

Learn Android Studio 3: Efficient Android App Development

Are you looking for a deeper understanding of the Java™ programming language so that you can write code that is clearer, more correct, more robust, and more reusable? Look no further! Effective Java™, Second Edition, brings together seventy-eight indispensable programmer’s rules of thumb: working, best-practice solutions for the programming challenges you encounter every day. This highly anticipated new edition of the classic, Jolt Award-winning work has been thoroughly updated to cover Java SE 5 and Java SE 6 features introduced since the first edition. Bloch explores new design patterns and language idioms, showing you how to make the most of features ranging from generics to enums, annotations to autoboxing. Each chapter in the book consists of several “items” presented in the form of a short, standalone essay that provides specific advice, insight into Java platform subtleties, and outstanding code examples. The comprehensive descriptions and explanations for each item illuminate what to do, what not to do, and why. Highlights include: New coverage of generics, enums, annotations, autoboxing, the for-each loop, varargs, concurrency utilities, and much more Updated techniques and best practices on classic topics, including objects, classes, libraries, methods, and serialization How to avoid the traps and pitfalls of commonly misunderstood subtleties of the language Focus on the language and its most fundamental libraries: java.lang, java.util, and, to a lesser extent, java.util.concurrent and java.io Simply put, Effective Java™, Second Edition, presents the most practical, authoritative guidelines available for writing efficient, well-designed programs.

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

Unique and clever ideas are important when building a hot-selling Android app, but the real drivers for success are speed, efficiency, and power management. With this practical guide, you’ll learn the major performance issues confronting Android app developers, and the tools you need to diagnose problems early. Customers are finally realizing that apps have a major role in the performance of their Android devices. Author Doug Sillars not only shows you how to use Android-specific testing tools from companies including Google, Qualcomm, and AT&T, but also helps you explore potential remedies. You’ll discover ways to build apps that run well on all 19,000 Android device types in use. Understand how performance issues affect app sales and retention Build an Android device lab to maximize UI, functional, and performance testing Improve the way your app interacts with device hardware Optimize your UI for fast rendering, scrolling, and animations Track down memory leaks and CPU issues that affect performance Upgrade communications with the server, and learn how your app performs on slower networks Apply Real User Monitoring (RUM) to ensure that every device is delivering the optimal user experience

Unleash the power of Android Studio 3 to develop mobile applications faster and efficiently. About This Book Use Android Studio not just as an IDE but as a complete testing and build solution Produce customized APKs with Gradle to suit various versions of an app, such as test versions and free versions of an otherwise paid app. Explore all aspects of UI development and testing using working XML and Java examples. Learn seamless migration from Eclipse and other development platforms to Android Studio. Who This Book Is For This book targets developers, with experience of developing for Android, who are new to Android Studio or wish to migrate from another IDE such as Eclipse. This book will show you how to get the utmost from this powerful tool. What You Will Learn Create styles, themes, and material designs Set up, configure, and run virtual devices using the AVD manager Improve the design of your application using support libraries Learn about GitHub libraries Use emulators to design layouts for a wide variety of devices, including wearables. Improve application performance in terms of memory, speed, and power usage In Detail Android Studio is an Integrated Development Environment (IDE) designed for developing Android apps. As with most development processes, Android keeps resources and logic nicely separated, and so this book covers the management of imagery and other resources, and the development and testing tools provided by the IDE. After introducing the software, the book moves straight into UI development using the sophisticated, WYSIWYG layout editor and XML code to design and test complex interfaces for a wide variety of screen configurations. With activity design covered, the book continues to guide the reader through application logic development, exploring the latest APIs provided by the SDK. Each topic will be demonstrated by working code samples that can be run on a device or emulator. One of Android Studio’s greatest features is the large number of third-party plugins available for it, and throughout the book we will be exploring the most useful of these, along with samples and libraries that can be found on GitHub. The final module of the book deals with the final stages of development: building and distribution. The book concludes by taking the reader through the registration and publication processes required by Google. By the time you have finished the book, you will be able to build faster, smoother, and error-free Android applications, in less time and with fewer complications than you ever thought possible. Style and approach This is a step-by-step guide with examples demonstrating how Android Studio can be used as a complete solution for developing, testing, and deploying apps from start to finish.

