

Android Programming In Kotlin Starting With An App

In this book, we take you on a fun, hands-on and pragmatic journey to learning Android application development using Kotlin. You'll start building your first Android app from scratch within minutes. Every section is written in a bite-sized manner and straight to the point as i don't want to waste your time (and most certainly mine) on the content you don't need. In the end, you will have the skills to create an app and submit it to the app store. In the course of this book, we will cover: Chapter 1: Introduction & Data Calculator App Chapter 2: Quotes App Using RecyclerView Chapter 3: To Do List App Using RecyclerView & Shared Preferences Chapter 4: To Do List with Realm Chapter 5: Connecting to an API, Cryptocurrency Price Tracker Chapter 6: Connecting to GitHub API - Search GitHub Users App Chapter 7: Face Detection, Text Recognition with ML Kit Chapter 8: Publishing Our App on AppStore The goal of this book is to teach you Android development in a fun and motivating way. We focus only on the essentials and cover the material in a hands-on practice manner for you to code along. Requirements: No previous knowledge of Android development or Kotlin required, but you should have basic programming knowledge. We will learn how to make Android apps while at the same time learning the Kotlin programming language.

Learn all the Java and Android skills you need to start making powerful mobile applications About This Book Kick-start your Android programming career, or just have fun publishing apps to the Google Play marketplace A first-principles introduction to Java, via Android, which means you'll be able to start building your own applications from scratch Learn by example and build three real-world apps and over 40 mini apps throughout the book Who This Book Is For Are you trying to start a career in programming, but haven't found the right way in? Or do you have a great idea for an app, but don't know how to make it a reality? Or maybe you're just frustrated that "to learn Android, you must know Java." If so, Android Programming for Beginners is for you. You don't need any programming experience to follow along with this book, just a computer and a sense of adventure. What You Will Master the fundamentals of coding Java for Android Install and set up your Android development environment Build functional user interfaces with the Android Studio visual designer Add user interaction, data capture, sound, and animation to your apps Manage your apps' data using the built-in Android SQLite database Find out about the design patterns used by professionals to make top-grade applications Build, deploy, and publish real Android applications to the Google Play marketplace In Detail Android is the most popular OS in the world. There are millions of devices accessing tens of thousands of applications. It is many people's entry point into the world of technology; it is an operating system for everyone. Despite this, the entry-level to actually make Android applications is usually a computer science degree, or five years' worth of Java experience. Android Programming for Beginners will be your companion to create Android applications from scratch—whether you're looking to start your programming career, make an application for work, be introduced to mobile development, or are just looking to program for fun. We will introduce you to all the fundamental concepts of programming in an Android context, from the Java basics to working with the Android API. All examples are created from within Android Studio, the official Android development environment that helps supercharge your application development process. After this crash course, we'll dive deeper into Android programming and you'll learn how to create applications with a professional-standard architecture through fragments, make location-aware apps with Google Maps integration, and store your user's data with SQLite. In addition, you'll see how to make your apps multilingual, capture images from a device's camera, and work with graphics, sound, and animations too. By the end of this book, you'll be ready to start building your own custom applications in Android and Java. Style and approach With more than 40 mini apps to code and run, Android Programming for Beginners is a hands-on guide to learning Android and Java. Each example application demonstrates a different aspect of Android programming. Alongside these mini apps, we push your abilities by building three larger applications to demonstrate Android application development in context.

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.

Learn how to create a modern Android application through the course of this book, you will be taught from the ground-up on how to create and develop your own Android apps in the Kotlin language, which has been given first-class status by Google. You will be given detailed tutorials on how to set up Android Studio, test devices, and creating your first "hello world" application, all the way through to creating new collections for your app and handling constraints. Not only will you be exposed to real working Kotlin code, you will also learn how to develop Android apps which are adaptable to many different form factors and orientations. In addition, you'll be able to develop in Android Studio 3.0, the latest version of the IDE made by Google. Through every step there are screenshots of what you should be doing, alongside code examples for you to play with. You will develop three Android apps during the course of the book, each progressively getting more complex and building upon what you learnt from the last one. So what are you waiting for? Start building your own Android app today! Want to learn the basics first? Check out my other book on Amazon - Kotlin Development for Beginners (with Code Examples) here: bit.ly/kotlin-book. Summary Kotlin in Action guides experienced Java developers through the language basics of Kotlin all the way through building applications to run on the JVM and Android devices. Foreword by Andrew 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 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 Kotlin with natural language syntax. The authors are core Kotlin developers, so you can trust that even the granly details are described accurately. 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 Android developers. About the Author Dmitry Jemerov and Svetlana Isikova 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

