information with Arrays 10 Creating Your First Object 11 Describing What Your Object is Like 12 Making the Most of Existing Objects Part IV Moving into Advanced Topics 13 Storing Objects in Data Structures 14 Handling Errors in a Program 15 Creating a Threaded Program 16 Using Inner Classes and Closures Part V

Programming a Graphical User Interface 17 Building a Simple User Interface in Swing 18 Laying Out a User Interface 19 Responding to User Input Part VI Writing Internet Applications 20 Reading and Writing Files 21 Using Java 9's New HTTP Client 22 Creating Java2D Graphics 23 Creating Minecraft Mods with Java 24 Writing Android Apps Appendixes A Using the NetBeans Integrated Development Environment B Where to Go from Here Java Resources C This Book's Web Site D Fixing a Problem with the Android Studio Emulator

Core Java® has long been recognized as the leading, no-nonsense tutorial and reference for experienced programmers who want to write robust Java code for real-world applications. Now, Core Java®, Volume I–Fundamentals, Tenth Edition, has been extensively updated to reflect the most eagerly awaited and innovative version of Java in years: Java SE 8. Rewritten and reorganized to illuminate new Java SE 8 features, idioms, and best practices, it contains hundreds of example programs–all carefully crafted for easy understanding and practical applicability. Writing for serious programmers solving real-world problems, Cay Horstmann helps you achieve a deep understanding of the Java language and library. In this first volume of the two-volume work, Horstmann focuses on fundamental language concepts and the foundations of modern user interface programming. You'll find in-depth coverage of topics ranging from Java object-oriented programming to generics, collections, lambda expressions, Swing UI design, and the latest approaches to concurrency and functional programming. This guide will help you Leverage your existing programming knowledge to quickly master core Java syntax Understand how encapsulation, classes, and inheritance work in Java Master interfaces, inner classes, and lambda expressions for functional programming Improve program robustness with exception handling and effective debugging Write safer, more readable programs with generics and strong typing Use pre-built collections to collect multiple objects for later retrieval Master concurrent programming techniques from the ground up Build modern cross-platform GUIs with standard Swing components Deploy configurable applications and applets, and deliver them across the Internet Simplify concurrency and enhance performance with new functional techniques If you're an experienced programmer moving to Java SE 8, Core Java®, Tenth Edition, will be your reliable, practical companion–now and for many years to come. Look for the companion volume, Core Java®, Volume II–Advanced Features, Tenth Edition (ISBN-13: 978-0-13-417729-8), for coverage of Java 8 streams, input and output, XML, databases, annotations, and other advanced topics. Register your product or convenient access to downloads, updates, and corrections as they become available. See inside the book for information.

Last Updated: 2nd Mar 2020 Build 28 Full coverage of all OCA Java Programmer 8 Certification Exam objectives with focus on fundamental concepts. OCA, Oracle Certified Associate Java SE 8 Programmer Fundamentals, 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. Written by expert with more than 15 years of industry experience, the book also helps you ace technical interviews by making you aware of things that technical managers focus on. The Java 8 exam requires you to learn new features of the language including functional programming. This book covers all such topics thoroughly. The also book includes coding exercises that will get you moving on "write a lot of code" front. It perfectly complements Enthuware mock exams. The book makes it easy to get your doubts

cleared by including links to existing discussion on a particular topic. If the existing discussion doesn't address your doubt, you can see more clarification from the Author. IMPORTANT - The book DOES NOT include mock exams and should be used as a study guide before or while attempting Enthuware Mock Exams.

"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.

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.

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.

Beginning Java 8 FundamentalsLanguage Syntax, Arrays, Data Types, Objects, and Regular ExpressionsApress

Designed as a Java-based textbook for beginning programmers, this book uses game programming as a central pedagogical tool to improve student engagement, learning outcomes, and retention. The new edition includes updating the GUI interface chapters from Swing based to FX based programs. The game programming is incorporated into the text in a

way that does not compromise the amount of material traditionally covered in a basic programming or advanced Java programming course, and permits instructors who are not familiar with game programming and computer graphic concepts to realize the pedagogical advantages of using game programming. The book assumes the reader has no prior programming experience. The companion files are available to eBook customers by emailing the publisher info@merclearning.com with proof of purchase. FEATURES: Features content in compliance with the latest ACM/IEEE computer science curriculum guidelines Introduces the basic programming concepts such as strings, loops, arrays, graphics, functions, classes, etc Includes updating the GUI interface chapters (Chapters 11 and 12) from Swing based to FX based Contains material on programming of mobile applications and several simulations that graphically depict unseen runtime processes 4 color throughout with game demos on the companion files Instructor’s resources available upon adoption

