

## Javafx 9 By Example Carl Dea Springer

The open source JavaFX platform offers a Java-based approach to rich Internet application (RIA) development—an alternative to Adobe Flash/Flex and Microsoft Silverlight. At over 100 million downloads, JavaFX is poised to be a significant player. Written by a JavaFX engineer and developer, this book is one of the first on the JavaFX platform to give you the following: The fundamentals of JavaFX scripting on desktop and mobile platforms Examples of RIAs using JavaFX Graphics Media and animation using JavaFX See how JavaFX gives you dynamic Java effects in your RIA development.

Learn JavaFX 8 shows you how to start developing rich-client desktop applications using your Java skills and provides comprehensive coverage of JavaFX 8's features. Each chapter starts with an introduction to the topic at hand, followed by a step-by-step discussion of the topic with small snippets of code. The book contains numerous figures aiding readers in visualizing the GUI that is built at every step in the discussion. The book starts with an introduction to JavaFX and its history. It lists the system requirements and the steps to start developing JavaFX applications. It shows you how to create a Hello World application in JavaFX, explaining every line of code in the process. Later in the book, author Kishori Sharan discusses advanced topics such as 2D and 3D graphics, charts, FXML, advanced controls, and printing. Some of the advanced controls such as TableView, TreeTableView and WebView are covered at length in separate chapters. This book provides complete and comprehensive coverage of JavaFX 8 features; uses an incremental approach to teach JavaFX, assuming no prior GUI knowledge; includes code snippets, complete programs, and pictures; covers MVC patterns using JavaFX; and covers advanced topics such as FXML, effects, transformations, charts, images, canvas, audio and video, DnD, and more. So, after reading and using this book, you'll come away with a comprehensive introduction to the JavaFX APIs as found in the new Java 8 platform.

This book constitutes the refereed proceedings of the First International Conference on Human Factors in Computing and Informatics, SouthCHI 2013, held in Maribor, Slovenia, in July 2013. SouthCHI is the successor of the USAB Conference series and promotes all aspects of human-computer interaction. The 38 revised full papers presented together with 12 short papers, 4 posters and 3 doctoral thesis papers were carefully reviewed and selected from 169 submissions. The papers are organized in the following topical sections: measurement and usability evaluation; usability evaluation - medical environments; accessibility methodologies; game-based methodologies; Web-based systems and attribution research; virtual environments; design culture for ageing well: designing for "situated elderliness"; input devices; adaptive systems and intelligent agents; and assessing the state of HCI research and practice in South-Eastern Europe.

This text is intended for use in the Java programming course Tony Gaddis ' s accessible, step-by-step presentation helps beginning students understand the important details necessary to become skilled programmers at an introductory level. Gaddis motivates the study of both programming skills and the Java programming language by presenting all the details needed to understand the “ how ” and the “ why ” —but never losing sight of the fact that most beginners struggle with this material. His approach is both gradual and highly accessible, ensuring that students understand the logic behind developing high-quality programs. In Starting Out with Java: Early Objects, Gaddis looks at objects—the fundamentals of classes and methods—before covering procedural programming. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, and an abundance of exercises appear in every chapter. Teaching and Learning Experience This program presents a better teaching and learning experience—for you and your students. Enhance Learning with the Gaddis Approach: Gaddis ' s accessible approach features clear and easy-to-read code listings, concise real-world examples, and exercises in every chapter. Keep Your Course Current: Content is refreshed to provide the most up-to-date information on new technologies for your course. Support Instructors and Students: Student and instructor resources are available to expand on the topics presented in the text.

Cross-Platform Mobile and Cloud Development

Java 7 Recipes

JavaFX Essentials

Rich-client Applications for Any Platform

Clean Architecture

JavaFX Rich Client Programming on the NetBeans Platform

*Java 7 Recipes offers solutions to common programming problems encountered every day while developing Java-based applications. Fully updated with the newest features and techniques available, Java 7 Recipes provides code examples involving Servlets, Java FX 2.0, XML, Java Swing, and much more. 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 7 Recipes apart from other books on the topic. Java 7 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 all-new release of Java: Java 7 Focuses especially on up-and-coming technologies such as Java FX 2.0 Respects your time by focusing on practical solutions you can implement in your own code*

*JavaFX 8: Introduction by Example shows you how to use your existing Java skills to create graphically exciting client applications with the JavaFX 8 platform. The book is a new and much improved edition of JavaFX 2.0: Introduction by Example, taking you through a series of engaging, fun-to-work examples that bring you up to speed on the major facets of the platform. It will help you to create applications that look good, are fun to use, and that take advantage of the medium to present data of all types in ways that engage the user and lead to increased productivity. Entirely example-based, JavaFX 8: Introduction by Example begins with the fundamentals of installing the software and creating a simple interface. From there, you'll move in progressive steps through the process of developing applications using JavaFX's standard drawing primitives. You'll then explore images, animations, media, and web. This new edition incorporates the changes resulting from the switch to Java 8 SDK. It covers advanced topics such as custom controls, JavaFX 3D, gesture devices, and embedded systems. Best of all, the book is full of working code that you can adapt and extend to all your future projects. Entirely example-based Filled with fun and practical code examples Covers all that's new in Java 8 relating to JavaFX such as Lambda expressions and Streams Covers gesture devices, 3D display, embedded systems, and other advanced topics*