Deep dive into the world of Android to create robot applications with Kotlin

Android Studio 4.0 Development Essentials - Kotlin Edition

Kotlin Programming

Android Studio 3.0 Development Essentials - Android 8 Edition

Learn Kotlin the Easy Way While Creating an Android App

Build Perceivable, Operable, Understandable & Robust Apps

Enhance your Kotlin programming skills by building 3 real-world applications Key Features Build three full-fledged, engaging applications from scratch and learn to deploy them Enhance your app development and programming activities with Kotlin's powerful and intuitive tools and utilities. Experience the gentle learning curve, expressiveness, and intuitiveness of Kotlin, as you develop your own applications Book Description Kotlin greatly reduces the verbosity of source code. With Google having announced their support for Kotlin as a first-class language for writing Android apps, now's the time learn how to create apps from scratch with Kotlin programming. By Example takes you through the building blocks of Kotlin, such as functions and classes. You'll explore various features of Kotlin by building three applications of varying complexity. For a quick start to Android development, we look at building a classic game, Tetris, and elaborate on object-oriented programming in Kotlin. Our next application will be a messenger app, a level up in terms of complexity. Before moving onto the third app, we take a look at data persistent methods, helping us learn about the storage and retrieval of useful applications. Our final app is a place reviewer: a web application that will make use of the Google Maps API and Place Picker. By the end of this book, you will have gained experience of creating and deploying Android applications using Kotlin. What you will learn Learn the building blocks of the Kotlin programming language Develop powerful RESTful microservices for Android applications Create reactive Android applications Implement an MVC architecture design pattern and dependency management using Kotlin Cronicler, transform, and stash data with Logstash Secure applications using Spring Security Deploy Kotlin microservices to AWS and Android applications to the Play Store Who this book is for This book is for those who are new to Kotlin or are familiar with the basics, having dabbled with Java until now. Basic programming knowledge is mandatory.

Kotlin is a statically typed programming language designed to interoperate with Java and fully supported by Google on the Android operating system. Based on Big Nerd Ranch's popular Kotlin Essentials course, this guide shows you how to work effectively with the Kotlin programming language through hands-on examples and clear explanations of key Kotlin concepts and foundational APIs. Written for Kotlin 1.2, this book will also introduce you to JetBrains' IntelliJ IDEA development environment. Whether you are an experienced Android developer looking for modern features beyond what Java offers or a new developer ready to learn your first programming language, the authors will guide you from first principles to advanced usage of Kotlin. By the end of this book, you will be empowered to create reliable, concise applications in Kotlin.

Learn how to hack systems like black hat hackers and secure them like security experts Key Features Understand how computer systems work and their vulnerabilities Exploit weaknesses and hack into machines to test their security Learn how to secure systems from hackers Book Description This book starts with the basics of ethical hacking, how to practice hacking safely and legally, and how to install and use Kali Linux on the Linux terminal. You will explore network hacking, where you will see how to test the security of wired and wireless networks. You'll also learn how to crack the password for any Wi-Fi network (whether it uses WEP, WPA, or WPA2) and spy on the connected devices. Moving on, you will discover how to gain access to remote computer systems using client-side and server-side attacks. You will also get the hang of post-exploitation techniques, including remotely controlling and interacting with the systems that you compromised. Towards the end of the book, you will be able to pick up web application hacking techniques. You'll see how to discover, exploit, and prevent a number of website vulnerabilities, such as XSS and SQL injections. The attacks covered are practical techniques that work against real systems and are purely for educational purposes. At the end of each section, you will learn how to detect, prevent, and secure systems from these attacks. What you will learn Understand ethical hacking and the different fields and types of hackers Set up a penetration testing lab to practice safe and legal hacking Explore Linux basics, commands, and how to interact with the terminal Access password-protected networks and spy on connected clients Use server and client-side attacks to hack and control remote computers Control a hacked system remotely and use it to hack other systems Discover, exploit, and prevent a number of web application vulnerabilities such as XSS and SQL injections Who this book is for Learning Ethical Hacking from Scratch is for anyone interested in learning how to hack and test the security of systems like professional hackers and security experts.

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 companies will ask for. So it's important to start learning Kotlin as soon as possible. Kotlin 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 them 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.

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 to start learning Kotlin. Why waste your time struggling with new concepts? This multisensory learning experience is designed for the way your brain really works.

