

Rxjava For Android Developers

Learn reactive programming with RxJava. Explore key aspects of this library as you learn simple design patterns and review real-world use cases.

Build your first app in Flutter—no experience necessary! Beginning Flutter: A Hands-On Guide to App Development is the essential resource for both experienced and novice developers interested in getting started with Flutter—the powerful new mobile software development kit. With Flutter, you can quickly and easily develop beautiful, powerful apps for both Android and iOS, without the need to learn multiple programming languages or juggle more than one code base. This book walks you through the process step by step. In Flutter, you'll be working with Dart, the programming language of choice for top app developers. Even if you're just starting out in your development career, you can learn Dart quickly, eliminating the barrier to entry for building apps. This is a more efficient way to develop and maintain cross-platform mobile apps, and this book makes the process even easier with a teach-by-example approach. Focus on providing quality content by eliminating the need to switch between multiple coding languages Learn the ins and outs of Flutter, including all the frameworks, widgets, and tools available to developers Accelerate your app development pace, keeping all the code for your cross-platform app in a single code base Leapfrog barriers to entry to the mobile software market, creating your first app with no experience necessary The

Read Book Rxjava For Android Developers

Flutter community is growing rapidly and transforming the way Android and iOS apps get made. Beginning Flutter allows you to get on board with the latest app development technology, giving your mobile development career a big head start.

Learn how to implement Reactive Programming paradigms with Kotlin, and apply them to web programming with Spring Framework 5.0 and in Android Application Development. About This Book Learn how to solve blocking user experience with Reactive Programming and get deep insights into RxKotlin Integrate Reactive Kotlin with Spring and build fantastic Android Apps with RxKotlin and RxAndroid Build reactive architectures that reduce complexity throughout the development process and make your apps(web and Android) scalable Who This Book Is For This book is for Kotlin developers who would like to build fault-tolerant, scalable, and distributed systems. A basic knowledge of Kotlin is required, but no prior knowledge of reactive programming. What You Will Learn Learn about reactive programming paradigms and how reactive programming can improve your existing projects Gain in-depth knowledge in RxKotlin 2.0 and the ReactiveX Framework Use RxKotlin with Android Create your own custom operators in RxKotlin Use Spring Framework 5.0 with Kotlin Use the reactor-kotlin extension Build Rest APIs with Spring,Hibernate, and RxKotlin Use testSubscriber to test RxKotlin applications Use backpressure management and Flowables In Detail In today's app-driven era, when programs are asynchronous, and responsiveness is so vital, reactive programming can help you write code that's more reliable, easier to scale,

Read Book Rxjava For Android Developers

and better-performing. Reactive programming is revolutionary. With this practical book, Kotlin developers will first learn how to view problems in the reactive way, and then build programs that leverage the best features of this exciting new programming paradigm. You will begin with the general concepts of Reactive programming and then gradually move on to working with asynchronous data streams. You will dive into advanced techniques such as manipulating time in data-flow, customizing operators and provider and how to Use the concurrency model to control asynchronicity of code and process event handlers effectively. You will then be introduced to functional reactive programming and will learn to apply FRP in practical use cases in Kotlin. This book will also take you one step forward by introducing you to spring 5 and spring boot 2 using Kotlin. By the end of the book, you will be able to build real-world applications with reactive user interfaces as well as you'll learn to implement reactive programming paradigms in Android. Style and Approach Loaded with numerous code examples and real-life projects, this book helps you delve into Reactive Programming with Kotlin, and apply it to real-world Spring-web and Android projects, thus making all your apps reactive.

Reactive Programming with Java and ReactiveX About This Book Explore the essential tools and operators RxJava provides, and know which situations to use them in Delve into Observables and Subscribers, the core components of RxJava used for building scalable and performant reactive applications Delve into the practical implementation of

Read Book Rxjava For Android Developers

tools to effectively take on complex tasks such as concurrency and backpressure Who This Book Is For The primary audience for this book is developers with at least a fundamental mastery of Java. Some readers will likely be interested in RxJava to make programs more resilient, concurrent, and scalable. Others may be checking out reactive programming just to see what it is all about, and to judge whether it can solve any problems they may have. What You Will Learn Learn the features of RxJava 2 that bring about many significant changes, including new reactive types such as Flowable, Single, Maybe, and Completable Understand how reactive programming works and the mindset to "think reactively" Demystify the Observable and how it quickly expresses data and events as sequences Learn the various Rx operators that transform, filter, and combine data and event sequences Leverage multicasting to push data to multiple destinations, and cache and replay them Discover how concurrency and parallelization work in RxJava, and how it makes these traditionally complex tasks trivial to implement Apply RxJava and Retrolambda to the Android domain to create responsive Android apps with better user experiences Use RxJava with the Kotlin language to express RxJava more idiomatically with extension functions, data classes, and other Kotlin features In Detail RxJava is a library for composing asynchronous and event-based programs using Observable sequences for the JVM, allowing developers to build robust applications in less time. Learning RxJava addresses all the fundamentals of reactive programming to help readers write reactive code, as well as teach them an effective