Kotlin Cookbook

A Hands On Guide to App Development

Learn Android Studio 4

Android Application Development For Dummies

Build Android Apps Quickly and Effectively

The Next Generation Language for Modern Android Apps Programming

There are many Android programming guides that give you the basics. This book goes beyond simple apps into many areas of Android development that you simply will not find in competing books. Whether you want to add home screen app widgets to your arsenal, or create more complex maps, integrate multimedia features like the camera, integrate tightly with other applications, or integrate scripting languages, this book has you covered. Moreover, this book has over 50 pages of Honeycomb-specific material, from dynamic fragments, to integrating navigation into the action bar, to creating list-based app widgets. It also has a chapter on using NFC, the wireless technology behind Google Wallet and related services. This book is one in CommonsWare’s growing series of Android related titles, including “The Busy Coder’s Guide to Android Development,” “Android Programming Tutorials,” and the upcoming “Tuning Android Applications.” Table of Contents WebView, Inside and Out Crafting Your Own Views More Fun With ListViews Creating Drawables Home Screen App Widgets Interactive Maps Creating Custom Dialogs and Preferences Advanced Fragments and the Action Bar Animating Widgets Using the Camera Playing Media Handling System Events Advanced Service Patterns Using System Settings and Services Content Provider Theory Content Provider Implementation Patterns The Contacts ContentProvider Searching with SearchManager Introspection and Integration Tapjacking Working with SMS More on the Manifest Device Configuration Push Notifications with C2DM NFC The Role of Scripting Languages The Scripting Layer for Android JVM Scripting Languages Reusable Components Testing Production Presents instructions for creating Android applications for mobile devices using Java.

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.

Create reliable, robust, and efficient Android apps with industry-standard design patterns About This Book Create efficient object interaction patterns for faster and more efficient Android development Get into efficient and fast app development and start making money from your android apps Implement industry-standard design patterns and best practices to reduce your app development time drastically Who This Book Is For This book is intended for Android developers who have some basic android development experience. Basic Java programming knowledge is a must to get the most out of this book. What You Will Learn Build a simple app and run it on real and emulated devices Explore the WYSIWYG and XML approaches to material design provided within Android Studio Detect user activities by using touch screen listeners, gesture detection, and reading sensors Apply transitions and shared elements to employ elegant animations and efficiently use the minimal screen space of mobile devices Develop apps that automatically apply the best layouts for different devices by using designated directories Socialize in the digital word by connecting your app to social media Make your apps available to the largest possible audience with the AppCompat support library In Detail Are you an Android developer with some experience under your belt? Are you wondering how the experts create efficient and good-looking apps? Then your wait will end with this book! We will teach you about different Android development patterns that will enable you to write clean code and make your app stand out from the crowd. The book starts by introducing the Android development environment and exploring the support libraries. You will gradually explore the different design and layout patterns and get to know the best practices of how to use them together. Then you’ll then develop an application that will help you grasp activities, services, and broadcasts and their roles in Android development. Moving on, you will add user-detecting classes and APIs such as gesture detection, touch screen listeners, and sensors to your app. You will also learn to adapt your app to run on tablets and other devices and platforms, including Android Wear, auto, and TV. Finally, you will see how to connect your app to social media and explore deployment patterns as well as the best publishing and monetizing practices. The book will start by introducing the Android development environment and exploring the support libraries. You will gradually explore the different Design and layout patterns and learn the best practices on how to use them together. You will then develop an application that will help you grasp Activities, Services and Broadcasts and their roles in Android development. Moving on, you will add user detecting classes and APIs such as at gesture detection, touch screen listeners and sensors to our app. You will also learn to adapt your app to run on tablets and other devices and platforms, including Android Wear, Auto, and TV. Finally, you will learn to connect your app to social media and explore deployment patterns and best publishing and monetizing practices. Style and approach This book takes a step-by-step approach. The steps are explained using real-world practical examples. Each chapter uses case studies where we show you how using design patterns will help in your development process.