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)

In arenas ranging from enterprise development to Android app programming, Java remains one of the world's most popular programming languages. Sams Teach Yourself Java in 21 Days helps the serious learner gain true mastery over the new Java 8. In this book's straightforward, step-by-step approach, each lesson builds on everything that's come before, helping readers learn Java's core features and techniques from the ground up. Friendly, accessible, and conversational, Sams Teach Yourself Java in 21 Days offers a practical grounding in the language, without ever becoming overwhelming or intimidating. Week 1 introduces the basic building blocks of the Java programming language: keywords, operators, class and object definitions, packages, interfaces, exceptions, and threads. Week 2 covers the Swing graphical user interface class libraries and the important classes that support data structures, string handling, dates and times. Week 3 ventures into the hottest areas of Java programming: web services, Java servlets, network programming, database programming and Android development.

54+ hours of video instruction. Overview The professional programmer's Deitel® video guide to JavaTM SE 7 and SE 8 development with the powerful JavaTM platform Description Written for programmers with a background in high-level language programming, this LiveLesson applies the Deitel signature live-code approach to teaching programming and explores the JavaTM language and JavaTM APIs in depth. The LiveLesson presents concepts in the context of fully tested programs, not code fragments. The LiveLesson features hundreds of complete JavaTM programs with thousands of lines of proven JavaTM code, and hundreds of tips that will help you build robust applications. The source code repository for this LiveLesson can be found at www.informit.com/title/9780133489347 . The code for the JPMS section can be

found at http://ptgmedia.pearsoncmg.com/imprint_downloads/informit/downloads/jpmsfilesforjavall.zip . Paul J. Deitel , CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of MIT, where he studied Information Technology. He holds the Sun (now Oracle) Certified Java Programmer and Certified Java Developer certifications, and is an Oracle Java Champion. Through Deitel & Associates, Inc., he has delivered Java, C#, Visual Basic, C++, C and Internet programming courses to industry clients, including Cisco, IBM, Sun Micro systems, Dell, Siemens, Lucent Technologies, Fidelity, NASA at the Kennedy Space Center, the National Severe Storm Laboratory, White Sands Missile Range, Rogue Wave Software, Boeing, SunGard Higher Education, Stratus, Cambridge Technology Partners, One Wave, Hyperion Software, Adra Systems, Entergy, CableData Systems, Nortel Networks, Puma, iRobot, Invensys and many more. He and his co-author, Dr. Harvey M. Deitel, are the world's best-selling programming-language textbook/professional book authors. Skill Level Beginner-to-Intermediate What you Will Learn Start with an introduction to JavaTM using an early classes and objects approach, then rapidly move on to more advanced topics, including GUI, graphics, exception handling, lambdas, streams, functional interfaces, object serialization, concurrency, generics, generic collections, JDBCTM and more. You'll enjoy Deitels' classic treatment of object-oriented programming and the object-oriented design ATM case study, including a complete JavaTM implementation. And new to this LiveLesson is detailed coverage of JShell, Java 9's REPL (Read-Eval-Print-Loop) for interactive Java. Whe...

The Definitive Java Programming Guide In Java: The Complete Reference, Eighth Edition, bestselling programming author Herb Schildt shows you everything you need to develop, compile, debug, and run Java programs. Updated for Java Platform, Standard Edition 7 (Java SE 7), this comprehensive volume covers the entire Java language, including its syntax, keywords, and fundamental programming principles. You'll also find information on key elements of the Java API library. JavaBeans, servlets, applets, and Swing are examined and real-world examples demonstrate Java in action. In addition, new Java SE 7 features such as try-with-resources, strings in switch, type inference with the diamond operator, NIO.2, and the Fork/Join Framework are discussed in detail. Coverage includes: Data types and operators Control statements Classes and objects Constructors and methods Method overloading and overriding Interfaces and packages Inheritance Exception handling Generics Autoboxing Enumerations Annotations The try-with-resources statement Varargs Multithreading The I/O classes Networking The Collections Framework Applets and servlets JavaBeans AWT and Swing The Concurrent API Much, much more While Java texts are plentiful, it's difficult to find one that takes a real-world approach, and encourages novice programmers to build on their Java skills through practical exercise. Written by an expert with 19 experience teaching computer programming, Java Programming Fundamentals presents object-