Read Book Rxjava For Android Developers

approach to designing and implementing reactive libraries and applications. Starting with a brief introduction to reactive programming concepts, there is an overview of Observables and Observers, the core components of RxJava, and how to combine different streams of data and events together. You will also learn simpler ways to achieve concurrency and remain highly performant, with no need for synchronization. Later on, we will leverage backpressure and other strategies to cope with rapidly-producing sources to prevent bottlenecks in your application. After covering custom operators, testing, and debugging, the book dives into hands-on examples using RxJava on Android as well as Kotlin. Style and approach This book will be different from other Rx books, taking an approach that comprehensively covers Rx concepts and practical applications.

Battle-Tested Strategies for Storing, Managing, and Sharing Android Data “Android™ Database Best Practices goes well beyond API documentation to offer strategic advice about how to handle data in an Android application and the tools needed to develop productively. This arms the developer with a trove of solutions to nearly any problem an application may face involving data. Mastering the concepts in this book are therefore essential for any developer who wants to create professional Android applications.”
–Greg Milette, Android developer, Gradison Technologies, Inc. This is the first guide to focus on one of the most critical aspects of Android development: how to efficiently store, retrieve, manage, and share information from your app’s internal database.

Read Book Rxjava For Android Developers

Through real-world code examples, which you can use in your own apps, you'll learn how to take full advantage of SQLite and the database-related classes on Android. A part of Addison-Wesley's Android™ Deep Dive series for experienced Android developers, Android Database Best Practices draws on Adam Stroud's extensive experience leading cutting-edge app projects. Stroud reviews the core database theory and SQL techniques you need to efficiently build, manipulate, and read SQLite databases. He explores SQLite in detail, illuminates Android's APIs for database interaction, and shares modern best practices for working with databases in the Android environment. Through a complete case study, you'll learn how to design your data access layer to simplify all facets of data management and avoid unwanted technical debt. You'll also find detailed solutions for common challenges in building data-enabled Android apps, including issues associated with threading, remote data access, and showing data to users. Extensive, up-to-date sample code is available for download at github.com/android-database-best-practices/device-database. You will Discover how SQLite database differs from other relational databases Use SQL DDL to add structure to a database, and use DML to manipulate data Define and work with SQLite data types Persist highly structured data for fast, efficient access Master Android classes for create, read, update, and delete (CRUD) operations and database queries Share data within or between apps via content providers Master efficient UI strategies for displaying data, while accounting for threading issues Use Android's Intents API to

Read Book Rxjava For Android Developers

pass data between activities when starting a new activity or service Achieve two-way communication between apps and remote web APIs Manage the complexities of app-to-server communication, and avoid common problems Use Android's new Data Binding API to write less code and improve performance

Offers software developers step-by-step instructions on how to create and distribute their first marketable, professional Android application.

Summary Kotlin in Action guides experienced Java developers from the language basics of Kotlin all the way through building applications to run on the JVM and Android devices. Foreword by Andrey Breslav, Lead Designer of Kotlin. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning

Publications. About the Technology Developers want to get work done - and the less hassle, the better. Coding with Kotlin means less hassle. The Kotlin programming language offers an expressive syntax, a strong intuitive type system, and great tooling support along with seamless interoperability with existing Java code, libraries, and frameworks. Kotlin can be compiled to Java bytecode, so you can use it everywhere Java is used, including Android. And with an efficient compiler and a small standard library, Kotlin imposes virtually no runtime overhead. About the Book Kotlin in Action teaches you to use the Kotlin language for production-quality applications. Written for experienced Java developers, this example-rich book goes further than most language books, covering interesting topics like building DSLs with natural language syntax. The

Read Book Rxjava For Android Developers

authors are core Kotlin developers, so you can trust that even the gnarly details are dead accurate. What's Inside Functional programming on the JVM Writing clean and idiomatic code Combining Kotlin and Java Domain-specific languages About the Reader This book is for experienced Java developers. About the Author Dmitry Jemerov and Svetlana Isakova are core Kotlin developers at JetBrains. Table of Contents PART 1 - INTRODUCING KOTLIN Kotlin: what and why Kotlin basics Defining and calling functions Classes, objects, and interfaces Programming with lambdas The Kotlin type system PART 2 - EMBRACING KOTLIN Operator overloading and other conventions Higher-order functions: lambdas as parameters and return values Generics Annotations and reflection DSL construction