Android App Development in Android Studio

Programming in Scala

Learn Android App Development

Fluent Forever

A Pocket Guide to Android Studio Development

Developers, build mobile Android apps using Android 4 The fast-growing popularity of Android smartphones and tablets creates a huge opportunities for developers. If you’re an experienced developer, you can start creating robust mobile Android apps right away with this professional guide to Android 4 application development. Written by one of Google’s lead Android developer advocates, this practical book walks you through a series of hands-on projects that illustrate the features of the Android SDK. That includes all the new APIs introduced in Android 3 and 4, including building for tablets, using the Action Bar, Wi-Fi Direct, NFC Beam, and more. Shows experienced developers how to create mobile applications for Android smartphones and tablets Revised and expanded to cover all the Android SDK releases including Android 4.0 (Ice Cream Sandwich), including all updated APIs, and the latest changes to the Android platform. Explains new and enhanced features such as drag and drop, fragments, the action bar, enhanced multitouch support, new environmental sensor support, major improvements to the animation framework, and a range of new communications techniques including NFC and Wi-Fi direct. Provides practical guidance on publishing and marketing your applications, best practices for user experience, and more This book helps you learn to master the design, lifecycle, and UI of an Android app through practical exercises, which you can then use as a basis for developing your own Android apps.

Build Android apps using the popular and efficient Android Studio 3 suite of tools, an integrated development environment (IDE) for Android developers using Java APIs. With this book, you ’ ll learn the latest and most productive tools in the Android tools ecosystem, ensuring quick Android app development and minimal effort on your part. Along the way, you ’ ll use Android Studio to develop Java-based Android apps, tier by tier through practical examples. These examples cover core Android topics such as notifications and toast; intents and broadcast receivers; and services. Then, you ’ ll learn how to publish your apps and sell them online and in the Google Play store. What You’ll Learn Use Android Studio 3 to quickly and confidently build your first Android apps Build an Android user interface using activities and layouts, event handling, images, menus and the action bar Incorporate new elements including fragments Integrate data with data persistence Access the cloud Who This Book Is For Those who may be new to Android Studio 3 or Android Studio in general. You may or may not be new to Android development in general. Some prior experience with Java is also recommended.

Advanced Android™ Application Development, Fourth Edition, is the definitive guide to building robust, commercial-grade Android apps. Systematically revised and updated, this guide brings together powerful, advanced techniques for the entire app development cycle, including design, coding, testing, debugging, and distribution. With the addition of quizzes and exercises in every chapter, it is ideal for both professional and classroom use. An outstanding practical reference for the newest Android APIs, this guide provides in-depth explanations of code utilizing key API features and includes downloadable sample apps for nearly every chapter. Together, they provide a solid foundation for any modern app project. Throughout, the authors draw on decades of in-the-trenches experience as professional mobile developers to provide tips and best practices for highly efficient development. They show you how to break through traditional app boundaries with optional features, including the Android NDK, Google Analytics and Android Wear APIs, and Google Play Game Services. New coverage in this edition includes Integrating Google Cloud Messaging into your apps Utilizing the new Google location and Google Maps Android APIs Leveraging in-app billing from Google Play, as well as third-party providers Getting started with the Android Studio IDE Localizing language and using Google Play App Translation services Extending your app ’ s reach with Lockscreen widgets and DayDreams Leveraging improvements to Notification, Web, SMS, and other APIs Anuzzzi has released new source code samples for use with Android Studio. The code updates are posted to the associated blog site: http://advancedandroidbook.blogspot.com/ This title is an indispensable resource for intermediate- to advanced-level Java programmers who are now developing for Android, and for seasoned mobile developers who want to make the most of the new Android platform and hardware.

This revamped, newly titled edition is a complete update of Android™ Wireless Application Development, Volume II: Advanced Topics, Third Edition.