*Create media-rich client applications using JavaFX 9 and the Java 9 platform. Learn to create GUI-based applications for mobile devices, desktop PCs, and even the web. Incorporate media such as audio and video into your applications. Interface with hardware devices such as Arduino and Leap Motion. Respond to gesture control through devices such as the Leap Motion Controller. Take advantage of the new HTTP2 API to make RESTful web requests and WebSockets calls. New to this edition are examples of creating stylized text and loading custom fonts, guidance for working with Scene Builder to create visual layouts, and new content*

*on developing iOS and Android applications using Gluon mobile. The book also covers advanced topics such as custom controls, JavaFX 3D, gesture devices, printing, and animation. Best of all, the book is full of working code that you can adapt and extend to all your future projects. Is your goal to develop visually exciting applications in the Java language? Then this is the book you want at your side. JavaFX 9 by Example is chock-full of engaging, fun-to-work examples that bring you up to speed on the major facets of JavaFX 9. You'll learn to create applications that look good, are fun to use, and that take advantage of the medium to present data of all types in ways that engage the user and lead to increased productivity. The book: Has been updated with new content on modular development, new APIs, and an example using the Scene Builder tool Is filled with fun and practical code examples that you can modify and drop into your own projects Includes an example using Arduino and an accelerometer sensor to track motion in 3D Helps you create JavaFX applications for iOS and Android devices What You'll Learn Work with touch-based interfaces Interpret gesture-based events Use shapes, color, text, and UI controls to create a simple click and point game Add audio and video to your projects Utilize JavaFX 3D Create custom controls using CSS, SVG, and Canvas APIs Organize code into modules using Java Platform Module System (Project Jigsaw) Who This Book Is For Java developers developing visual and media-rich applications to run on PCs, phones, tablets, Arduino controllers, and more. This includes developers tasked with creating visualizations of data from statistical analysis and from sensor networks. Any developer wanting to develop a polished user-interface in Java will find much to like in this book.*

*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.*

*Build on your Basic Knowledge of HTML5 and JavaScript to Create Substantial HTML5 Applications*

*Spring Boot: Up and Running*

*First International Conference, SouthCHI 2013, Maribor, Slovenia, July 1-3, 2013, Proceedings*

*Core Java for the Impatient*

*Java 9 Modularity*

*Java*

**Master Spring basics and core topics, and share the authors' insights and real-world experiences with remoting, Hibernate, and EJB. Beyond the basics, you'll learn how to leverage the Spring Framework to build the various tiers and parts of an enterprise Java application: transactions, web and presentation tiers, deployment, and much more. A full sample application allows you to apply many of the technologies and techniques covered in Pro Spring 5 and see how they work together. This book updates the perennial bestseller with the latest that the new Spring Framework 5 has to offer. Now in its fifth edition, this popular title is by far the most comprehensive and definitive treatment of Spring available. It covers the new functional web framework and interoperability with Java 9. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom. The agile, lightweight, open-source Spring Framework continues to be the de facto leading enterprise Java application development framework for today's Java programmers and developers. It works with other leading open-source, agile, and lightweight Java technologies such as Hibernate, Groovy, MyBatis, and more. Spring now works with Java EE and JPA 2 as well. What You'll Learn Discover what's new in Spring Framework 5 Use the Spring Framework with Java 9 Master data access and transactions Work with the new functional web framework Create microservices and other web services Who This Book Is For Experienced Java and enterprise Java developers and programmers. Some experience with Spring highly recommended.**

**Build on your basic knowledge of HTML5 and JavaScript to create substantial HTML5 applications. Through the many interesting projects you can create in this book, you'll develop HTML5 skills for future projects, and extend the core skills you may have learned with its companion book, The Essential Guide to HTML5. HTML5 and JavaScript Projects is fully updated as a second edition and covers important programming techniques and HTML, CSS, and JavaScript features to help you build projects with images, animation, video, audio and line drawings. You'll learn how to build games, quizzes and other interactive projects; incorporate the use of the Google Maps API and localStorage; and address the challenges of Responsive Design and Accessibility. Each project starts out with a description of the example's operation, often with full-color illustrations. You'll then review the HTML5 and JavaScript concepts that relate to the project followed by a step-by-step explanation of the programming used. Tables are used to show the relationship of functions and provide comments for each line of code so that you can easily apply the techniques to your own HTML5 projects. What You'll Learn Enhance your HTML5 and JavaScript programming skills. Poduce applications combining Canvas drawings, photos, and videos Incorporate Google Maps and geolocation into your projects Build applications requiring persistent data, storing the information locally or on a database on the server Who This Book Is For Developers who have some knowledge of programming and want to build more substantial applications by combining basic features and combining JavaScript with other technologies.**