Learn Reactive Programming in Kotlin with RxJava!The popularity of reactive programming continues to grow on an ever-increasing number of platforms and languages. Rx lets developers easily and quickly build apps with code that can be understood by other Rx developers-even over different platforms.Not only will you learn how to use RxJava to create complex reactive applications on Android, you'll also see how to solve common application design issues by using RxJava. Finally, you'll discover how to exercise full control over the library and leverage the full power of reactive programming in your apps.Who This Book Is ForThis book is for Android developers who already feel comfortable with the Android SDK and Kotlin, and want to dive deep into development with RxJava, RxKotlin, and RxAndroid.Topics Covered in

Read Book Rxjava For Android Developers

Reactive Programming with Kotlin: Getting Started: Get an introduction to the reactive programming paradigm, learn the terminology involved, and see how to begin using RxJava in your projects. Event Management: Learn how to handle asynchronous event sequences via two key concepts in Rx-Observables and Observers. Being Selective: See how to work with various events using tools such as filtering, transforming, combining, and timing operators. UI Development: RxJava and companion libraries make it easy to work with the UI of your apps, providing a reactive approach to handling user events. Intermediate Topics: Level up your RxJava knowledge with chapters on reactive networking, error handling, and schedulers. Advanced Topics: Round out your RxJava education by learning about app architecture, repositories, and integrating RxJava with Android Jetpack. And much, much more! By the end of the book, you'll have hands-on experience solving common issues in a reactive paradigm—and you'll be well on your way to coming up with your own Rx patterns and solutions!

Use Kotlin to build Android apps, web applications, and more—while you learn the nuances of this popular language. With this unique cookbook, developers will learn how to apply this Java-based language to their own projects. Both experienced programmers and those new to Kotlin will benefit from the practical recipes in this book. Author Ken Kousen (Modern Java Recipes) shows you how to solve problems with Kotlin by concentrating on your own use cases rather than on basic syntax. You provide the context and this book supplies the answers. Already big in Android development, Kotlin can be used anywhere Java is applied, as well as for iOS development, native applications, JavaScript generation, and more. Jump in and build

Read Book Rxjava For Android Developers

meaningful projects with Kotlin today. Apply functional programming concepts, including lambdas, sequences, and concurrency See how to use delegates, late initialization, and scope functions Explore Java interoperability and access Java libraries using Kotlin Add your own extension functions Use helpful libraries such as JUnit 5 Get practical advice for working with specific frameworks, like Android and Spring

The first comprehensive guide to discovering and preventing attacks on the Android OS As the Android operating system continues to increase its share of the smartphone market, smartphone hacking remains a growing threat. Written by experts who rank among the world's foremost Android security researchers, this book presents vulnerability discovery, analysis, and exploitation tools for the good guys. Following a detailed explanation of how the Android OS works and its overall security architecture, the authors examine how vulnerabilities can be discovered and exploits developed for various system components, preparing you to defend against them. If you are a mobile device administrator, security researcher, Android app developer, or consultant responsible for evaluating Android security, you will find this guide is essential to your toolbox. A crack team of leading Android security researchers explain Android security risks, security design and architecture, rooting, fuzz testing, and vulnerability analysis Covers Android application building blocks and security as well as debugging and auditing Android apps Prepares mobile device administrators, security researchers, Android app developers, and security consultants to defend Android systems against attack Android Hacker's Handbook is the first comprehensive resource for IT professionals charged with smartphone security.

Google has officially announced Kotlin as a supported language to write Android Apps. These

Read Book Rxjava For Android Developers

are amazing news for Android developers, which now have the ability to use a modern and powerful language to make their job easier and funnier. But this comes with other responsibilities. If you want to be a good candidate for new Android opportunities, Kotlin is becoming a new need most companies will ask for. So it's your time to start learning about it! And "Kotlin for Android Developers" is the best tool. Recommended by both Google and JetBrains, this book will guide through the process of learning all the new features that Java was missing, in an easy and fun way. You'll be creating an Android app from ground using Kotlin as the main language. The idea is to learn the language by example, instead of following a typical structure. I'll be stopping to explain the most interesting concepts and ideas about Kotlin, comparing it with Java 7. This way, you can see what the differences are and which parts of the language will help you speed up your work. This book is not meant to be a language reference, but a tool for Android developers to learn Kotlin and be able to continue with their own projects by themselves. I'll be solving many of the typical problems we have to face in our daily lives by making use of the language expressiveness and some other really interesting tools and libraries. The book is very practical, so it is recommended to follow the examples and the code in front of a computer and try everything it's suggested. You could, however, take a first read to get a broad idea and then dive into practice.