Build and deploy your Java-based Android apps using the popular and efficient Android Studio 4 suite of tools, an integrated development environment (IDE) for today’s Android developers. With this book, you ’ ll learn the latest and most productive tools in the Android tools ecosystem, ensuring quick Android app development and minimal effort on your part. Among these tools, you’ll use the new Android Studio 4 features, including an upgraded CPU profiler UI, a new build speed window, the multi-preview feature, and the live layout inspector. After reading and using this book, you’ll be able to efficiently build complete Java-based Android apps that run on any Android smartphone, tablet, smart watch and more. You ’ ll also be able to publish those apps and sell them online and in the Google Play store. What You Will Learn Use Android Studio 4 to quickly and confidently build your first Android apps Build an Android user interface using activities and layouts, event handling, images, menus, and the action bar Work with new tools in Android Studio 4: Jetpack compose support, a smart editor for ProGuard rules, a new motion layout editor, a new Android Gradle plugin, and a fragment wizard with new fragment templates Integrate data with data persistence Access the cloud Who This Book Is For Those who may be new to Android Studio 4 or Android Studio in general. You may or may not be new to Android development. Some prior experience with Java is recommended.

Android Design Patterns and Best Practice

Asynchronous Processing Techniques for Android Applications

A Hands-on Guide to Building Apps with iOS and Android

Mastering Coroutines in Kotlin and Android

Android Cookbook

Kotlin for Android Developers

Want to build apps for Android devices? This book is the perfect way to master the fundamentals. Written by an expert who’s taught this mobile platform to hundreds of developers in large organizations, this gentle introduction shows experienced object-oriented programmers how to use Android ’ s basic building blocks to create user interfaces, store data, connect to the network, and more. You’ll build a Twitter-like application throughout the course of this book, adding new features with each chapter. Along the way, you’ll also create your own toolbox of code patterns to help you program any type of Android application with ease. Get an overview of the Android platform and discover how it fits into the mobile ecosystem Learn about the Android stack, including its application framework, and the structure and distribution of application packages (APK) Set up your Android development environment and get started with simple programs Use Android ’ s building blocks—Activities, Intents, Services, Content Providers, and Broadcast Receivers Learn how to build basic Android user interfaces and organize UI elements in Views and Layouts Build a service that uses a background process to update data in your application Get an introduction to Android Interface Definition Language (AIDL) and the Native Development Kit (NDK)

What will you learn from this book? If you have an idea for a killer Android app, this fully revised and updated edition will get you up and running in a jiffy. You ’ ll go beyond syntax and how-to manuals and learn how to think like a great Android developer. This hands-on book teaches you everything from designing user interfaces to building multi-screen apps that persist data in a database. It covers the latest features of Android Jetpack, including Jetpack Compose. It’s like having an experienced Android developer sitting right next to you! If you have some Kotlin know-how, you’re ready to get started. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Android Development uses a visually rich format to engage your mind rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts? This multisensory learning experience is designed for the way your brain really works.

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 appWhen developing a professional Android app, there are hundreds of options for libraries and possible 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 forThis 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 TutorialsBy 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.

Build Android apps using the popular and efficient Android Studio 3 suite of tools, an integrated development environment (IDE) with which Android developers can now use the Kotlin programming language. With this book, you ’ ll learn the latest and most productive tools in the Android tools ecosystem, ensuring quick Android app development and minimal effort on your part. Along the way, you ’ ll use Android Studio to develop apps tier by tier through practical examples. These examples cover core Android topics such as Activities, Intents, BroadcastReceivers, Services and AsyncTask. Then, you ’ ll learn how to publish your apps and sell them online and in the Google Play store. What You ’ ll Learn Use Android Studio 3 to quickly and confidently build your first Android apps Build an Android user interface using activities and layouts, event handling, images, menus and the action bar Incorporate new elements including fragments Learn how data is persisted Use Kotlin to build apps Who This Book Is For Those who may be new to Android Studio 3 or Android Studio in general. You may or may not be new to Android development in general. Some prior experience with Java is also recommended.

