Practical Android 14 Complete Projects On Advanced Techniques And Approaches

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 Rumpe, 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 App 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
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 Software Development: A Collection of Practical Projects is a new book by Android instructor Mark Wickham. The book includes content from some of his most popular classes the past years allowing readers to get the benefit of the classes packaged together in this useful Android text. The book includes in-depth coverage of some of the most important topics for Android developers, such as: connectivity, image handling, push messaging, and more. Electronic content available as a companion resource to the book includes access to 14 complete Android projects which you can import into your development environment and customize to meet your own requirements. The book uses a project-based approach. Unlike most books on the market today, The book provides complete working code for all of the projects. In Android, there are always multiple ways to accomplish a given task. The book helps developers choose the best approach for their app and lets developers implement their solution quickly by leveraging complete projects. When you purchase the book, you will get access to 14 complete Android projects- that's more than 10,000 lines of fully tested Java code ready for you to use. Developers appreciate this approach because it enables them to focus on their apps, and not waste time tying to integrate code snippets or troubleshoot environment setup issues. The book includes the following chapters: Introduction to JSON - shows you how to use the popular notation language to add flexibility to your apps. Connectivity - covers all aspects of HTTP in Android. Shows you how to determine if your server is reachable. Lazyloading - a common pattern for most apps which is not trivial to implement. Covers all of the major libraries. Remote Crashlogs - implement a solution for your apps so you know when they crash and can provide timely fixes. Uploading & Emailing - allow users to upload content to a server and email content using email implementations. Push Messaging - take your app to the next level by adding push. Two complete working examples covered. Android Audio - provides complete coverage of all the Android audio API's and systhesis engines. Helps you select the right audio approach for your app.

This book is for those who want to learn how to build exciting Arduino projects by interfacing it with Android. You will need to have some basic experience in electronics and programming. However, you don't need to have any previous experience with the Arduino or Android platforms.

Build, customize, and debug your own Android system About This Book Master Android system-level programming by integrating, customizing, and extending popular open source projects Use Android emulators to explore the true potential of your hardware Master key debugging techniques to create a hassle-free development environment Who This Book Is For This book is for Android system programmers and developers who want to use Android and create indigenous projects with it. You should know the important points about the operating system and the C/C++ programming language. What You Will Learn Set up the Android development environment and organize source code repositories Get acquainted with the Android system architecture Build the Android emulator from the AOSP source tree Find out how to enable WiFi in the Android emulator Debug the boot up process using a customized Ramdisk Port your Android system to a new platform using VirtualBox Find out what recovery is and see how to enable it in the AOSP build Prepare and test OTA packages In Detail Android system programming involves both hardware and software knowledge to work on system level programming. The developers need to use various techniques to debug the different components in the target devices. With all the challenges, you usually have a deep learning curve to master relevant knowledge in this area. This book will not only give you the key knowledge you need to understand Android system programming, but will also prepare you as you get hands-on with projects and gain debugging skills that you can use in your future projects. You will start by exploring the basic setup of AOSP, and building and testing an emulator image. In the first project, you will learn how to customize and extend the Android emulator. Then you'll move on to the real challenge—building your own Android system on

VirtualBox. You'll see how to debug the init process, resolve the bootloader issue, and enable various hardware interfaces. When you have a complete system, you will learn how to patch and upgrade it through recovery. Throughout the book, you will get to know useful tips on how to integrate and reuse existing open source projects such as LineageOS (CyanogenMod), Android-x86, Xposed, and GApps in your own system. Style and approach This is an easy-to-follow guide full of hands-on examples and system-level programming tips.