Real-World Android by Tutorials guides you through building one professional Android app using the most important architectures and libraries. Along the way, you'll get a solid foundation in Android development concepts so you can make informed decisions about how to apply them in your own codebase. Learn how to implement a real-world Android app. When developing a professional Android app, there are hundreds of options for libraries and possible

Read Book Rxjava For Android Developers

architectures. Finding documentation is easy, but you might end up with an app structure that isn't ideal for your project. *Real-World Android by Tutorials* helps you implement a real-world app from scratch, addressing critical problems like finding the right architecture, making the UI responsive and appealing and implementing efficient animations. Who this book is for This book is for intermediate Android developers who already know the basics of the Android platform and the Kotlin language, and who are looking to build modern and professional apps using the most important libraries. If you want to create a reactive and good-looking UI and are determined not to ignore important aspects like security, this book will help. Topics covered in *Real-World Android by Tutorials* By reading this book, you'll learn about the following topics: Choosing the right architecture: Pick the right app architecture to achieve a good separation between domain and data layers, making your app easy to build and maintain. Building features: Learn how to structure your code to make it more testable. Modularization: Split your code into different modules, improving the build time and reusability of your code. Animations: Use the new Motion Editor to implement animations that make your app's UI more appealing. Custom Views: Go beyond the basics by creating a View that's specific to your app's needs. Security: Protect your app's data and code. Tooling: Mastering the right tool is a fundamental skill when creating a professional app. Learn how to use the tools to analyze your code and fix some tricky bugs. After reading this book, you'll be prepared to implement your own, professional Android app. Get up and running with reactive programming paradigms to build fast, concurrent, and powerful applications About This Book Get to grips with the core design principles of reactive programming Learn about Reactive Extensions for .NET through real-world examples Improve

Read Book Rxjava For Android Developers

your problem-solving ability by applying functional programming Who This Book Is For If you are a .NET developer who wants to implement all the reactive programming paradigm techniques to create better and more efficient code, then this is the book for you. No prior knowledge of reactive programming is expected. What You Will Learn Create, manipulate, and aggregate sequences in a functional-way Query observable data streams using standard LINQ query operators Program reactive observers and observable collections with C# Write concurrent programs with ease, scheduling actions on various workers Debug, analyze, and instrument Rx functions Integrate Rx with CLR events and custom scheduling Learn Functional Reactive Programming with F# In Detail Reactive programming is an innovative programming paradigm focused on time-based problem solving. It makes your programs better-performing, easier to scale, and more reliable. Want to create fast-running applications to handle complex logics and huge datasets for financial and big-data challenges? Then you have picked up the right book! Starting with the principles of reactive programming and unveiling the power of the pull-programming world, this book is your one-stop solution to get a deep practical understanding of reactive programming techniques. You will gradually learn all about reactive extensions, programming, testing, and debugging observable sequence, and integrating events from CLR data-at-rest or events. Finally, you will dive into advanced techniques such as manipulating time in data-flow, customizing operators and providers, and exploring functional reactive programming. By the end of the book, you'll know how to apply reactive programming to solve complex problems and build efficient programs with reactive user interfaces. Style and approach This is a concise reference manual for reactive programming with Rx for C# and F# using real-world, practical examples.

Read Book Rxjava For Android Developers

Summary RxJS in Action gives you the development skills you need to create reactive applications with RxJS. This book is full of theory and practical examples that build on each other and help you begin thinking in a reactive manner. Foreword by Ben Lesh, Project lead, RxJS 5. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology On the web, events and messages flow constantly between UI and server components. With RxJS, you can filter, merge, and transform these streams directly, opening the world of data flow programming to browser-based apps. This JavaScript implementation of the ReactiveX spec is perfect for on-the-fly tasks like autocomplete. Its asynchronous communication model makes concurrency much, much easier. About the Book RxJS in Action is your guide to building a reactive web UI using RxJS. You'll begin with an intro to stream-based programming as you explore the power of RxJS through practical examples. With the core concepts in hand, you'll tackle production techniques like error handling, unit testing, and interacting with frameworks like React and Redux. And because RxJS builds on ideas from the world of functional programming, you'll even pick up some key FP concepts along the way. What's Inside Building clean, declarative, fault-tolerant applications Transforming and composing streams Taming asynchronous processes Integrating streams with third-party libraries Covers RxJS 5 About the Reader This book is suitable for readers comfortable with JavaScript and standard web application architectures. About the Author Paul P. Daniels is a professional software engineer with experience in .NET, Java, and JavaScript. Luis Atencio is a software engineer working daily with Java, PHP, and JavaScript platforms, and author of Manning's Functional Programming in JavaScript. Table of Contents PART 1 - UNDERSTANDING STREAMS Thinking reactively