Learn Android Studio 3 with Kotlin

Learn Kotlin the Easy Way While Developing an Android App

Efficient Android Threading

Build Perceivable, Operable, Understandable & Robust Apps

Android Programming

Improve Ratings with Speed, Optimizations, and Testing

Learn Android App Development is a hands-on tutorial and useful reference. You’ll quickly get up to speed and master the Android SDK and the Java that you need for your Android Apps. The Android SDK offers powerful features, and this book is the fastest path to mastering them!and the rest of the Andorid SDK!for programmers with some experience who are new to Android smartphone and tablet apps development. Many books introduce the Android SDK, but very few explain how to develop apps optimally. This book teaches both core Java language concepts and how to wisely but rapidly employ the design patterns and logic using the Android SDK, which is based on Java APIs. You’ll also learn best practices that ensure your code will be efficient and perform well. Get an accelerated but complete enough treatment of the fundamentals of Java necessary to get you started. Design your first app using prototyping and other design methods. Build your first Android app using the code given over the course of the book. Finally, debug and distribute your first app on Google Play or other Android app store. After reading this book, you’ll have your first app ready and on the app store, earning you the prestige and the money you seek.

This concise reference book for Android Studio 3 presents the essential Android Studio functions in a well-organized format that can be used as a handy reference. It will quickly demonstrate the usage of the Android Studio IDE to build an Android mobile app step by step. You won’t find any technical jargon, bloated samples, drawn out history lessons, or witty stories in this book. What you will find is a reference that is concise, to the point and highly accessible. The Android Studio IDE Quick Reference is packed with useful information and is a must-have for any mobile or Android app developer or programmer. What You Will Learn Discover the workflow basics in Android Studio 3 Make tasks efficient with keyboard shortcuts Carry out unit testing in Android Studio 3 Use time-saving techniques such as templates Master debugging basics Configure your project using Gradle Use the profiler to monitor app performance Who This Book Is For Those who already know how to build applications in Android using Java. This book will serve as a handy and quick reference on how to get things done in Android Studio 3.

Learn Android Studio 3 with KotlinEfficient Android App DevelopmentApress

Plan how to build a better app, grow it into a business, and earn money from your hard work using Firebase. In this book, Laurence Moroney, Staff Developer Advocate at Google, takes you through each of the 15 Firebase technologies, showing you how to use them with concrete examples. You’ll see how to build cross-platform apps with the three pillars of the Firebase platform: technologies to help you develop apps with a real-time database, remote configuration, cloud messaging, and more; grow your apps with user sharing, search integration, analytics, and more; and earn from your apps with in-app advertising. After reading The Definitive Guide to Firebase, you’ll come away empowered to make the most of this technology that helps you build better cross-platform mobile apps using either native Android or JavaScript-based web apps and effectively deploy them in a cloud environment. What You’ll Learn Use the real-time database for

a codeless middleware that gives online and offline data for syncing across your users' devices Master Firebase Cloud Messaging, a technology that delivers to connected devices in less than 500ms Grow your app organically with technologies such App Indexing, App Invites, and Dynamic Links Understand problems when they arise with crash reporting Fix user problems without direct access to users' devices Tie it all together with analytics that give you great intelligence about how users interact with your app Who This Book Is For Experienced Android, mobile app developers new to Firebase. This book is also for experienced web developers looking to build and deploy web apps for smartphones and tablets, too, who may be new or less experienced with mobile programming.

Beginning Flutter

Advanced Android Application Development

Covering Android 7

The Busy Coder's Guide to Advanced Android Development

Android Studio to Zipalign

Android Development with Kotlin

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 thisJava-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 contextand 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, JavaScriptgeneration, and more. Jump in and build 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

What will you learn from this book? If you have an idea for a killer Android app, this book will help you build your first working application in a jiffy. You'll learn hands-on how to structure your app, design interfaces, create a database, make your app work on various smartphones and tablets, and much more. It's like having an experienced Android developer sitting right next to you! All you need is some Java know-how to get started. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Android Development uses a visually rich format to engage your mind, rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts? This multi-sensory learning experience is designed for the way your brain really works.

This book covers Android app design fundamentals in Android Studio using Java programming language. The author assumes you have no experience in app development. The book starts with the installation of the required development environment and setting up the emulators. Then, the simplest "Hello World" app is developed step by step. In the next chapter, basics of the Java programming language are given with practical examples. Screenshots and code snippets are clearly given in the book to guide the reader. After the Java lecture, 6 complete Android apps are developed again by step by step instructions.Each code line is explained. As the reader follows the development of the example apps, he/she will learn designing user interfaces, connecting interface objects to code, developing efficient Java code and testing the app on emulators and real devices. The sample apps developed in this book are as follows: 1. Headlight app: Learn the basics of app development and use buttons in your code.