The free book "Fundamentals of Computer Programming with C#" is a comprehensive computer programming tutorial that teaches programming, logical thinking, data structures and algorithms, problem solving and high quality code with lots of examples in C#. It starts with the first steps in programming and software development like variables, data types, conditional statements, loops and arrays and continues with other basic topics like methods, numeral systems, strings and string processing, exceptions, classes and objects. After the basics this fundamental programming book enters into more advanced programming topics like recursion, data structures (lists, trees, hash-tables and graphs), high-quality code, unit testing and refactoring, object-oriented principles (inheritance, abstraction, encapsulation and polymorphism) and their implementation the C# language. It also covers fundamental topics that each good developer should know like algorithm design, complexity of algorithms and problem solving. The book uses C# language and Visual Studio to illustrate the programming concepts and explains some C# / .NET specific technologies like lambda expressions, extension methods and LINQ. The book is written by a team of developers lead by Svetlin Nakov who has 20+ years practical software development experience. It teaches the major programming concepts and way of thinking needed to become a good software engineer and the C# language in the meantime. It is a great start for anyone who wants to become a skillful software engineer. The books does not teach technologies like databases, mobile and web development, but shows the true way to master the basics of programming regardless of the languages, technologies and tools. It is good for beginners and intermediate developers who want to put a solid base for a successful career in the software engineering industry. The book is accompanied by free video lessons, presentation slides and mind maps, as well as hundreds of exercises and live examples. Download the free C# programming book, videos, presentations and other resources from http://introprogramming.info. Title: Fundamentals of Computer Programming with C# (The Bulgarian C# Programming Book) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) Author: Svetlin Nakov & Co. Pages: 1132 Language: English Published: Sofia, 2013 Publisher: Faber Publishing, Bulgaria Web site: http://www.introprogramming.info License: CC-Attribution-Share-Alike Tags: free, programming, book, computer programming, programming fundamentals, ebook, book programming, C#, CSharp, C# book, tutorial, C# tutorial; programming concepts, programming fundamentals, compiler, Visual Studio, .NET, .NET Framework, data types, variables, expressions, statements, console, conditional statements, control-flow logic, loops, arrays, numeral systems, methods, strings, text processing, StringBuilder, exceptions, exception handling, stack trace, streams, files, text files, linear data structures, list, linked list, stack, queue, tree, balanced tree, graph, depth-first search, DFS, breadth-first search, BFS, dictionaries, hash tables, associative arrays, sets, algorithms, sorting algorithm, searching algorithms, recursion, combinatorial algorithms, algorithm complexity, OOP, object-oriented programming, classes, objects, constructors, fields, properties, static members, abstraction, interfaces, encapsulation, inheritance, virtual methods, polymorphism, cohesion, coupling, enumerations, generics, namespaces, UML, design patterns, extension methods, anonymous types, lambda expressions, LINQ, code quality, high-quality code, high-quality classes, high-quality methods, code formatting, self-documenting code, code refactoring, problem solving, problem solving methodology, 9789544007737, 9544007733

Learn the most popular software programming language in easy steps KEY FEATURES ? Extensive coverage on fundamentals and core concepts of Python programming. ? A complete reference guide to crack Python Interviews and exams. ? Includes ample MCQs and solved examples to prepare you for theory and practical exams. ? Easy-to-understand text with explanatory illustrations. DESCRIPTION Basic Core Python Programming is an absolute beginners book. It focuses on the fundamentals of Python programming and simplifies coding concepts. This book makes it easy to learn the concepts of Python variables, Expressions, Decision structures, and Iteration. Equipped with a lot of exercises and Q&As, you don't just practice the programming but also gain an in-depth understanding of the basic concepts of Python. You will start your journey right from how to go about Python installation and start using its interactive development environment and go on to learn how to build logic and implement it with coding. You will explore different types of data, operators, and in-built functions. This book covers numerous coding examples that will help you understand the importance of each data type, how to work with each one of them, and when to use them. You can learn some more practical useful concepts like how to implement control structures and use them for decision making and controlling the program flow. WHAT YOU WILL LEARN ? Stronghold on Python variables, expressions, decision structures, and iterations. ? Practical knowledge on how to work with various data types, operators, and in-built functions. ? Learn to implement strings, lists, arrays, and control structures. ? Learn how to control the program flow and how to use it for decision-making. ? A great reference book on Python basics for software programmers. WHO THIS BOOK IS FOR This book is highly appealing to all tech-savvy students, programming enthusiasts, IT undergraduates, and computer science students. You do not need any prior knowledge of programming to begin with this book as long as you have the interest to learn to program. TABLE OF CONTENTS 1. Introduction 2. Python Basics 3. Numbers, Operators, and In-built Functions 4. Strings 5. Lists and Arrays 6. Tuples and Dictionaries 7. Sets and Frozen Sets 8. Program Flow Control in Python