Read Book Rxjava For Android Developers

Reacting with RxJS Core operators It's about time you used RxJS PART 2 - OBSERVABLES IN PRACTICE Applied reactive streams Coordinating business processes Error handling with RxJS PART 3 MASTERING RXJS Heating up observables Toward testable, reactive programs RxJS in the wild

Spring is the de facto framework for Java SE development and it has been widely used for building web and enterprise grade applications. Last year, Pivotal provided complete support for Kotlin as a language that Spring can compile to, making it an even stronger framework in terms of android development. To make things simpler, Pivotal has ...

Provides instruction on building Android apps, including solutions to working with web services, multitouch gestures, location awareness, and device features.

RxJava--Reactive Extensions for the JVM--is a library for composing asynchronous and event-based programs using Observable sequences for the Java VM, which will help you beat Android platform limitations to create astonishing Android apps. Starting with some quick background information on the Rx .NET library, this book quickly moves on to your first example. You will understand Observables and learn to filter, transform, or merge them in detail. Next, you will learn how to get rid of Threads, AsyncTasks, and Handlers with Schedulers to create a smooth user experience. Develop an easy, ready-to-go approach to REST API communications and enrich your skills by working with new challenging examples. By the end of the book, you will have explored the reactive programming world and will have created your first Android app without having to think about threading, networking, concurrency, and collection management.

Read Book Rxjava For Android Developers

'Android Security Cookbook' breaks down and enumerates the processes used to exploit and remediate Android app security vulnerabilities in the form of detailed recipes and walkthroughs. Android Security Cookbook is aimed at anyone who is curious about Android app security and wants to be able to take the necessary practical measures to protect themselves; this means that Android application developers, security researchers and analysts, penetration testers, and generally any CIO, CTO, or IT managers facing the impending onslaught of mobile devices in the business environment will benefit from reading this book.

Learn Android Studio covers Android Studio and its rich tools ecosystem, including Git and Gradle: this book covers how Android Studio works seamlessly with Git, for source control, and Gradle, a build and test tool. In addition, this book demonstrates how to develop/collaborate with remote Git web-hosting services such as GitHub and Bitbucket. Four complete Android projects accompany this volume and are available for download from a public Git repository. With this book, you learn the latest and most productive tools in the Android tools ecosystem, and the best practices for Android app development. You will be able to take away the labs' code as templates or frameworks to re-use and customize for your own similar apps. Android Studio is an intuitive, feature-rich, and extremely forgiving Integrated Development Environment (IDE). This IDE is more productive and easier to use for your Android app creations than Eclipse. With this book you will quickly master Android Studio and maximize your Android

Read Book Rxjava For Android Developers

development time. Source code on the remote web-hosting service is targeted to the latest Android Studio release, version 1.2.

In today's app-driven era, when programs are asynchronous and responsiveness is so vital, reactive programming can help you write code that's more reliable, easier to scale, and better-performing. With this practical book, Java developers will first learn how to view problems in the reactive way, and then build programs that leverage the best features of this exciting new programming paradigm. Authors Tomasz Nurkiewicz and Ben Christensen include concrete examples that use the RxJava library to solve real-world performance issues on Android devices as well as the server. You'll learn how RxJava leverages parallelism and concurrency to help you solve today's problems. This book also provides a preview of the upcoming 2.0 release. Write programs that react to multiple asynchronous sources of input without descending into "callback hell" Get to that aha! moment when you understand how to solve problems in the reactive way Cope with Observables that produce data too quickly to be consumed Explore strategies to debug and to test programs written in the reactive style Efficiently exploit parallelism and concurrency in your programs Learn about the transition to RxJava version 2

Create the perfectly customized system by unleashing the power of Android OS on your embedded device About This Book Understand the system architecture and how the source code is organized Explore the power of Android and customize the build system

Read Book Rxjava For Android Developers

Build a fully customized Android version as per your requirements Who This Book Is For If you are a Java programmer who wants to customize, build, and deploy your own Android version using embedded programming, then this book is for you. What You Will Learn Master Android architecture and system design Obtain source code and understand the modular organization Customize and build your first system image for the Android emulator Level up and build your own Android system for a real-world device Use Android as a home automation and entertainment system Tailor your system with optimizations and add-ons Reach for the stars: look at the Internet of Things, entertainment, and domotics In Detail Take a deep dive into the Android build system and its customization with Learning Embedded Android Programming, written to help you master the steep learning curve of working with embedded Android. Start by exploring the basics of Android OS, discover Google's "repo" system, and discover how to retrieve AOSP source code. You'll then find out to set up the build environment and the first AOSP system. Next, learn how to customize the boot sequence with a new animation, and use an Android "kitchen" to "cook" your custom ROM. By the end of the book, you'll be able to build customized Android open source projects by developing your own set of features. Style and approach This step-by-step guide is packed with various real-world examples to help you create a fully customized Android system with the most useful features available.