oriented programming by employing examples taken
Essential Java Skills--Made Easy! What Special – In this book I covered and explained several topics of latest Java 8 Features in detail for Developers & Fresher's, Topics Like– Lambdas. || Java 8 Functional interface, || Stream and Time API in Java 8. This Java book doesn't require previous programming experience. However, if you come from a C or C++ programming background, then you will be able to learn faster. Learn the all basics and advanced features of Java programming in no time from Bestseller Java Programming Author Harry. H. Chaudhary (More than 1,67,000 Books Sold !). This Java Guide, starts with the basics and Leads to Advance features of Java in detail with thousands of Java Codes and new features of Java 8 like Lambdas. Java 8 Functional interface, || Stream and Time API in Java 8. , I promise this book will make you expert level champion of java. Anyone can learn java through this book at expert level. The main objective of this java book is not to give you just Java Programming Knowledge, I have followed a pattern of improving the question solution of thousands of Codes with clear theory explanations with different Java complexities for each java topic problem, and you will find multiple solutions for complex java problems. Engineering Students and fresh developers can also use this book. This book covers common core syllabus for all Computer Science Professional Degrees If you are really serious then go ahead and make your day with this ultimate java book. First Part- Teach you how to compile and run a Java program, shows you everything you need to develop, compile, debug, and run Java programs. And then discusses the keywords, syntax, and constructs that form the core of the Java language. After that it leads you to advanced features of java, including multithreaded programming and Applets. Learning a new language is no easy task especially when it's an oop's programming language like Java. You might think the problem is your brain. It seems to have a mind of its own, a mind that doesn't always want to take in the dry, technical stuff you're forced to study. The fact is your brain craves novelty. This Java Book is very serious java stuff: A complete introduction to Java. You'll learn everything from the fundamentals to advanced topics, if you've read this book, you know what to expect--a visually rich format designed for the way your brain works. To use this book does not require any previous programming experience. However, if you come from a C/C++ background, then you will be able to advance a bit more rapidly. As most readers will know, Java is similar, in form and spirit, to C/C++. Thus, knowledge of those languages helps, but is not necessary. Even if you have never programmed before, you can learn to program in Java using this book. Inside Contents (Chapters): 1. (Overview of Java) 2.(Java Language) 3.(Control Statements) 4.(Scanner class, Arrays & Command Line Args) 5.(Class & Objects in Java) 6.(Inheritance in Java) 7.(Object oriented programming) 8.(Packages in Java) 9.(Interface in Java) 10.(String and StringBuffer) 11.(Exception Handling) 12.(Multi-Threaded Programming) 13.(Modifiers/Visibility modes) 14.(Wrapper Class) 15.(Input/Output in Java) 16.(Applet Fundamentals)

17.(Abstract Windows Toolkit)(AWT) 18.(Introduction To AWT Events) 19.(Painting in AWT) 20.(java.lang.Object Class) 21.(Collection Framework) PART - II (Java 8 Features for Developers) 22. Java 8 Features for Developers – Lambdas. 23. Java 8 Functional interface,Stream & Time API. 24. Key Features that Make Java More Secure than Other Languages.

The book is written in such a way that learners without any background in programming are able to follow and understand it entirely. It discusses the concepts of Java in a simple and straightforward language with a clear cut explanation, without beating around the bush.On reading the book, readers are able to write simple programs on their own, as this is the first requirement to become a Java Programmer. The book provides ample solved programs which could be used by the students not only in their examinations but also to remove the fear of programming from their minds.After reading the book, the students gain the confidence to apply for a software development company, face the interview board and come out successful. The book covers sample interview questions which were asked in various interviews. It helps students to prepare for their future careers.

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.

Currently used at many colleges, universities, and high schools, this hands-on introduction to computer science is ideal for people with little or no programming experience. The goal of this concise book is not just to teach you Java, but to help you think like a computer scientist. You'll learn how to program—a useful skill by itself—but you'll also discover how to use programming as a means to an

end. Authors Allen Downey and Chris Mayfield start with the most basic concepts and gradually move into topics that are more complex, such as recursion and object-oriented programming. Each brief chapter covers the material for one week of a college course and includes exercises to help you practice what you've learned. Learn one concept at a time: tackle complex topics in a series of small steps with examples Understand how to formulate problems, think creatively about solutions, and write programs clearly and accurately Determine which development techniques work best for you, and practice the important skill of debugging Learn relationships among input and output, decisions and loops, classes and methods, strings and arrays Work on exercises involving word games, graphics, puzzles, and playing cards