**Build enhanced visual experiences and design and deploy modern, easy-to-maintain, client applications across a variety of platforms. This book will show you how these applications can take advantage of the latest user interface components, 3D technology, and cloud services to create immersive visualizations and allow high-value data manipulation. The Definitive Guide to Modern Java Clients with JavaFX is a professional reference for building Java applications for desktop, mobile, and embedded in the Cloud age. It offers end-to-end coverage of the latest features in JavaFX and Java 13. After reading this book, you will be equipped to upgrade legacy client applications, develop cross-platform applications in Java, and build enhanced desktop and mobile native clients. What You Will Learn**Create modern client applications in Java using the latest JavaFX and Java 13**Build enterprise clients that will enable integration with existing cloud services Use advanced visualization and 3D features**Deploy on desktop, mobile, and embedded devices **Who This Book Is For** Professional Java developers who are interested in learning the latest client Java development techniques to fill out their skillset. **This easy-to-follow textbook teaches Java programming from first principles, as well as covering design and testing methodologies. The text is divided into two parts. Each part supports a one-semester module, the first part addressing fundamental programming concepts, and the second part building on this foundation, teaching the skills required to develop more advanced applications. This fully updated and greatly enhanced fourth edition covers the key developments introduced in Java 8, including material on JavaFX, lambda expressions and the Stream API. Topics and features:** begins by introducing fundamental programming concepts such as declaration of variables, control structures, methods and arrays; goes on to cover the fundamental object-oriented concepts of classes and objects, inheritance and polymorphism; uses JavaFX throughout for constructing event-driven graphical interfaces; includes advanced topics such as interfaces and lambda expressions, generics, collection classes and exceptions; explains file-handling techniques, packages, multi-threaded programs, socket programming, remote database access and processing collections using streams; includes self-test questions and programming exercises at the end of each chapter, as well as two illuminating case studies; provides additional resources at its associated website (simply go to [springer.com](http://springer.com) and search for "Java in Two Semesters"), including a guide on how to install and use the NetBeans™ Java IDE. Offering a gentle introduction to the field, assuming no prior knowledge of the subject, Java in Two Semesters is the ideal companion to undergraduate modules in software development or programming.

**JavaFX**

**JavaFX 9 by Example**

**Functional Kotlin**

**HTML5 and JavaScript Projects**

**Complete Guide to Test Automation**

**Starting Out with Java: Early Objects PDF eBook, Global Edition**

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

The release of Java SE 8 introduced significant enhancements that impact the Core Java technologies and APIs at the heart of the Java platform. Many old Java idioms are no longer required and new features like lambda expressions will increase programmer productivity, but navigating these changes can be challenging. Core Java for the Impatient is a complete but concise guide to Java SE 8. Written by Cay Horstmann--the author of Java SE 8 for the Really Impatient and Core Java(tm), the classic, two-volume introduction to the Java language--this indispensable new tutorial offers a faster, easier pathway for learning the language and libraries. Given the size of the language and the scope of the new features introduced in Java SE 8, there's plenty of material to cover, but it's presented in small chunks organized for quick access and easy understanding. If you're an experienced programmer, Horstmann's practical insights and sample code will help you quickly take advantage of lambda expressions (closures), streams, and other Java language and platform improvements. Horstmann covers everything developers need to know about modern Java, including Crisp and effective coverage of lambda expressions, enabling you to express actions with a concise syntax A thorough introduction to the new streams API, which makes working with data far more flexible and efficient A treatment of concurrent programming that encourages you to design your programs in terms of cooperating tasks instead of low-level threads and locks Up-to-date coverage of new libraries like Date and Time Other new features that will be especially valuable for server-side or mobile programmers Whether you are just getting started with modern Java or are an experienced developer, this guide will be invaluable for anyone who wants to write tomorrow's most robust, efficient, and secure Java code.

Use the JavaFX platform to create rich-client Java applications and discover how you can use this powerful Java-based UI platform, which is capable of handling large-scale data-driven business applications for PC as well as mobile and embedded devices. The expert authors cover the new more modular JavaFX 9 APIs, development tools, and best practices and provide code examples that explore the exciting new features provided with JavaFX 9, part of Oracle's new Java 9 release. Pro JavaFX 9: A Definitive Guide to Building Desktop, Mobile, and Embedded Java Clients also contains engaging tutorials that cover virtually every facet of JavaFX development and reference materials on JavaFX that augment the JavaFX API documentation. What You'll Learn Create a user interface in JavaFX Use SceneBuilder to create a

user interface Build dynamic UI layouts in JavaFX and using the JavaFX UI controls Create charts in JavaFX Leverage JavaFX languages and markup Who This Book Is For Experienced Java programmers looking to learn and leverage JavaFX 9 for rich client-side Java development.

This open access book provides a comprehensive overview of the application of the newest laser and microscope/ophthalmoscope technology in the field of high resolution imaging in microscopy and ophthalmology. Starting by describing High-Resolution 3D Light Microscopy with STED and RESOLFT, the book goes on to cover retinal and anterior segment imaging and image-guided treatment and also discusses the development of adaptive optics in vision science and ophthalmology. Using an interdisciplinary approach, the reader will learn about the latest developments and most up to date technology in the field and how these translate to a medical setting. High Resolution Imaging in Microscopy and Ophthalmology – New Frontiers in Biomedical Optics has been written by leading experts in the field and offers insights on engineering, biology, and medicine, thus being a valuable addition for scientists, engineers, and clinicians with technical and medical interest who would like to understand the equipment, the applications and the medical/biological background. Lastly, this book is dedicated to the memory of Dr. Gerhard Zinser, co-founder of Heidelberg Engineering GmbH, a scientist, a husband, a brother, a colleague, and a friend.