TEAM ARDUINO UP WITH ANDROID FOR SOME MISCHIEVOUS FUN! Filled with practical, do-it-yourself gadgets, Arduino + Android Projects for the Evil Genius shows you how to create Arduino devices and control them with Android smartphones and tablets. Easy-to-find equipment and components are used for all the projects in the book. This wickedly inventive guide covers the Android Open Application Development Kit (ADK) and USB interface and explains how to use them with the basic Arduino platform. Methods of communication between Android and Arduino that don't require the ADK--including sound, Bluetooth, and WiFi/Ethernet are also discussed. An Arduino ADK programming tutorial helps you get started right away. Arduino + Android Projects for the Evil Genius: Contains step-by-step instructions and helpful illustrations Provides tips for customizing the projects Covers the underlying principles behind the projects Removes the frustration factor--all required parts are listed Provides all source code on the book's website Build these and other devious devices: Bluetooth robot Android Geiger counter Android-controlled light show TV remote Temperature logger Ultrasonic range finder Home automation controller Remote power and lighting control Smart thermostat RFID door lock Signaling flags Delay timer

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.

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.

"This book--a renamed new edition of Android Wireless Application Development, Volume II--is the definitive guide to advanced commercial-grade Android development, updated for the latest Android SDK. The book serves as a reference for the Android API."--

Presents a guide to Android application development using the app-driven approach for sixteen fully tested apps that include syntax, code walkthroughs, and sample outputs.

The first comprehensive guide to discovering and preventingattacks on the Android OS As the Android operating system continues to increase its shareof the smartphone market, smartphone hacking remains a growingthreat. Written by experts who rank among the world's foremostAndroid security researchers, this book presents vulnerabilitydiscovery, analysis, and exploitation tools for the good guys.Following a detailed explanation of how the Android OS works andits overall security architecture, the authors examine howvulnerabilities can be discovered and exploits developed forvarious system components, preparing you to defend againstthem. If you are a mobile device administrator, security researcher,Android app developer, or consultant responsible for evaluatingAndroid security, you will find this guide is essential to yourtoolbox. A crack team of leading Android security researchers explainAndroid security risks, security design and architecture, rooting,fuzz testing, and vulnerability analysis Covers Android application building blocks and security as wellas debugging and auditing Android apps Prepares mobile device administrators, security researchers,Android app developers, and security consultants to defend Androidsystems against attack Android Hacker's Handbook is the first comprehensiveresource for IT professionals charged with smartphonesecurity.

Welcome to Code Like a Girl, where you'll get started on the adventure of coding with cool projects and step-by-step tips, from the co-author of the bestselling The Daring Book for Girls. Coding is about creativity, self-expression, and telling your story. It's

solving problems and being curious, building things, making the world a better place, and creating a future. It's about you: whoever you are, wherever you're at, whatever you want. Nearly everything you encounter on a screen is made from code. You see, with code you can have an idea and put it into action: it's your voice and your vision. From the outside, tech and code may seem puzzling and mysterious, but when you get through the door and past the first few beginner steps and your code starts to work, it feels like magic. In this book, you'll learn how to: - Code with Scratch--projects like making a dog walk through the park, sending your friend a card, and devising a full-scoring game! - Build your own computer--really! - Create your own digital fortune-teller, with the Python language. - Make your own smartphone gloves. - Make light-up bracelets. - Code a motion sensor that tells you when someone enters your room. - And lots more!

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 .

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

Unleash the power of the Android OS and build the kinds ofbrilliant, innovative apps users love to use If you already know your way around the Android OS and can builda simple Android app in under an hour, this book is for you. Ifyou’re itching to see just how far you can push it anddiscover what Android is really capable of, it’s for you. Andif you’re ready to learn how to build advanced, intuitive,innovative apps that are a blast to use, this book isdefinitely for you. From custom views and advanced multi-touch gestures, tointegrating online web services and exploiting the latestgeofencing and activity recognition features, ace Androiddeveloper, Erik Hellman, delivers expert tips, tricks andlittle-known techniques for pushing the Android envelope so youcan: Optimize your components for the smoothest user experiencepossible Create your own custom Views Push the boundaries of the Android SDK Master Android Studio and Gradle Make optimal use of the Android audio, video and graphicsAPIs Program in Text-To-Speech and Speech Recognition Make the most of the new Android maps and location API Use Android connectivity technologies to communicate withremote devices Perform background processing Use Android cryptography APIs Find and safely use hidden Android APIs Cloud-enable your applications with Google Play Services Distribute and sell