2. Body mass index (BMI) calculator app: Using input boxes, performing calculations and displaying the results on the screen. 3. Simple dice roller app: Using random number generator functions, including images in your project, displaying images on the screen and changing the displayed image programmatically. 4. The compass app: Accessing the magnetic field sensor, setting required permissions, extracting the direction angle and animating a compass figure. 5. Show my location app: Creating a map project, setting required permissions, accessing GPS device and showing real time location on the map. 6. S.O.S. sender app: Adding SMS functionality, setting required permissions and sending real time location using SMS. This book includes 146 figures and 114 code snippets that are used to explain app development concepts clearly. Full resolution colour figures and project files can be viewed and downloaded from the the book's website: www.android-java.website.

Build Android apps and learn the essentials of the popular Kotlin programming language and APIs. This book will teach you the key Kotlin skills and techniques important for creating your very own Android apps. Apart from introducing Kotlin programming, Learn Kotlin for Android Development stresses clean code principles and introduces object-oriented and functional programming as a starting point for developing Android apps. After reading and using this book, you'll have a foundation to take away and apply to your own Kotlin-based Android app development. You'll be able to write useful and efficient Kotlin-based apps for Android, using most of the features Kotlin as a language has to offer. What You Will Learn Build your first Kotlin app that runs on Android Work with Kotlin classes and objects for Android Use constructs, loops, decisions, and scopes Carry out operations on data Master data containers, arrays, and collections Handle exceptions and access external libraries Who This Book Is For Very little programming experience is required: no prior knowledge of Kotlin needed.

Programming Android

Android Accessibility by Tutorials (First Edition)

Java + Android Edition for Beginners

Effective Kotlin

Professional App Development with Kotlin

A Problem-Focused Approach

Learn Android Accessibility! Accessibility is an important, often overlooked, part of building a quality app. The Web Content Accessibility Guidelines (WCAG) can be confusing and it's often unclear how to apply these guidelines to Android. That's where Android Accessibility by Tutorials comes in! In this book, you'll learn about building accessible apps on Android using WCAG through hands-on, step-by-step tutorials. Who This Book is For This book is for intermediate Android developers who already know the basics of Android and Kotlin development and want to learn about accessibility. Topics Covered in Android Accessibility by Tutorials Importance of accessibility: Learn why accessibility is important and how you can use it to improve product quality. Getting your team on board: Gain insight into how you can get buy-in from your team to make accessibility a priority. Testing for accessibility: Practice using the tools you need to uncover areas for accessibility improvement. WCAG: Explore the guidelines used when enforcing accessibility laws. Android's accessibility: Become familiar with the Android APIs that cater to accessibility. Custom views: Understand how to integrate with accessibility services when building a custom view. One thing you can count on: after reading this book, you'll be prepared to improve your own apps by making them more accessible.

Fully updated for Android Studio 3.0 and Android 8, the goal of this book is to teach the skills necessary to develop Android based applications using the Android Studio Integrated Development Environment (IDE), the Android 8 Software Development Kit (SDK) and the Java programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an Android development and testing environment. An overview of Android Studio is included covering areas such as tool windows, the code editor and the Layout Editor tool. An introduction to the architecture of Android is followed by an in-depth look at the design of Android applications and user interfaces using the Android Studio environment. More advanced topics such as database management, content providers and intents are also covered, as are touch screen handling, gesture recognition, camera access and the playback and recording of both video and audio. This edition of the book also covers printing, transitions and cloud-based file storage. The concepts of material design are also covered in detail, including the use of floating action buttons, Snackbars, tabbed interfaces, card views, navigation drawers and collapsing toolbars. In addition to covering general Android development techniques, the book also includes Google Play specific topics such as implementing maps using the Google Maps Android API, and submitting apps to the Google Play Developer Console. Other key features of Android Studio 3 and Android 8 are also covered in detail including the Layout Editor, the ConstraintLayout and ConstraintSet classes, constraint chains and barriers, direct reply notifications and multi-window support. Chapters also cover advanced features of Android Studio such as App Links, Instant Apps, the Android Studio Profiler and Gradle build configuration. Assuming you already have some Java programming experience, are ready to download Android Studio and the Android SDK, have access to a Windows, Mac or Linux system and ideas for some apps to develop, you are ready to get started.