Java 8 Recipes

An Introduction to Problem Solving and Programming

Patterns and Practices for Developing Maintainable Applications

Core Java, Volume II--Advanced Features

Pro Spring 5

Beginning JavaFX

Vocabulary in Use Pre-intermediate and Intermediate is a vocabulary book for intermediate learners of English, primarily designed as a self-study reference and practice book, but which can also be used for classroom work. In its style and format it is similar to its upper intermediate and advanced equivalent, English Vocabulary in Use. - 100 easy-to-use units: over 2,500 vocabulary items in a wide range of topic areas are presented, contextualise and explained and explained on left-hand pages with a variety of follow-up activities on right-hand pages. - Helps to build on and expand existing vocabulary. - Suggests tips and techniques for good learning habits. - Designed to be flexible: can be used both for self-study and in class. - Provides a comprehensive key with not only answers to the exercises but also more comments on how the language is used. - Includes a detailed index with phonetic transcriptions.

The #1 Guide to Advanced Java Programming, Fully Updated for Java 11 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 II—Advanced Features, Eleventh Edition, has been updated for Java 11, with up-to-date coverage of advanced UI and enterprise programming, networking, security, and Java's powerful new module system. Cay S. Horstmann explores sophisticated new language and library features with the depth and completeness that readers expect from Core Java. He demonstrates how to use these features to build professional-quality applications, using thoroughly tested examples that reflect modern Java style and best practices, including modularization. Horstmann's examples are carefully crafted for easy understanding and maximum practical value, so you can consistently use them to jump-start your own code. Master advanced techniques, idioms, and best practices for writing superior Java code Take full advantage of modern Java I/O APIs, object serialization, and regular expressions Efficiently connect to network services, implement network clients and servers, and harvest web data Query databases and manage database connections with the latest version of JDBC Simplify all aspects of date and time programming with the Java Date and Time API Write internationalized programs that localize dates, times, numbers, text, and GUIs Process code in three powerful ways: the scripting API, compiler API, and annotation processing Learn how to migrate legacy code to the Java Platform Module System Leverage the modern Java security features most valuable to application programmers Program advanced client-side user interfaces, and generate images on the server Use JNI to interoperate with native C code See Core Java, Volume I—Fundamentals, Eleventh Edition (ISBN-13: 978-0-13-516630-7), for expert coverage of fundamental Java and UI programming, including objects, generics, collections, lambda expressions, Swing design, concurrency, and functional programming. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Develop cross-platform, feature-rich JavaFX GUI applications with expert instruction from Java guru Herb Schildt Introducing JavaFX 8

Programming provides a fast-paced introduction to JavaFX, Java's next-generation GUI programming tool In this easy-to-read guide from Oracle Press, Java guru Herb Schildt presents the key topics and concepts that all Java developers will need to begin developing modern, dynamic JavaFX GUI applications. Of course, it's written in the cohesive, yet concise format that has made Schildt an international best-selling programming author. Designed expressly for Java programmers, the book's focus is on the new JavaFX API. As a result, all examples are written entirely in Java. The book begins with the fundamentals, including the general form of a JavaFX program. Readers then advance to event handling, controls, images, fonts, layers, effects, transforms, animation s (including 3D animations), menus, and more. Numerous complete

examples are included that put key topics and techniques into action. Presents a cohesive, fast-paced overview of key facets of JavaFX 8 programming Sample code used in the text is available for download from the McGraw-Hill/Oracle Press Web site Written in Herb Schildt's clear, crisp, uncompromising style that has made him the choice of millions worldwide

Java EE 7 Recipes takes an example-based approach in showing how to program Enterprise Java applications in many different scenarios. Be it a small-business web application, or an enterprise database application, Java EE 7 Recipes provides effective and proven solutions to accomplish just about any task that you may encounter. You can feel confident using the reliable solutions that are demonstrated in this book in your personal or corporate environment. The solutions in Java EE 7 Recipes are built using the most current Java Enterprise specifications, including EJB 3.2, JSF 2.2, Expression Language 3.0, Servlet 3.1, and JMS 2.0. While older technologies and frameworks exist, it is important to be forward-looking and take advantage of all that the latest technologies offer. Rejuvenate your Java expertise to use the freshest capabilities, or perhaps learn Java Enterprise development for the first time and discover one of the most widely used and most powerful platforms available for application development today. Let Java EE 7 Recipes show you the way by showing how to build streamlined and reliable applications much faster and easier than ever before by making effective use of the latest frameworks and features on offer in the Java EE 7 release. Shows off the most current Java Enterprise Edition technologies. Provides solutions to creating sophisticated user interfaces. Demonstrates proven solutions for effective database access. Table of ContentsIntroduction to Servlets JavaServer Pages The Basics of JavaServer Faces Facelets JavaServer Faces Standard Components Advanced JavaServer Faces and Ajax JDBC Object-Relational Mapping Enterprise JavaBeans The Query API and JPQL Oracle's Glassfish Contexts and Dependency Injection Java Message Service Authentication and Security Java Web Services Enterprise Solutions Using Alternative Programming Languages WebSockets and JSON-P JavaFX in the Enterprise Concurrency and Batch Applications