your applications on Google Play Store Learn how to unleash the power of Android and transform yourapps from good to great in Android Programming: Pushing theLimits.
Build Android N applications using modern techniques and libraries to get your own high-quality apps published on Google Play in no time About This Book Get started with Android development, from the installation of required tools to publishing to the market Make your applications Android N ready—Android has evolved quite a lot since the very beginning and so has their Software Development Kit—so get up to speed Save time and improve the quality of your applications with widely used open source libraries and dependency management Who This Book Is For Want to get started with Android development? Start here. What You Will Learn Get to know how to use popular open source libraries to reduce time to market and avoid re-inventing the wheel Automate your application's testing phase to avoid last minute crashes Use dependency management to properly keep dependencies and updates under control Efficiently show huge amounts of items in a list Forget about memory and speed concerns Publish and monetize your Android applications on Google Play Persist your application data so it can continue working in offline mode Don't let the UX break because of network issues In Detail The mobile app market is huge. But where do you start? And how you can deliver something that takes Google Play by storm? This guide is the perfect route into Android app development – while it's easy for new apps to sink without a trace, we'll give you the best chance of success with practical and actionable guidance that will unlock your creativity and help you put the principles of Android development into practice. From the fundamentals and getting your project started to publishing your app to a huge market of potential customers, follow this guide to become a confident, creative and reliable mobile developer. Get to grips with new components in Android 7 such as RecyclerView, and find out how to take advantage of automated testing, and, of course, much, much more. What are you waiting for? There's never been a better time – or a better way – to get into Android app development. Style and approach More than just a manual, this is an accessible route into Android development. Packed with examples that demonstrate how to put key concepts and ideas into practice, this guide isn't just about learning, it's about immediate development.
Want to build apps for Android devices? This book is the perfect way to master the fundamentals. Written by experts who have taught this mobile platform to hundreds of developers in large organizations and startups alike, 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. Throughout the book, you’ll build a Twitter-like application, adding new features with each chapter. You’ll also create your own toolbox of code patterns to help you program any type of Android application with ease. Become familiar with the Android platform and how it fits into the mobile ecosystem Dive into the Android stack, including its application framework and the APK application package Learn Android’s building blocks: Activities, Intents, Services, Content Providers, and Broadcast Receivers Create 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
This book will equip you to create high-quality, visually appealing Android 11 apps from scratch with Kotlin. You’ll discover a wide range of real-world development challenges faced by developers and explore various techniques to overcome them.
Create exciting projects by connecting the Raspberry Pi to your Android phone About This Book Manage most of the fundamental functions of Raspberry Pi from your Android phone Use the projects created in this book to develop even more exciting projects in the future A project-based learning experience to help you discover amazing ways to combine the power of Android and Raspberry Pi Who This Book Is For The target audience for this book includes Raspberry Pi enthusiasts, hobbyists, and anyone who wants to create engaging projects with Android OS. Some knowledge of Android programming would be helpful. What You Will Learn

Install the tools required on your Pi and Android to manage and administer the Pi from Android Share your files between different Android devices using the Pi as a server Set up the Pi to live-stream the camera in surveillance mode and customize Android to receive this content Turn your Pi into a media center and control it from your Android See your Android display on a large screen using Raspberry Pi Connect your car's dashboard to your Android device using Raspberry Pi In Detail Raspberry Pi is the credit card-sized, general purpose computer which has revolutionized portable technology. Android is an operating system that widely used in mobile phones today both on the high and low ends of the mobile phone market. However, there is little information about how to connect the two in spite of how popular both of them are. Raspberry Pi Android Projects starts with simple projects that help you access the command prompt and the desktop environment of Raspberry Pi from the comfort of your Android phone or tablet. Then, you will be introduced to more complex projects that combine the strengths of the Pi and Android in amazing ways. These projects will teach you how to manage services on the Pi from Android, share files between Android devices using the Pi as a server, administer and view the Pi's camera from Android in surveillance mode, and connect your car to the Pi and make data more accessible using Android. The introductory projects covered will be useful each time you need to access or administer your Pi for other purposes, and the more advanced projects will continue to be valuable even after you become an expert on Pi. By the end of this book, you will be able to create engaging and useful projects that will help you combine the powers of both Android and Raspberry Pi. Style and approach A quick and easy-to-follow guide that will show how you can add up the power of Pi and Android by combining them.