This book will equip you to create high-quality, visually appealing Android 11 apps from

Read Book Rxjava For Android Developers

scratch with Kotlin. You'll discover a wide range of real-world development challenges faced by developers and explore various techniques to overcome them.

Learn Reactive Programming in Swift with RxSwift!The popularity of reactive programming continues to grow on an every-increasing number of platforms and languages. Rx lets developers easily and quickly build apps with code that can be understood by other Rx developers - even over different platforms.Not only will you learn how to use the RxSwift port to create complex reactive applications on iOS, you'll also see how to easily solve common application design issues by using RxSwift. Finally you'll discover how to exercise full control over the library and leverage the full power of reactive programming in your apps.This books is for iOS developers who already feel comfortable with iOS and Swift, and want to dive deep into development with RxSwift.Topics Covered in RxSwift:- Getting Started: Get an introduction to the reactive programming paradigm, learn the terminology involved and see how to begin using RxSwift in your projects.- Event Management: Learn how to handle asynchronous event sequences via two key concepts in Rx - Observables and Observers.- Being Selective: See how to work with various events using concepts such as filtering, transforming, combining, and time operators.- UI Development: RxSwift makes it easy to work with UI of your apps using RxCocoa, which provides integration of both UIKit and Cocoa.- Intermediate Topics: Level up your RxSwift knowledge with chapters on reactive networking, multi-threading, and error handling.And much, much more!By the

Read Book Rxjava For Android Developers

end of this book, you'll have hands-on experience solving common issues in a reactive paradigm - and you'll be well on your way to coming up with your own Rx patterns and solutions!

"Android Programming Tutorials" show you what you can do with Android, through a series of 28 individual exercises, giving you hands-on instruction in how to build sophisticated Android applications, using many of the technologies outlined in CommonsWare's other Android books. These exercises lead you through the basics of creating Android applications, all the way through many fun Android features like Internet access, location tracking, maps, integrated WebKit browsers, cameras, accelerometers, and much more. Full source code to all the exercise answers is available right on this page, to help you if you get stuck. "Android Programming Tutorials" makes an excellent companion volume to more traditional Android books that merely tell you what is possible. The book has been battle-tested, used in the author's live Android training events, with the exercises put through their paces by hundreds of students.

Decompiling Android looks at the the reason why Android apps can be decompiled to recover their source code, what it means to Android developers and how you can protect your code from prying eyes. This is also a good way to see how good and bad Android apps are constructed and how to learn from them in building your own apps. This is becoming an increasingly important topic as the Android marketplace grows and

Read Book Rxjava For Android Developers

developers are unwittingly releasing the apps with lots of back doors allowing people to potentially obtain credit card information and database logins to back-end systems, as they don't realize how easy it is to decompile their Android code. In depth examination of the Java and Android class file structures Tools and techniques for decompiling Android apps Tools and techniques for protecting your Android apps

A systematic guide consisting of over 70 recipes which focus on helping you build portable mobile games and aims to enhance your game development skills with clear instructions. If you are a C++ developer who wants to jump into the world of Android game development and who wants to use the power of existing C++ libraries in your existing Android Java applications, then this book is for you. You need to have basic knowledge of C or C++ including pointer manipulation, multithreading, and object-oriented programming concepts as well as some experience developing applications without using an IDE.

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

Read Book Rxjava For Android Developers

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

Read Book Rxjava For Android Developers

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.

Get an easy introduction to reactive streams in Java to handle concurrency, data streams, and the propagation of change in today's applications. This compact book includes in-depth introductions to RxJava, Akka Streams, and Reactor, and integrates the latest related features from Java 9 and 11, as well as reactive streams programming with the Android SDK. Reactive Streams in Java explains how to manage the exchange of stream data across an asynchronous boundary—passing elements on to another thread or thread-pool—while ensuring that the receiving side is not forced to buffer arbitrary amounts of data which can reduce application efficiency. After reading and using this book, you'll be proficient in programming reactive streams for Java in order to optimize application performance, and improve memory management and data exchanges. What You Will Learn Discover reactive streams and how to use them Work with the latest features in Java 9 and Java 11 Apply reactive streams using RxJava Program using Akka Streams Carry out reactive streams programming in Android Who

Read Book Rxjava For Android Developers

This Book Is For Experienced Java programmers.