Java in Two Semesters

Extend your OOP skills and implement Functional techniques in Kotlin and Arrow

JavaFX 2.0: Introduction by Example

JavaFX 9 by Example, Third Edition

Human Factors in Computing and Informatics

Java EE 7 Recipes

**JavaFX 10 is used to create media-rich client applications. If you are a Java developer and want to create graphical applications and skill up to become a pro at Java GUI programming, then this is the right choice for you. You will be guided through the different components of the JavaFX application, to master and combine them.**

**In Pro JavaFX 2: A Definitive Guide to Rich Clients with Java Technology, Jim Weaver, Weiqi Gao, Stephen Chin, Dean Iverson, and Johan Vos show you how you can use the JavaFX platform to create rich-client Java applications. You'll see how JavaFX provides a powerful Java-based UI platform capable of handling large-scale data-driven business applications. Covering the JavaFX API, development tools, and best practices, this book provides code examples that explore the exciting new features provided with JavaFX 2. It contains engaging tutorials that cover virtually every facet of JavaFX development and reference materials on JavaFX that augment the JavaFX API documentation. Written in an engaging and friendly style, Pro JavaFX 2 is an essential guide to JavaFX 2.**

**In Pro JavaFX 8 expert authors show you how to use the JavaFX platform to create rich-client Java applications. You'll discover how you can use this powerful Java-based UI platform, which is capable of handling large-scale data-driven business applications for PC as well as now mobile and embedded devices. Covering the JavaFX API, development tools, and best practices, this book provides code examples that explore the exciting new features provided with JavaFX 8 which comes as part of Oracle's new Java (SE) 8 release. This book also contains engaging tutorials that cover virtually every facet of JavaFX development and reference materials on JavaFX that augment the JavaFX API documentation. After reading and using this book, you'll have the authoritative knowledge that should give you an edge in your next JavaFX-based application projects for your job or your clients.**

**Note: You are purchasing a standalone product; MyProgrammingLab does not come packaged with this content. If you would like to purchase both the physical text and MyProgrammingLab search for ISBN-10: 0133862119/ISBN-13: 9780133862119. That package includes ISBN-10: 0133766268/ISBN-13: 9780133766264 and ISBN-10: 0133841030 /ISBN-13: 9780133841039. MyProgrammingLab is not a self-paced technology and should only be purchased when required by an instructor.**

**Java: An Introduction to Problem Solving and Programming, 7e, is ideal for introductory Computer Science courses using Java, and other introductory programming courses in departments of Computer Science, Computer Engineering, CIS, MIS, IT, and Business. It also serves as a useful Java fundamentals reference for programmers. Students are introduced to object-oriented programming and important concepts such as design, testing and debugging, programming**

style, interfaces inheritance, and exception handling. The Java coverage is a concise, accessible introduction that covers key language features. Objects are covered thoroughly and early in the text, with an emphasis on application programs over applets. MyProgrammingLab for Java is a total learning package. MyProgrammingLab is an online homework, tutorial, and assessment program that truly engages students in learning. It helps students better prepare for class, quizzes, and exams—resulting in better performance in the course—and provides educators a dynamic set of tools for gauging individual and class progress. Teaching and Learning Experience This program presents a better teaching and learning experience—for you and your students. Personalized Learning with MyProgrammingLab: Through the power of practice and immediate personalized feedback, MyProgrammingLab helps students fully grasp the logic, semantics, and syntax of programming. A Concise, Accessible Introduction to Java: Key Java language features are covered in an accessible manner that resonates with introductory programmers. Tried-and-true Pedagogy: Numerous case studies, programming examples, and programming tips are used to help teach problem-solving and programming techniques. Flexible Coverage that Fits your Course: Flexibility charts and optional graphics sections allow instructors to order chapters and sections based on their course needs. Instructor and Student Resources that Enhance Learning: Resources are available to expand on the topics presented in the text.