How to Build Android Apps with Kotlin

Your stepping stone to penetration testing

Core features to get you ready for developing applications

Kotlin Quick Start Guide

Beginning Android Development With Kotlin

Kotlin in Action

Get started with Kotlin programming for building real world applications Key Features Start programming with Kotlin Explore Kotlin language syntax, standard libraries and Java Interoperability Builds an example application with what you learn Book Description Kotlin is a general purpose, object-oriented language that primarily targets the JVM and Android. Intended as a better alternative to Java, its main goals are high interoperability with Java and increased developer productivity. Kotlin is still a new language and this book will help you to learn the core Kotlin features and get you ready for developing applications with Kotlin. This book covers Kotlin features in detail and explains them with practical code examples. You will learn how to set up the environment and take your first steps with Kotlin and its syntax. We will cover the basics of the language, including functions, variables, and basic data types. With the basics covered, the next chapters show how functions are first-class citizens in Kotlin and deal with the object-oriented side of Kotlin. You will move on to more advanced features of Kotlin. You will explore Kotlin's Standard Library and learn how to work with the Collections API. The book finishes by putting Kotlin in to practice, showing how to build a desktop app. By the end of this book, you will be confident enough to use Kotlin for your next project. What you will learn Programming in Kotlin language syntax, basic types, control flow, classes, and OOP Writing functions and functional programming in Kotlin Defining and importing from packages in Kotlin Running Kotlin on JVMs and Android runtimes Working with the Kotlin Standard Library and advanced features of Kotlin programming Setting up a Kotlin development environment with JetBrains tools Building real-world applications with Kotlin Who this book is for This book is intended for anybody who wants to learn the most important Kotlin features. No experience of Kotlin is expected.

Android Programming with Kotlin for Beginners Build Android apps starting from zero programming experience with the new Kotlin programming language 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, 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 delve 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 programming and RxKotlin 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.

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.

What will you learn from this book? Head First Kotlin is a complete introduction to coding in Kotlin. This hands-on book helps you learn the Kotlin language with a unique method that goes beyond syntax and how-to manuals and teaches you how to think like a great Kotlin developer. You'll learn everything from language fundamentals to collections, generics, lambdas, and higher-order functions. Along the way, you'll play with both object-oriented and functional programming. If you want to really understand Kotlin, this is the book for you. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Kotlin 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.

The Next Generation Language for Modern Android Apps Programming

Kotlin Development for Android

Kotlin for Android App Development

Kotlin Programming with Tutorials (First Edition)

Real-World Android by Tutorials (First Edition)

Build Android apps starting from zero programming experience with the new Kotlin programming language

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.

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.

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.

Learn the Java and Android skills you need to start developing powerful mobile applications with the help of actionable steps Key FeaturesKick-start your Android programming career or just have fun publishing apps to the Google Play marketplaceGet a first principles introduction to using Java and Android and prepare to start building your own apps from scratchLearn by example by building four real-world apps and dozens of mini appsBook Description Do you want to make a career in programming but don't know where to start? Do you have a great idea for an app but don't know how to make it a reality? Or are you worried that you'll have to learn Java programming to become an Android developer? Look no further! This new and expanded third edition of Android Programming for Beginners will be your guide to creating Android applications from scratch. The book starts by introducing you to all the fundamental concepts of programming in an Android context, from the basics of Java to working with the Android API. You'll learn with the help of examples that use up-to-date API classes and are created within Android Studio, the official Android development environment that helps supercharge your mobile application development process. After a crash course on the key programming concepts, you'll explore Android programming and get to grips with creating applications with a professional-standard UI using fragments and storing user's data with SQLite. This Android Java book also shows you how you can make your apps multilingual, draw on the screen with a finger, and work with graphics, sound, and animations. By the end of Android programming for Beginners, you'll be ready to start building your own custom applications in Android and Java. What you will learnUnderstand the fundamentals of coding in Java for AndroidInstall and set up your Android development environmentBuild functional user interfaces with the Android Studio visual designerAdd user interaction, data capture, sound, and animation to your appsManage your apps' data using the built-in Android SQLite databaseExplore the design patterns used by professionals to build top-grade applicationsBuild real-world Android applications that you can deploy to the Google Play marketplaceWho this book is for This Android book is for you if you are completely new to Java, Android, or programming and want to get started with Android app development. If you have experience of using Java on Android, this book will serve as a refresher to help you advance your knowledge and make progress through the early projects covered in the book.