Learn reactive programming using Java and its functional aspects, sometimes called RxJava. This book shows you how to solve "callback hell" with RxJava and shows you how to write thread-safe code without hanging onto state variables which comes in handy for cloud computing software-as-a-service issues, especially when dealing with big data processes through streaming. Reactive Java Programming includes unique coverage of reactive Android programming, growing more and more popular in mobile development with the Cloud. After reading this guide to reactive programming, you'll be able to apply it to your own big data cloud applications that use Java. What You'll Learn Use and map observables Filter and combine events Employ subjects, schedulers, and backpressure Handle reactive patterns Test your RxJava code Write your own operators Carry out reactive Android programming Who This Book Is For Experienced Java programmers new to reactive programming and those who may have some experience with reactive programming new to Java.

Summary RxJava for Android Developers teaches you how to build fast, fluid, and reactive mobile apps for Android with RxJava. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology For Android developers, writing multithreaded apps can be as challenging as it is necessary. RxJava simplifies complex threading operations, maintaining proper synchronization as you switch seamlessly from thread to thread. RxJava also brings the

Read Book Rxjava For Android Developers

benefits of reactive programming to your apps—that means better real-time responsiveness, the holy grail for every Android developer. About the Book RxJava for Android Developers begins by inviting you to think about programming and data the reactive way. This engaging, hands-on essential reference introduces you to the central pattern of RxJava for Android, then explains the View Model before exploring highly sought-after app features like chat clients and elegant transitions. Finally, you'll look at high-level design concerns and architectural approaches and frameworks that work well with Functional Reactive Programming (FRP) thinking. What's inside

- An introduction to reactive programming
- Easier thread management
- Improving UI responsiveness
- Thinking asynchronously
- Building a working chat client
- About the Reader
- Readers should have some experience building Android applications. No experience with RxJava is needed.

About the Author Timo Tuominen has used FRP and RxJava extensively while working with Futurice as an architect of a major Android project for Samsung.

Table of Contents

- PART 1 - Core reactive programming
 - Introduction to reactive programming
 - Networking with observables
 - Building data processing chains
 - Connecting the user interface with networking
- Advanced RxJava
- PART 2 - Architectures in RxJava
 - Reactive view models
 - Developing with view models
 - Expanding existing Rx apps
 - Testing reactive code
- PART 3 - Advanced RxJava architectures
 - Advanced architectures: Chat client 1
 - Advanced architectures: Chat client 2
 - Transitions with Rx
 - Making a maps client

Read Book Rxjava For Android Developers

Build Beautiful Apps With Jetpack Compose Jetpack Compose is hyping up everyone in the Android UI toolkit world. This completely new and modern solution to building declarative user interfaces provides more opportunity than ever to create beautiful, reactive and animated apps. However, because of its early-in-development status, Jetpack Compose is missing one of the most important pieces of successful software: detailed documentation. That's why we've prepared a whole book's worth of documentation for you! Jetpack Compose By Tutorials is here to help, by showing you exactly how Compose works, what its fundamental components are and how you can use them to build complex real-world apps! Who this book is for This book is for all Android developers who have experience with the legacy UI Toolkit through XML and View components, but who are looking for a fresh, reusable, clean and easy-to-use solution to reduce their boilerplate code while building stunning user interfaces. Topics covered in Jetpack Compose by Tutorials

- Fundamentals: Core Jetpack Compose elements and functions
- Combining components: Mixing different layouts and building beautiful interfaces
- State Management: State wrappers, LiveData observables and UI recomposition
- UI Styling: Modifiers for size, shape, colors, background, padding and alignment
- User Interaction: Different click, touch and scroll listeners and their handlers
- Animations: State changes, value animations and complex transitions

One thing you can count on: After reading this book, you'll be prepared to tackle any design specification and build it in your Android apps using Jetpack Compose. You'll make

Read Book Rxjava For Android Developers

your apps really stand out by adding different modifiers and Material Design components, as well as animations.