**A Craftsman's Guide to Software Structure and Design**

**Building User Experience and Interfaces with Java 8**

**A Definitive Guide to Rich Clients with Java Technology**

**Techniques, Practices, and Patterns for Building and Maintaining Effective Software Projects**

**A Problem-Solution Approach**

**Mastering JavaFX 10**

Quickly find solutions to dozens of common programming problems with the Java Enterprise Edition Platform for small business web applications, enterprise database applications, and microservices solutions. 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! Java EE 8 Recipes provides you with effective and proven solutions that can be used to accomplish just about any task that you may encounter. You can feel confident using the reliable solutions that are demonstrated in this book in your personal or corporate environment. Java is a mature programming language that has been refined over the years into a productive and lucrative language for those with the skills to wield it. One result of this years-long refining process is that the language carries forward many older feature sets that no longer represent the best way of getting work accomplished. You can rest assured that Java EE 8 Recipes provides solutions using the most current approaches implemented in the most current Java Enterprise technologies, including JSON-P 1.1, JSF 2.3, and JAX-RS 2.1. Build a streamlined and reliable application that uses the latest in Java technologies, and develop it much faster than you did with the older technologies. Rejuvenate your Java expertise to use the freshest capabilities, or perhaps learn Java Enterprise development for the first time and discover one of the most widely used and most powerful technologies available for application development today. Develop productively. Develop with proven technology. Develop with Java Enterprise Edition. The book: Teaches how to develop RESTful enterprise applications quickly using the most current Java EE technologies Explores different solutions for developing sophisticated web user interfaces Walks you through a myriad of different concepts to apply while working with databases using Java technologies What You'll Learn Develop Java Enterprise applications using the latest in Java EE technologies Build great-looking user interfaces using Java Server Faces Employ Java Servlet technology and standard frameworks in developing professional web applications Create enterprise-level database applications using Enterprise Java Beans and JAX-RS RESTful web services Make use of Arquillian to build a cohesive test suite for Java EE applications Manage Java EE application security through Java EE's container feature set Who This Book Is For Java developers who want to develop effective and proven solutions without reading a lengthy manual and scrubbing for techniques. A beginning Java programmer will find the book handy for learning a variety of different solutions for the platform, while advanced developers will enjoy the ease of the problem-solution approach to quickly broaden their knowledge of the platform's latest technologies.

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

Learn how to apply Functional Programming with Kotlin to real-life projects with popular libraries like Arrow. Key Features Focus on the functional aspects of Kotlin and identify the advantages that functional programming brings to the table and the associated coding benefits. Implement common functional programming design patterns and techniques. Learn to combine OOP and Reactive Programming with Functional Programming and how RxKotlin and funkTionale can help you implementing Functional Programming in Kotlin Book Description Functional programming makes your application faster, improves performance, and increases your productivity. Kotlin supports many of the popular and advanced functional features of functional languages. This book will cover the A-Z of functional programming in Kotlin. This book bridges the language gap for Kotlin developers by showing you how to create and consume functional constructs in Kotlin. We also bridge the domain gap by showing how functional constructs can be applied in business scenarios. We'll take you through lambdas, pattern matching,

immutability, and help you develop a deep understanding of the concepts and practices of functional programming. If you want learn to address problems using Recursion, Kotlin has support for it as well. You'll also learn how to use the funkTionale library to perform currying and lazy programming and more. Finally, you'll learn functional design patterns and techniques that will make you a better programmer. By the end of the book, you will be more confident in your functional programming skills and will be able to apply them while programming in Kotlin. What you will learn Learn the Concepts of Functional Programming with Kotlin Discover the Coroutines in Kotlin Uncover Using funkTionale plugin Learn Monads, Functions and Applicatives Combine Functional Programming with OOP and Reactive Programming Uncover Using Monads with funkTionale Discover Stream Processing Who this book is for Kotlin developers who have no functional programming experience, will benefit from this book.

**Practical Software Architecture Solutions from the Legendary Robert C. Martin ("Uncle Bob")** By applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin ("Uncle Bob") reveals those rules and helps you apply them. Martin's Clean Architecture doesn't merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you've come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you'll face—the ones that will make or break your projects. Learn what software architects need to achieve—and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what's critically important and what's merely a "detail" Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager—and for every programmer who must execute someone else's designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

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JavaFX 8: Introduction by Example

Introducing JavaFX 8 Programming

High Resolution Imaging in Microscopy and Ophthalmology

Featuring JavaFX

Java EE 8 Recipes

*Interaction Flow Modeling Language describes how to apply model-driven techniques to the problem of designing the front end of software applications, i.e., the user interaction. The book introduces the reader to the novel OMG standard Interaction Flow Modeling Language (IFML). Authors Marco Brambilla and Piero Fraternali are authors of the IFML standard and wrote this book to explain the main concepts of the language. They effectively illustrate how IFML can be applied in practice to the specification and implementation of complex web and mobile applications, featuring rich interactive interfaces, both browser based and native, client side components and widgets, and connections to data sources, business logic components and services. Interaction Flow Modeling Language provides you with unique insight into the benefits of engineering web and mobile applications with an agile model driven approach. Concepts are explained through intuitive examples, drawn from real-world applications. The authors accompany you in the voyage from visual specifications of requirements to design and code production. The book distills more than twenty years of practice and provides a mix of methodological principles and concrete and immediately applicable techniques. Learn OMG's new IFML standard from the authors of the standard with this approachable reference Introduces IFML concepts step-by-step, with many practical examples and an end-to-end case example Shows how to integrate IFML with other OMG standards including UML, BPMN, CWM, SoaML and SysML Discusses how to map models into code for a variety of web and mobile platforms and includes many useful interface modeling patterns and best practices Quickly find solutions to dozens of common programming problems encountered while building Java applications. Content is presented in the popular problem-solution format. Look up the programming problem that you want to resolve. Read the solution. Apply the solution directly in your own code. Problem solved! This revised edition covers important new features such as Java 9's JShell and the new modularity features enabling you to separate code into independent modules that perform discrete tasks. Also covered are the new garbage collection algorithm and completely revamped process API. Enhanced JSON coverage is provided as well as a new chapter on JavaServer Faces development for web applications. What You'll Learn Develop Java SE applications using the latest in Java SE technology Exploit advanced features like modularity and lambdas Use JShell to quickly develop solutions Build dynamic web applications with JavaScript and Project Nashorn Create great-looking web interfaces with JavaServer Faces Generate graphics and work with media such as sound and video Add internationalization support to your Java applications Who This Book Is For Both beginning Java programmers and advanced Java developers*