For both beginning and experienced programmers! From the author of the multi-award-winning Thinking in C++ and Thinking in Java together with a member of the Kotlin language team comes a book that breaks the concepts into small, easy-to-digest "atoms," along with exercises supported by hints and solutions directly inside IntelliJ IDEA! No programming background necessary. Summaries for experienced programmers. Easy steps via very small chapters ("atoms"). Free accompanying exercises/solutions within IntelliJ Idea. Gives you a strong Kotlin foundation. Kotlin is cleaner, more consistent and far more powerful than Java. Increase programming productivity with Kotlin's clear, concise syntax. Reading safer, more reliable programs. Kotlin easily interacts with Java. Effortlessly migrate by adding pieces of Kotlin to an existing Java project. Support for Windows, Mac and Linux. Free version of IntelliJ IDEA includes extensive Kotlin support. Book resources, live seminars, workshops and consulting available at AtomicKotlin.com.

Learn Android Studio 3 with Kotlin

The Big Nerd Ranch Guide

Learn Ethical Hacking from Scratch

Achieving Structured Concurrency with Coroutines

Kotlin and Android Development featuring Jetpack

Android Accessibility by Tutorials (First Edition)

Learn all the Java and Android skills you need to start making powerful mobile applications with practical and actionable steps Key FeaturesKick-start your Android programming career, or just have fun publishing apps to the Google Play marketplaceA first-principles introduction to Java, via Android, which means you'll be able to start building your own applications from scratchLearn by example and build four real-world apps and dozens of mini-apps throughout the bookBook Description Are you trying to start a career in programming, but haven't found the right way in? Do you have a great idea for an app, but don't know how to make it a reality? Or maybe you're just frustrated that in order to learn Android, you must know Java. If so, then this book is for you. This new and expanded second edition of Android Programming for Beginners will be your companion to create Android Pie applications from scratch. We will introduce you to all the fundamental concepts of programming in an Android context, from the basics of Java to working with the Android API. All examples use the up-to-date API classes, and are created from within Android Studio, the official Android development environment that helps supercharge your application development process. After this crash course, we'll dive deeper into Android programming and you'll learn how to create applications with a professional-standard UI through fragments and store your user's data with SQLite. In addition, you'll see how to make your apps multilingual, draw to the screen with a finger, and work with graphics, sound, and animations too. By the end of this book, you'll be ready to start building your own custom applications in Android and Java. What you will learnUnderstand the fundamentals of coding in Java for AndroidInstall and set up your Android development environmentBuild functional user interfaces with the built-in Android SQLite databaseExplore the design patterns used by professionals to make top-grade applications Build, deploy, and publish real Android applications to the Google Play marketplaceWho this book is for This book is for you if you are completely new to Java, Android, or programming and want to make Android applications. This book also acts as a refresher for those who already have experience of using Java on Android to advance their knowledge and make fast progress through the early projects.

Presents instructions for creating Android applications for mobile devices using Java. Master the fundamentals of Android programming and apply your skills to create scalable and reliable apps using industry best practices Key FeaturesBuild apps with Kotlin, Google's preferred programming language for Android developmentUnlock solutions to development challenges with guidance from experienced Android professionalsImprove your apps by adding valuable features that make use of advanced functionalityBook Description Are you keen to get started building Android 11 apps, but don't know where to start? How to Build Android Apps with Kotlin is a comprehensive guide that will help kick-start your Android development practice. This book starts with the fundamentals of app development, enabling you to utilize Android Studio and Kotlin to get started building Android projects. You'll learn how to create apps and run them on virtual devices through guided exercises. Progressing through the chapters, you'll delve into Android's RecyclerView to make the most of lists, images, and maps, and see how to fetch data from a web service. Moving ahead, you'll get to grips with testing, learn how to keep your architecture clean, understand how to persist data, and gain basic knowledge of the dependency injection pattern. Finally, you'll see how to publish your apps on the Google Play store. You'll work on realistic projects that are split up into bite-size exercises and activities, allowing you to challenge yourself in an enjoyable and attainable way. You'll build apps to create quizzes, read news articles, check weather reports, store recipes, retrieve movie information, and remind you where you parked your car. By the end of this book, you'll have the skills and confidence to build your own creative Android applications using Kotlin. What you will learnCreate maintainable and scalable apps using KotlinUnderstand the Android development lifecycleSimplify app development with Google architecture componentsUse standard libraries for dependency injection and data parsingApply the repository pattern to retrieve data from outside sourcesPublish your app on the Google Play storeWho this book is for If you want to build your own Android applications using Kotlin but are unsure of how to begin, then this book is for you. To easily grasp the concepts in this book, it is recommended that you already have a basic understanding of Kotlin, or experience in a similar programming language and a willingness to brush up on the Kotlin before you start.