Kotlin is a powerful and pragmatic language, but it's not enough to know about its features. We also need to know when they should be used and in what way. This book is a guide for Kotlin developers on how to become excellent Kotlin developers. It presents and explains in-depth the best practices for Kotlin development. Each item is presented as a clear rule of thumb, supported by detailed explanations and practical examples. 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 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.

How to Learn Any Language Fast and Never Forget It

Efficient Android App Development

High Performance Android Apps

Learning Mobile App Development

Learn Kotlin for Android Development

Android Developer Tools Essentials

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.

Multithreading is essential if you want to create an Android app with a great user experience, but how do you know which techniques can help solve your problem? This practical book describes many asynchronous mechanisms available in the Android SDK, and provides guidelines for selecting the ones most appropriate for the app you're building. Author Anders Goransson demonstrates the advantages and disadvantages of each technique, with sample code and detailed explanations for using it efficiently. The first part of the book describes the building blocks of asynchronous processing, and the second part covers Android libraries and constructs for developing fast, responsive, and well-structured apps. Understand multithreading basics in Java and on the Android platform Learn how threads communicate within and between processes Use strategies to reduce the risk of memory leaks Manage the lifecycle of a basic thread Run tasks sequentially in the background with HandlerThread Use Java's Executor Framework to control or cancel threads Handle background task execution with AsyncTask and IntentService Access content providers with AsyncQueryHandler Use loaders to update the UI with new data

Presents an introduction to the new programming language for the Java Platform.

The Only Tutorial Covering BOTH iOS and Android—for students and professionals alike! Now, one book can help you master mobile app development with both market-leading platforms: Apple's iOS and Google's Android. Perfect for both students and professionals, Learning Mobile App Development is the only tutorial with complete parallel coverage of both iOS and Android. With this guide, you can master either platform, or both—and gain a deeper understanding of the issues associated with developing mobile apps. You'll develop an actual working app on both iOS and Android, mastering the entire mobile app development lifecycle, from planning through licensing and distribution. Each tutorial in this book has been carefully designed to support readers with widely varying backgrounds and has been extensively tested in live developer training courses. If you're new to iOS, you'll also find an easy, practical introduction to Objective-C, Apple's native language. All source code for this book, organized by chapter, is available at https://github.com/LearningMobile/BookApps Coverage includes Understanding the unique design challenges associated with mobile apps Setting up your Android and iOS development environments Mastering Eclipse development tools for Android and Xcode 5 tools for iOS Designing interfaces and navigation schemes that leverage each platform's power Reliably integrating persistent data into your apps Using lists (Android) or tables (iOS) to effectively present data to users Capturing device location, displaying it, and using it in your apps Accessing hardware devices and sensors Publishing custom apps internally within an organization Monetizing your apps on Apple's AppStore or the Google Play marketplace, as well as other ways of profiting from app development, such as consulting and developer jobs

Effective Java

Mastering Android Studio 3

Android App Development For Dummies

Kotlin Coroutines by Tutorials (Second Edition)

Real-World Android by Tutorials (First Edition)

Learn Android Studio

Get your first Android apps up and running with the help of plain English and practical examples. If you have a great idea for an Android app, but have never programmed before, then this book is for you. Android Apps for Absolute Beginners cuts through the fog of jargon and mystery that surrounds Android app development, and gives you simple, step-by-step instructions to get you started. This book teaches Android application development in language anyone can understand, giving you the best possible start in Android development. It provides clean, straightforward examples that make learning easy, allowing you to pick up the concepts without fuss. It offers clear code descriptions and layout so that you can get your apps running as soon as possible Although this book covers what's new in Android 7, it is also backwards compatible to cover some of the previous Android releases. What You'll Learn Download, install, and configure the latest software needed for Android app development Work efficiently using an integrated development environment (IDE) Build useful, attractive applications and get them working immediately Create apps with ease using XML markup and drag-and-drop graphical layout editors Use new media and graphics to skin your app so that it has maximum appeal Create advanced apps combining XML, Java and new media content Who This Book Is For If you have a great idea for an Android app, but have never programmed before, then this book is for you. You don't need to have any previous computer programming skills — as long as you have a desire to learn and you know which end of the mouse is which, the world of Android apps development awaits.