*Filled with fun and practical code examples that you can modify and drop into your own projects, this book will teach you how to create applications that look good and that take advantage of the medium to present data of all types in ways that engage the user and lead to increased productivity. --*

*Rely on this robust and thorough guide to build and maintain successful test automation. As the software industry shifts from traditional waterfall paradigms into more agile ones, test automation becomes a highly important tool that allows your development teams to deliver software at an ever-increasing pace without compromising quality. Even though it may seem trivial to automate the repetitive tester's work, using test automation efficiently and properly is not trivial. Many test automation endeavors end up in the "graveyard" of software projects. There are many things that affect the value of test automation, and also its costs. This book aims to cover all of these aspects in great detail so you can make decisions to create the best test automation solution that will not only help your test automation project to succeed, but also allow the entire software project to thrive. One of the most important details that affects the success of the test automation is how easy it is to maintain the automated tests. Complete Guide to Test Automation provides a detailed hands-on guide for writing highly maintainable test code. What You'll Learn Know the real value to be expected from test automation Discover the key traits that will make your test automation project succeed Be aware of the different considerations to take into account when planning automated tests vs. manual tests Determine who should implement the tests and the implications of this decision Architect the test project and fit it to the architecture of the tested application Design and implement highly reliable automated tests Begin gaining value from test automation earlier Integrate test automation into the business processes of the development team Leverage test automation to improve your organization's performance and quality, even without formal authority Understand how different types of automated tests will fit into your testing strategy, including unit testing, load and performance testing, visual testing, and more Who This Book Is For Those involved with software development such as test automation leads, QA managers, test automation developers, and development managers. Some parts of the book assume hands-on experience in writing code in an object-oriented language (mainly C# or Java), although most of the content is also relevant for nonprogrammers.*

*Developing Rich Internet Applications*

**Pro JavaFX 2**

**Pro JavaFX 9**

**Build advanced and visually stunning Java applications**

**Model-Driven UI Engineering of Web and Mobile Apps with IFML**

**Beginning Java 8 Games Development**

*JavaFX 2.0: Introduction by Example provides a quick start to programming the JavaFX 2.0 platform. JavaFX 2.0 provides a rich set of APIs for use in creating graphically exciting client applications written solely in Java. You get a large set of customizable components that can be skinned using CSS techniques that you already know from doing web development. The platform even includes a web rendering engine enabling you to mix HTML content into your applications. Hardware acceleration means that your applications are fast and snappy, taking full advantage of modern graphics processing support at the hardware level. JavaFX 2.0 opens the door to business applications that look good, are fun to use, that take advantage of the medium to present data of all types—text, audio, video, etc.—in ways that engage the user and lead to increased productivity. Getting started with JavaFX 2.0 is surprisingly easy. You already have the Java skills. Very likely you know enough of CSS to get by. All that's left is to get a leg up on the API, and that's where JavaFX 2.0: Introduction by Example can help. In this short book, author Carl Dea takes you through a series of engaging, fun-to-work examples that bring you up to speed with the major facets of the platform. Begin with the fundamentals of installing the software and creating a simple interface. Move in progressive steps through the process of developing a working dialog box for an application. Then let the fun begin as you explore images and animations, audio and video, and finally learn to embed JavaFX applications in a web page as well as embedding HTML5 content within an application. At the end of this book you'll have a good grasp of what JavaFX is all about, and you'll be ready to begin your journey towards mastery of the platform. Entirely example-based Focused on practical applications Full of working code for you to adapt and extend*

*JavaFX is a state-of-the-art graphics toolkit that is now built into Java and can be easily integrated with the NetBeans Platform. With JavaFX, you can create advanced user interfaces, manipulate media, generate graphical effects and animations, and much more. The NetBeans Platform provides a framework for building robust, modular applications with long life expectancies. Together, JavaFX and the NetBeans Platform provide the basis for creating visually appealing, industrial-strength applications. Focusing on JavaFX as the front end for rich client applications, this guide's examples cover JavaFX 8 with the NetBeans Platform, NetBeans IDE, and Java 8. Gail and Paul Anderson fully explain JavaFX and its relationship with the NetBeans Platform architecture, and systematically show Java developers how to use them together effectively. Each concept and technique is supported by clearly written code examples, proven through extensive classroom teaching. Coverage includes Background basics with Java, JavaFX, and UI events Building loosely coupled applications NetBeans Platform Modules and Lookup NetBeans Platform Nodes, Explorer Views, and Actions Building CRUD-based applications Integrating JavaFX with a Swing-based framework Using JavaFX Charts with the NetBeans Platform Using the NetBeans Platform File System and Data System Keeping the UI responsive*