Build smart looking Kotlin apps with UI and functionality for the Android platform Key FeaturesStart your Android programming career, or just have fun publishing apps on Google Play marketplaceThe first-principle introduction to Kotlin through Kotlin, to start building easy-to-use appsLearn by example and build four real-world apps and dozens of mini-appsBook Description Android is the most popular mobile operating system in the world and Kotlin has been declared by Google as a first-class programming language to build Android apps. With the imminent arrival of the most anticipated Android update, Android 10 (Q), this book gets you started building apps compatible with the latest version of Android. It adopts a project-style approach, where we focus on teaching the fundamentals of Android app development and the essentials of Kotlin by building three real-world apps and more than a dozen mini-apps. The book begins by giving you a strong grasp of how Kotlin and Android work together before gradually moving onto exploring the various Android APIs for building stunning apps for Android with ease. You will learn to make your apps more presentable using different layouts. You will dive deep into Kotlin programming concepts such as variables, functions, data structures, Object-Oriented code, and how to connect your Kotlin code to the UI. You will learn to add multilingual text so that your app is accessible to millions of more potential users. You will learn how animation, graphics, and sound effects work and are implemented in your Android app. By the end of the book, you will have sound knowledge about significant Kotlin programming concepts and start building your own fully featured Android apps. What you will learnLearn how Kotlin and Android work togetherBuild a graphical drawing app using Object-Oriented Programming (OOP) principlesBuild beautiful, practical layouts using ScrollView, RecyclerView, NavigationView, ViewPager and CardViewWrite Kotlin code to manage an apps' data using different strategies including JSON and the built-in Android SQLite databaseAdd user interaction, data captures, sound, and animation to your appsImplement dialog boxes to capture input from the userBuild a simple database app that sorts and stores the user's dataWho this book is for This book is for people who are new to Kotlin, Android and want to develop Android applications that are easy to use and fun to interact with. Who This Book Is For This book is for those who are new to Kotlin or are familiar with the basics, having dabbled with Java until now. Basic programming knowledge is mandatory.

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.

Android Programming in Kotlin

Build in-depth, full-featured Android apps starting from zero programming experience, 3rd Edition

Head First Android Development

Kotlin for Android Developers

Android Programming for Beginners

Efficient Android App Development

Write More Robust and Maintainable Android Apps with Kotlin."Peter Sommerhoff takes a practical approach to teaching Kotlin by providing a larger set of code listings that demonstrate language features and by guiding readers through the development of two Android apps step by step. . . . Peter finds a good balance between what is essential and what can be left to readers, so this book is an efficient yet comprehensible source for starting programming with Kotlin."-Bernhard Rumpel, Professor of Software Engineering, RWTH Aachen University The Kotlin language brings state-of-the-art programming techniques and constructs to Android development. Kotlin for Android Development will help you rapidly understand Kotlin's principles and techniques, apply Kotlin in production app development, integrate Kotlin with existing Java code, and plan a migration to Kotlin, if you choose. If you have at least basic programming experience (with any language), Peter Sommerhoff's well-crafted overview and examples will help you get quickly up-to-speed with the Kotlin language, its constructs, and its advanced functional and object-oriented capabilities. Once you've mastered these foundations, Sommerhoff walks you through two complete app development projects, introducing best practices and emerging patterns for writing code that's robust, concise, readable, and highly performant. Understand Kotlin's goals, principles, advantages, design, and constructs Take full advantage of functional programming in the Kotlin environment Write more concise and reusable code using Kotlin's object-oriented features Interoperate with existing Java code, and plan a migration to Kotlin Use coroutines to efficiently handle concurrency Capture data via third-party APIs, map it to internal data representations, and present it to users Master best practices for architecting Kotlin Android apps Improve productivity and readability by creating simple domain-specific languages in Kotlin Fully updated for Android Studio 3.2, Android 9, Android Jetpack and the modern architectural guidelines and components, the goal of this book is to teach the skills necessary to develop Android-based applications using the Kotlin programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an Android development and testing environment followed by an introduction to programming in Kotlin including data types, flow control, functions, lambdas and object-oriented programming. 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. Chapters are also included covering the Android Architecture Components including view models, lifecycle management, Room databases, app navigation, live data and data binding. More advanced topics such as 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, Snackbar, 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 3.2 and Android 9 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.

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>.

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 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, Snackbar, 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.