The updated edition of the bestselling guide to Android app development If you have ambitions to build an Android app, this hands-on guide gives you everything you need to dig into the development process and turn your great idea into a reality! In this new edition of Android App Development For Dummies, you'll find easy-to-follow access to the latest programming techniques that take advantage of the new features of the Android operating system. Plus, two programs are provided: a simple program to get you started and an intermediate program that uses more advanced aspects of the Android platform. Android mobile devices currently account for nearly 80% of mobile phone market share worldwide, making it the best platform to reach the widest possible audience. With the help of this friendly guide, developers of all stripes will quickly find out how to install the tools they need, design a good user interface, grasp the design differences between phone and tablet applications, handle user input, avoid common pitfalls, and turn a "meh" app into one that garners applause. Create seriously cool apps for the latest Android smartphones and tablets Adapt your existing apps for use on an Android device Start working with programs and tools to create Android apps Publish your apps to the Google Play Store Whether you're a new or veteran programmer, Android App Development For Dummies will have you up and running with the ins and outs of the Android platform in no time.

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

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

Efficient Java-Based Android Apps Development

Android Studio IDE Quick Reference

Professional Android 4 Application Development

Head First Android Development

Android Studio 3.0 Development Essentials - Android 8 Edition

Learning Android

NATIONAL BESTSELLER • *For anyone who wants to learn a foreign language, this is the method that will finally make the words stick. “A brilliant and thoroughly modern guide to learning new languages.”—Gary Marcus, cognitive psychologist and author of the New York Times bestseller Guitar Zero At thirty years old, Gabriel Wyner speaks six languages fluently. He didn’t learn them in school—who does? Rather, he learned them in the past few years, working on his own and practicing on the subway, using simple techniques and free online resources—and here he wants to show others what he’s discovered. Starting with pronunciation, you’ll learn how to rewire your ears and turn foreign sounds into familiar sounds. You’ll retrain your tongue to produce those sounds accurately, using tricks from opera singers and actors. Next, you’ll begin to tackle words, and connect sounds and spellings to imagery rather than translations, which will enable you to think in a foreign language. And with the help of sophisticated spaced-repetition techniques, you’ll be able to memorize hundreds of words a month in minutes every day. This is brain hacking at its most exciting, taking what we know about neuroscience and linguistics and using it to create the most efficient and enjoyable way to learn a foreign language in the spare minutes of your day. Android development can be challenging, but through the effective use of Android Developer Tools (ADT), you can make the process easier and improve the quality of your code. This concise guide demonstrates how to build apps with ADT for a device family that features several screen sizes, different hardware capabilities, and a varying number of resources. With examples in Windows, Linux, and Mac OS X, you’ll learn how to set up an Android development environment and use ADT with the Eclipse IDE. Also, contributor Donn Felker introduces Android Studio, a Google IDE that will eventually replace Eclipse. Learn how to use Eclipse and ADT together to develop Android code Create emulators of various sizes and configurations to test your code Master Eclipse tools, or explore the new Android Studio Use Logcat, Lint, and other ADT tools to test and debug your code Simulate real-world events, including location, sensors, and telephony Create dynamic and efficient UIs, using Graphical Layout tools Monitor and optimize you application performance using DDMS, HierarchyViewer, and the Android Monitor tool Use Wizards and shortcuts to generate code and image assets Compile and package Android code with Ant and Gradle*

Best practices

The Definitive Guide to Firebase

Build Android Apps on Google's Mobile Platform

The Big Nerd Ranch Guide

Android Apps for Absolute Beginners

Learn Android Studio 3