*Learn how to make Android development much faster using a variety of Kotlin features, from basics to advanced, to write better quality code. About This Book Leverage specific features of Kotlin to ease Android application development Write code based on both object oriented and functional programming to build robust applications Filled with various practical examples so you can easily apply your knowledge to real world scenarios Identify the improved way of dealing with common Java patterns Who This Book Is For This book is for developers who have a basic understanding of Java language and have 6-12 months of experience with Android development and developers who feel comfortable with OOP concepts. What You Will Learn Run a Kotlin application and understand the integration with Android Studio Incorporate Kotlin into new/existing Android Java based project Learn about Kotlin type system to deal with null safety and immutability Define various types of classes and deal with properties Define collections and transform them in functional way Define extensions, new behaviours to existing libraries and Android framework classes Use generic type variance modifiers to define subtyping relationship between generic types Build a sample application In Detail Nowadays, improved application development does not just mean building better performing applications. It has become crucial to find improved ways of writing code. Kotlin is a language that helps developers build amazing Android applications easily and effectively. This book discusses Kotlin features in context of Android development. It demonstrates how common examples that are typical for Android development, can be simplified using Kotlin. It also shows all the benefits, improvements and new possibilities provided by this language. The book is divided in three modules that show the power of Kotlin and teach you how to use it properly. Each module present features in different levels of advancement. The first module covers Kotlin basics. This module will lay a firm foundation for the rest of the chapters so you are able to read and understand most of the Kotlin code. The next module dives deeper into the building blocks of Kotlin, such as functions, classes, and function types. You will learn how Kotlin brings many improvements to the table by improving common Java concepts and decreasing code verbosity. The last module presents features that are not present in Java. You will learn how certain tasks can be achieved in simpler ways thanks to Kotlin. Through the book, you will learn how to use Kotlin for Android development. You will get to know and understand most important Kotlin features, and how they can be used. You will be ready to start your own adventure with Android development with Kotlin.*

*Build Rich Applications that Run on the Desktop, the Web, Mobile Devices...Anywhere! Using JavaFX, developers and graphic designers can work together to build robust, immersive applications and deploy them anywhere: on the desktop, on the Web, and on millions of Java-enabled mobile devices. JavaFX lets you maintain your existing graphics and seamlessly integrate them into Java applications. Plus, JavaFX Script is a declarative language that allows you to preserve your investment in the Java platform while allowing more creativity with JavaFX's Rich Internet Application environment. JavaFX™: Developing Rich Internet Applications brings together all the knowledge, techniques, and reusable code you need to quickly deliver production-quality solutions. Writing for both developers and designers, the authors explain how JavaFX simplifies and improves the RIA development process, and they show how to make the most of its ready-built components and frameworks. JavaFX™ covers everything from data integration to multimedia, special effects to REST. The authors present a full chapter of code recipes and a complete case study application. This book's wide-ranging content includes Building and running JavaFX programs Understanding the role of graphics designers in creating JavaFX Graphical Assets Writing fast, efficient JavaFX Script programs Using data binding to simplify Model-View-Controller application design Creating rich user experiences with JavaFX visual components Bringing user interfaces to life with lighting, reflection, and other special effects Adding motion with the JavaFX animation framework Incorporating pictures, sound, and videos in your applications Creating RESTful applications with JSON and XML Writing JavaFX applications that make the most of the underlying Java platform The Java™ Series is supported, endorsed, and authored by the creators of the Java technology at Sun Microsystems, Inc. It is the official place to go for complete, expert, and definitive information on Java technology. The books in this Series provide the inside information you need to build effective, robust, and portable applications and applets. The Series is an indispensable resource for anyone targeting the Java platform.*

*Java 9 Recipes*

*Android Development with Kotlin*

*Interaction Flow Modeling Language*

*The Definitive Guide to Modern Java Clients with JavaFX*

*A Definitive Guide to Building Desktop, Mobile, and Embedded Java Clients*

*An In-Depth Guide to the Spring Framework and Its Tools*

With over 75 million downloads per month, Spring Boot is the most widely used Java framework available. Its ease and power have revolutionized application development from monoliths to microservices. Yet Spring Boot's simplicity can also be confounding. How do developers learn enough to be productive immediately? This practical book shows you how to use this framework to write successful mission-critical applications. Mark Heckler from VMware, the company behind Spring, guides you through Spring Boot's architecture and approach, covering topics such as debugging, testing, and deployment. If you want to develop cloud native Java or Kotlin applications with Spring Boot rapidly and effectively--using reactive programming, building APIs, and creating database access of all kinds--this book is for you. Learn how Spring Boot simplifies cloud native application development and deployment Build reactive applications and extend communication across the network boundary to create distributed systems Understand how Spring Boot's architecture and approach increase developer productivity and application portability Deploy Spring Boot applications for production workloads rapidly and reliably Monitor application and system health for optimal performance and reliability Debug, test, and secure cloud-based applications painlessly

JavaFX is a software platform to create and deliver rich Internet applications (RIAs) that can run across a wide variety of devices. JavaFX Essentials will help you to design and build high performance JavaFX 8-based applications that run on a variety of devices. Starting with the basics of the framework, it will take you all the way through creating your first working application to discovering the core and main JavaFX 8 features, then controlling and monitoring your outside world. The examples provided illustrate different JavaFX and Java SE 8 features. This guide is an invaluable tutorial if you are planning to develop and create JavaFX 8 applications to run on a variety of devices and platforms.

Learn JavaFX 8

English Vocabulary in Use Pre-intermediate and Intermediate with Answers

Pro JavaFX 8

New Frontiers in Biomedical Optics