Learn Android programming with Kotlin! Learning Android programming can be challenging. Sure, there is plenty of documentation, but the tools and libraries available today for Android are easily overwhelming for newcomers to Android and Kotlin. Android Apprentice takes a different approach. From building a simple first app, all the way to a fully-featured podcast player app, this book works you step-by-step, building on basic concepts to advanced techniques so you can build amazing apps worthy of the Google Play Store! Who This Book Is For This book is for anyone interested in writing mobile apps for Android. Though no previous mobile experience is necessary, this book is also a great resource for iPhone developers transitioning from iOS. Topics Covered in Android Apprentice Getting Started: Learn how to set up Android Studio and the Android Emulator. Layouts: Create layouts that can be used for both Activities and Fragments Debugging: No one's perfect! Learn how to dig down and troubleshoot bugs in your apps. Communication: Design separate Activities and communicate and send data between them using Intents. Scrolling Layouts: Learn how to use RecyclerView Views to make efficient, reusable views that scroll fluidly at a touch. Google Places: Integrate location APIs to bring the magic of maps into your Android apps. Networking: Learn how to access the AndroidX libraries to support older versions of Android. And much, much more! One thing you can count on: after reading this book, you'll be prepared to write feature-rich apps from scratch and go all the way to submitting them to the Google Play Store! About the Tutorial Team The Tutorial Team is a group of app developers and authors who write tutorials at the popular website raywenderlich.com. We take pride in making sure each tutorial we write holds to the highest standards of quality. We want our tutorials to be well written, easy to follow, and fun. If you've enjoyed the tutorials we've written in the past, you're in for a treat. The tutorials we've written for this book are some of our best yet - and this book contains detailed technical knowledge you simply won't be able to find anywhere else.

Developing Android 9 Apps Using the Android Studio 3.2, Kotlin and Android Jetpack

Android Development with Kotlin

Updated to Android 10 (Q)

Learn Kotlin for Android Development

Android Apprentice

Fully updated for Android Studio 4.0, Android 10 (Q), Android Jetpack and the modern architectural guidelines and components, the goal of this book is to teach the skills necessary to develop Android-based applications using the Kotlin programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an Android development and testing environment followed by an introduction to programming in Kotlin including data types, flow control, functions, lambdas, coroutines and object-oriented programming. 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 Kotlin including data types, flow control, functions, lambdas, coroutines and object-oriented programming using the Android Studio environment. Chapters are also included covering the Android Architecture Components including view models, lifecycle management, Room databases, app navigation, live data and data binding. More advanced topics such as intents are also covered, as are touch screen handling, gesture recognition and the playback and recording of audio. This edition of the book also covers printing, transitions, cloud-based file storage and foldable device support. The concepts of material design are also covered in detail, including the use of floating action buttons, Snackbar, 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 4.0 and the Android SDK are also covered in detail including the Layout Editor, the ConstraintLayout and ConstraintSet classes, MotionLayout animation, constraint chains and barriers, view binding, direct reply notifications and multi-window support. Chapters also cover advanced features of Android Studio such as App Links, Dynamic Feature Modules, the Android Studio Profiler and Gradle build configuration. Assuming you already have some 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.

Learn Android programming with Kotlin! Learning Android programming can be challenging. Sure, there is plenty of documentation, but the tools and libraries available today for Android are easily overwhelming for newcomers to Android and Kotlin. Android Apprentice takes a different approach. From building a simple first app, all the way to a fully-featured podcast player app, this book walks you step-by-step, building on basic concepts to advanced techniques so you can build amazing apps worthy of the Google Play Store! Who This Book Is For This book is for anyone interested in writing mobile apps for Android. Though no previous mobile experience is necessary, this book is also a great resource for iPhone developers transitioning from iOS. Topics Covered in Android Apprentice Getting Started: Learn how to set up Android Studio and the Android Emulator. Layouts: Create layouts that can be used for both Activities and Fragments Debugging: No one's perfect! Learn how to dig down and troubleshoot bugs in your apps. Communication: Design separate Activities and communicate and send data between them using Intents. Scrolling Layouts: Learn how to use RecyclerView Views to make efficient, reusable views that scroll fluidly at a touch. Google Places: Integrate location APIs to bring the magic of maps into your Android apps. Networking: Learn how to access the AndroidX libraries to support older versions of Android. And much, much more! One thing you can count on: after reading this book, you'll be prepared to write feature-rich apps from scratch and go all the way to submitting them to the Google Play Store! About the Tutorial Team The Tutorial Team is a group of app developers and authors who write tutorials at the popular website raywenderlich.com. We take pride in making sure each tutorial we write holds to the highest standards of quality. We want our tutorials to be well written, easy to follow, and fun. If you've enjoyed the tutorials we've written in the past, you're in for a treat. The tutorials we've written for this book are some of our best yet - and this book contains detailed technical knowledge you simply won't be able to find anywhere else.