Android Programming: The Big Nerd Ranch Guide is an introductory Android book for programmers with Java experience. Based on Big Nerd Ranch's popular Android Bootcamp course, this guide will lead you through the wilderness using hands-on example apps combined with clear explanations of key concepts and APIs. This book focuses on practical techniques for developing apps compatible with Android 4.1 (Jelly Bean) and up, including coverage of Lollipop and material design. Write and run code every step of the way, creating apps that integrate with other Android apps, download and display pictures from the web, play sounds, and more. Each chapter and app has been designed and tested to provide the knowledge and experience you need to get started in Android development. Big Nerd Ranch specializes in developing and designing innovative applications for clients around the world. Our experts teach others through our books, bootcamps, and onsite training. Whether it's Android, iOS, Ruby and Ruby on Rails, Cocoa, Mac OS X, JavaScript, HTML5 or UX/UI, we've got you covered. The Android team is constantly improving and updating Android Studio and other tools. As a result, some of the instructions we provide in the book are no longer correct. You can find an addendum addressing breaking changes at: <https://github.com/bignerdranch/AndroidCourseResources/raw/master/2ndEdition/Errata/2eAddendum.pdf>

Read Book Rxjava For Android Developers

ReactiveX is the common tongue of the reactive programming world. It's a new programming paradigm applied to infinite scenarios using any popular programming language. To really understand Rx, you need to rewire your brain to see the world differently, and we're here to help you. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Grokking ReactiveX is a practical book that teaches readers how to solve complex problems elegantly and with few lines of code. To make learning easier, each chapter introduces a new concept and then immediately demonstrates how to use it. Following carefully-selected examples with thorough, well-paced explanations, readers will immerse themselves in ReactiveX, concept by concept.

Updated with the latest Maven coordinates, Java programming features, and API changes, this book is your guide to solving problems in writing asynchronous and event-based programs

- Key Features
- Explore a variety of tools and techniques used to solve problems in implementing concurrency and parallelization
- Learn about core operators in RxJava that enable you to express your code logic productively
- Apply RxJava with Kotlin to create responsive Android apps with better user experience

Book Description RxJava is not just a popular library for building asynchronous and event-based applications; it also enables you to

Read Book Rxjava For Android Developers

create a cleaner and more readable code base. In this book, you'll cover the core fundamentals of reactive programming and learn how to design and implement reactive libraries and applications. Learning RxJava will help you understand how reactive programming works and guide you in writing your first example in reactive code. You'll get to grips with the workings of Observable and Subscriber, and see how they are used in different contexts using real-world use cases. The book will also take you through multicasting and caching to help prevent redundant work with multiple Observers. You'll then learn how to create your own RxJava operators by reusing reactive logic. As you advance, you'll explore effective tools and libraries to test and debug RxJava code. Finally, you'll delve into RxAndroid extensions and use Kotlin features to streamline your Android apps. By the end of this book, you'll become proficient in writing reactive code in Java and Kotlin to build concurrent applications, including Android applications. What you will learn Discover different ways to create Observables, Observers, and Subscribers Multicast in order to push data to multiple destinations and cache and replay them Express RxJava idiomatically with the help of Kotlin features such as extension functions and data classes Become familiar with various operators available in RxJava to perform common transformations and tasks Explore RxJava's reactive types, including Flowable,

Read Book Rxjava For Android Developers

Single, Maybe, and Completable Demystify Observables and how they express data and events as sequences Who this book is for This book is for Java developers who want to leverage reactive programming to develop more resilient and concurrent applications. If you're an RxJava user looking to get to grips with the latest features and updates in RxJava 3, this book is for you. Fundamental knowledge of core Java features and object-oriented programming will assist you in understanding the key concepts covered in this book.

In today's world, user interfaces have to be highly dynamic, asynchronous, and reliable. To meet these demands, the programming world is undergoing a radical shift towards something called Functional Reactive Programming (FRP), or just Reactive Programming. FRP offers programmers a new way to construct their applications so that they respond directly to change. And developers spend less time tracing obscure problems and more time focusing on what their code should be doing. RxJava for Android Developers teaches programmers a new way of thinking about programs and data as well as how to build robust and extensible user interfaces. This well-illustrated book presents lots of concrete, real-world problems and then shows how FRP helps to solve them. It begins by looking at examples that get readers into the mindset of data flows and goes on to introduce the concept of a View Model. Readers also learn how FRP enables

Read Book Rxjava For Android Developers

them to better manage change and introduce new features. The final part of this book focuses on higher-level application design concerns and strategies as you look at architectural approaches and frameworks that work well with FRP thinking. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Embedded Android is for Developers wanting to create embedded systems based on Android and for those wanting to port Android to new hardware, or creating a custom development environment. Hackers and moders will also find this an indispensable guide to how Android works.

GrokkingWith Reactivex and FRPPearson Professional

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

Read Book Rxjava For Android Developers

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.

[Copyright: 06ba385da072bc0a3c1b66dde659c869](https://www.amazon.com/Clean-Architecture-Clean-Codes-Design-Principles/dp/0132359877)