The #1 Guide for Serious Programmers: Fully Updated for Java SE 9, 10 & 11 Cay Horstmann's Core Java, Volume I—Fundamentals, Eleventh Edition, is the definitive guide to writing robust, maintainable code with the Java SE 9, 10, and 11 language and libraries. Horstmann writes for serious programmers who use Java in production projects, and need a deep, practical understanding of the language and API. Throughout, he delivers what you need most: hundreds of real (non-toy) examples revealing the most powerful, effective ways to get the job done. Updated examples reflect the new var keyword and take advantage of improvements in the Java API. You'll learn how to use JShell's new Read-Eval-Print Loop (REPL) for more rapid and exploratory development, and apply new features of the APIs for streams, input/output, processes, and concurrency. In this first of two volumes, Horstmann offers in-depth coverage of fundamental Java and UI programming, including object-oriented programming, generics, collections, lambda expressions, Swing design, concurrency, and functional programming. If you're an experienced programmer moving to Java SE 9, 10, or 11, there's no better source for expert insight, solutions, and code. Master foundational techniques, idioms, and best practices for writing superior Java code Efficiently implement encapsulation and inheritance Use sound principles of object-oriented design Leverage the full power of objects with interfaces, lambda expressions, and inner classes Harden programs through effective exception handling and debugging Write safer, more reusable code with generic programming Improve performance and efficiency with Java's standard collections Build cross-platform GUIs with the Swing toolkit Fully utilize multicore processors with Java's improved concurrency See Core Java, Volume II—Advanced Features, Eleventh Edition (ISBN-13: 978-0-13-516631-4), for expert coverage of Java 9, 10, and 11 enterprise features, the module system, annotations, networking, security, and advanced UI programming. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Offers an updated tutorial for beginners explaining how to use Java to incorporate games, animation, and special effects into Web pages.

The Java® Tutorial, Fifth Edition, is based on Release 7 of the Java Platform

Standard Edition. This revised and updated edition introduces the new features added to the platform, including a section on NIO.2, the new file I/O API, and information on migrating legacy code to the new API. The deployment coverage has also been expanded, with new chapters such as “Doing More with Rich Internet Applications” and “Deployment in Depth,” and a section on the fork/join feature has been added to the chapter on concurrency. Information reflecting Project Coin developments, including the new try-with-resources statement, the ability to catch more than one type of exception with a single exception handler, support for binary literals, and diamond syntax, which results in cleaner generics code, has been added where appropriate. The chapters covering generics, Java Web Start, and applets have also been updated. In addition, if you plan to take one of the Java SE 7 certification exams, this guide can help. A special appendix, “Preparing for Java Programming Language Certification,” lists the three exams available, details the items covered on each exam, and provides cross-references to where more information about each topic appears in the text. All of the material has been thoroughly reviewed by members of Oracle Java engineering to ensure that the information is accurate and up to date.
Reduce development time by organizing your programs as chains of functional interfaces and see that the advantages of using functional interfaces include the flexibility and power of inlined functional chains and reuse of functional methods utilized throughout the Java API. You’ll see how complex logical expressions can be reduced to chains of predicates and how chains of comparators can be used to sort data by several criteria in order. Other examples include streams that utilize functional interfaces to filter, sort, transform, and perform calculations on data; CompletableFutures that use functional interfaces to create cascading and parallel execution threads; and JavaFX programs that use functional interfaces to monitor the data backed by their graphical components. Each chapter contains a complete programming project: the Discount Dave project shows you how to qualify car customers by organizing questions as a list of predicates; the Real Estate Broker project shows you how to use chains of comparators to filter and sort homes according to customer priorities; the Dave's Part Inventory project shows you how to query and write reports from an inventory database using stream operations; and the Sentence Builder project shows you how to correct a sentence by implementing each grammar rule as a separate link in a future chain. Functional Interfaces in Java will help you quickly develop powerful and reliable programs that utilize functional interfaces to implement logic and calculations. What You Will Learn Use the functional interfaces in the java.util.function package to perform conditional logic, transform and generate data, and perform calculations Filter and sort data by several criteria using comparators Process collections and filter, sort, transform, and reduce stream elements with functional interfaces Write cascading and parallel execution threads Who This Book Is For Computer science student or a professional Java programmer. This work is a rigorous discussion of the application of functional

interfaces, so prerequisites for this text include basic Java programming and object-oriented Java programming.

Full coverage of all OCA Java Programmer 8 exam objectives with focus on fundamental concepts. OCA, Oracle Certified Associate Java SE 8 Programmer Fundamentals, 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. Written by expert with more than 15 years of industry experience, the book also helps you ace technical interviews by making you aware of things that technical managers focus on. The Java 8 exam requires you to learn new features of the language including functional programming. This book covers all such topics thoroughly. The also book includes coding exercises that will get you moving on "write a lot of code" front. It perfectly complements Enthuware mock exams.The book makes it easy to get your doubts cleared by including links to existing discussion on a particular topic. If the existing discussion doesn't address your doubt, you can see more clarification from the Author.IMPORTANT - The book DOES NOT include mock exams and should be used as a study guide before or while attempting Enthuware Mock Exams.

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.

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

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

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