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A hands-on introduction to the latest release of the Android OS and the easiest Android tools for developers As the dominant mobile platform today, the Android OS is a powerful and flexible platform for mobile device. The new Android 7 release (New York Cheesecake) boasts significant new features and enhancements for both smartphone and tablet applications. This step-by-step resource takes a hands-on approach to teaching you how to create Android applications for the latest OS and the newest devices, including both smartphones and tablets. Shows you how to install, get started with, and use Android Studio 2 – the simplest Android developer tool ever for beginners Addresses how to display notifications, create rich user interfaces, and use activities and intents Reviews mastering views and menus and managing data Discusses working with SMS Looks at packaging and publishing applications to the Android market Beginning Android Programming with Android Studio starts with the basics and goes on to provide you with everything you need to know to begin to successfully develop your own Android applications.

Start building native Android apps the modern way in Kotlin with Jetpack's expansive set of tools, libraries, and best practices. Learn how to create efficient, resilient views with Fragments and share data between the views with ViewModels. Use Room to persist valuable data quickly, and avoid NullPointerExceptions and Java's verbose expressions with Kotlin. You can even handle asynchronous web service calls elegantly with Kotlin coroutines. Achieve all of this and much more while building two full-featured apps, following detailed, step-by-step instructions With Kotlin and Jetpack, Android development is now smoother and more enjoyable than ever before. Dive right in by developing two complete Android apps. With the first app, Penny Drop, you create a full game complete with random die rolls, customizable rules, and AI opponents. Build lightweight Fragment views with data binding, quickly and safely update data with ViewModel classes, and handle all app navigation in a single location. Use Kotlin with Android-specific Kotlin extensions to efficiently write null-safe code without all the normal boilerplate required for pre-Jetpack + Kotlin apps. Persist and retrieve data as full objects with the Room library, then display that data with ViewModels and list records in a RecyclerView. Next, you create the official app for the Android Baseball League. It's a fake league but a real app, where you use what you learn in Penny Drop and build up from there. Navigate all over the app via a Navigation Drawer, including specific locations via Android App Links. Handle asynchronous and web service calls with Kotlin Coroutines, display that data smoothly with the Paging library, and send notifications to a user's phone from your app. Come build Android apps the modern way with Kotlin and Jetpack! What You Need: You'll need the Android SDK, a text editor, and either a real Android device or emulator for testing. While not strictly required, it's assumed you're using Android Studio, which comes with the Android SDK and simplifies creating an emulator. Also, a few examples require JDK 1.8 or later, though all of these pieces can be completed in other ways when using JDK 1.6.

Fully updated for Android Studio 4.2, the goal of this book is to teach the skills necessary to develop Android-based applications using the Kotlin programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an Android development and testing environment followed by an introduction to programming in Kotlin including data types, flow control, functions, lambdas, and object-oriented programming. 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. Chapters are also included covering the Android Architecture Components including view models, lifecycle management, Room database access, the Database Inspector, app navigation, live data, and data binding. More advanced topics such as intents are also covered, as are touch screen handling, gesture recognition, and the recording and playback of audio. This edition of the book also covers printing, transitions, cloud-based file storage, and foldable device support. 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. Other key features of Android Studio 4.2 and Android are also covered in detail including the Layout Editor, the ConstraintLayout and ConstraintSet classes, MotionLayout Editor, view binding, constraint chains, barriers, and direct reply notifications. Chapters also cover advanced features of Android Studio such as App Links, Dynamic Delivery, the Android Studio Profiler, Gradle build configuration, and submitting apps to the Google Play Developer Console. Assuming you already have some 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.

Android Studio 4.2 Development Essentials – Kotlin Edition

Design and build non-blocking, asynchronous Kotlin applications with RxBKotlin, Reactor-Kotlin, Android, and Spring

Best practices

Build in-depth, full-featured Android 9 Pie apps starting from zero programming experience, 2nd Edition

Professional App Development with Kotlin

Beginning Android Development with Kotlin

Android development is so vast that mastering this mobile operating system can seem daunting—particularly now that Kotlin has become the official Android development language. This book helps Android developers make the transition from Java to Kotlin and shows them how Kotlin provides a true advantage for gaining control over asynchronous computations. By focusing specifically on coroutines, a new asynchronous programming paradigm, this book describes how you can achieve structured concurrency with Kotlin. Authors Pierre-Olivier Laurence, Amanda Hinchman-Dominguez, and Mike Dunn provide implementations of the most common tasks in native Android development. The basics of the Kotlin language and the Android architecture Data transformations in Kotlin Android fundamentals in memory and threading Concurrency with coroutines Channels and flows Android profiling tools

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 Kotlin 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.

In this book, we take you on a fun, hands-on and pragmatic journey to learning Android application development using Kotlin. You'll start building your first Android app from scratch within minutes. Every section is written in a bite-sized manner and straight to the point as I don't want to waste your time (and most certainly mine) on the content you don't need. In the end, you will have the skills to create an app and submit it to the app store. In the course of this book, we will cover: Chapter 1: Introduction & BMI Calculator App Chapter 2: Quotes App Using RecyclerView Chapter 3: To Do List App Using RecyclerView & Shared Preferences Chapter 4: To Do List with Realm Chapter 5: Connecting to an API: Cryptocurrency Price Tracker Chapter 6: Connecting to GitHub API - Search GitHub Users App Chapter 7: Face Detection, d104 Recognition with ML Kit Chapter 8: Publishing Our App on AppStore The goal of this book is to teach you Android development in a manageable way without overwhelming you. We focus only on the essentials and cover the material in a hands-on practice manner for you to code along. Requirements No previous knowledge of Android development or Kotlin required, but you should have basic programming knowledge. We will learn how to make Android apps while at the same time learning the Kotlin programming language.

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.

Whether you are a professional programmer or a hobbyist, programming an Android app is an attractive proposition. Android firmly dominates the global smartphone market, meaning many potential users. All the tools you need are free to download and use and it's easy to get started as Android Studio will build you a Hello World app in a few minutes. What you do next is more difficult as Android is a tough system to master and to create a good app you need a feel for how the system works and its limitations. The good news is that Kotlin is a language that makes working with Android much easier. Android Programming In Kotlin: Starting With An App shows you how common tasks are done in Android Studio 3 using Kotlin, pointing out where necessary how this differs from the Java approach. Given that you can't avoid Java altogether it also explains how Kotlin can work with the Java-based Android SDK. Although Android development seems confusing at first, it has patterns which mean that having done something once you can generalize the approach to components you haven't previously encountered. This book doesn't set out to be a complete treatment of Kotlin or Android. Instead it focuses on the things you need to know to write an app with a single Activity and a UI, a good foundation for further Android programming. Particular attention is paid to creating the user interface (UI) because this is what you spend most of your time working on even if the app in question is sophisticated. There are plenty of examples in this book but they are deliberately simple, stripped down to let you see what is essential.

Android Apprentice (Fourth Edition)

Mastering Android Development with Kotlin

Android Programming with Kotlin for Beginners

Android Studio 3.2 Development Essentials - Kotlin Edition

(Create Your Own App)

Reactive Programming in Kotlin

Master Android development using a variety of Kotlin features About This Book Leverage specific features of Kotlin to ease Android application development An illustrative guide that will help you write code based Kotlin language to build robust Android applications Filled with various practical examples build amazing Android project using Kotlin so you can easily apply your knowledge to real world scenarios Who This Book Is For The book is for developers who want to build amazing Android applications in an easy and effective way. Basic knowledge of Kotlin is assumed, but you do not need any familiarity with Android development. What You Will Learn Understand the basics of Android development with Kotlin Get to know the key concepts in Android development See how to create modern mobile applications for the Android platform Adjust your application's look and feel Know how to persist and share application database Work with Services and other concurrency mechanisms Write effective tests Migrate an existing Java-based project to Kotlin In Detail Kotlin is a programming language intended to be a better Java, and it's designed to be usable and readable across large teams with different levels of knowledge. As a language, it helps developers build amazing Android applications in an easy and effective way. This book begins by giving you a strong grasp of Kotlin's features in the context of Android development and its APIs. Moving on, you'll take steps toward building stunning applications for Android. The book will show you how to set up the environment, and the difficulty level will grow steadily with the applications covered in the upcoming chapters. Later on, the book will introduce you to the Android Studio IDE, which plays an integral role in Android development. We'll use Kotlin's basic programming concepts such as functions, lambdas, properties, object-oriented code, safety aspects, type parameterization, testing, and concurrency, which will guide you through writing Kotlin code into production. We'll also show you how to integrate Kotlin into any existing Android project. Style and approach In this book, you'll master Android development using Kotlin through real application examples. We'll introduce you to basic Android concepts and offer guidance from the first steps to the final project. In each chapter, we'll develop one important application functionality as a development milestone. As we progress, you'll become more experienced in Android and our application will progress toward a real-world product. Finally, when we complete the application's development, we'll write proper tests to ensure it's production ready.

Beginning Android Development with Kotlin 1.2

Starting with an App

Head First Kotlin

A Brain-Friendly Guide

Atomic Kotlin