Your all-encompassing guide to learning Android app development If you're an aspiring or beginning programmer interested in creating apps for the Android market—which grows in size and downloads every day—this is your comprehensive, one-stop guide. Android Application Development All-in-One For Dummies covers the information you absolutely need to get started developing apps for Android. Inside, you'll quickly get up to speed on Android programming concepts and put your new knowledge to use to manage data, program cool phone features, refine your applications, navigate confidently around the Android native development kit, and add important finishing touches to your apps. Covering the latest features and enhancements to the Android Software Developer's Kit, this friendly, hands-on guide walks you through Android programming basics, shares techniques for developing great Android applications, reviews Android hardware, and much more. All programming examples, including the sample application, are available for download from the book's website Information is carefully organized and presented in an easy-to-follow format 800+ pages of content make this an invaluable resource at an unbeatable price Written by an expert Java educator, Barry Burd, who authors the bestselling Java For Dummies Go from Android newbie to master programmer in no time with the help of Android Application Development All-in-One For Dummies!

Choose the best approach for your app and implement your solution quickly by leveraging complete projects. This book is a collection of practical projects that use advanced Android techniques and approaches, written by Android instructor Mark Wickham. Mark has taught a series of popular classes at Android development conferences since 2013 and Practical Android covers content from his most popular classes. Each chapter covers an important concept and provides you with a deep dive into the implementation. The book is an ideal resource for developers who have some development experience, but may not be Android or mobile development experts. Each chapter includes at least one complete project to show the reader how to implement the concepts. What You'll Learn Apply JSON in Android Work with connectivity, which covers all aspects of HTTP in Android Determine if your server is reachable Use lazy loading, a common pattern for most apps and which is not trivial to implement Take advantage of remote crashlogs to implement a solution for your apps so you know when they

crash and can provide timely fixes Implement push messaging to take your app to the next level Develop with Android Audio, which provides complete coverage of all the Android audio APIs and synthesis engines Who This Book Is For Those with prior experience with using Android and have a strong Java background.

The book is an easy-to-follow guide with clear instructions on various mobile forensic techniques. The chapters and the topics within are structured for a smooth learning curve, which will swiftly empower you to master mobile forensics. If you are a budding forensic analyst, consultant, engineer, or a forensic professional wanting to expand your skillset, this is the book for you. The book will also be beneficial to those with an interest in mobile forensics or wanting to find data lost on mobile devices. It will be helpful to be familiar with forensics in general but no prior experience is required to follow this book.

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

The comprehensive developer guide to the latest Android featuresand capabilities Professional Android, 4th Edition shows developers how toleverage the latest features of Android to create robust andcompelling mobile apps. This hands-on approach provides in-depthcoverage through a series of projects, each introducing a newAndroid platform feature and highlighting the techniques and bestpractices that exploit its utmost functionality. The exercisesbegin simply, and gradually build into advanced Androiddevelopment. Clear, concise examples show you how to quicklyconstruct real-world mobile applications. This book is your guide to smart, efficient, effective Androiddevelopment. Learn the best practices that get more out of Android Understand the anatomy, lifecycle, and UI metaphor of Androidapps Design for all mobile platforms, including tablets Utilize both the Android framework and Google Playservices

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.

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.

Go beyond the basics and build complete applications using the Rust programming language. The applications in this book include a high-performance web client, a microcontroller (for a robot, for example), a game, an app that runs on Android, and an application that incorporates AI and machine learning. Each chapter will be organized in the following format: what this kind of application looks like; requirements and user stories of our example program; an introduction to the Rust libraries used; the actual implementation of the example program, including common pitfalls and their solutions; and a brief comparison of libraries for building each application, if there is no clear winner. Practical Rust Projects will open your eyes to the world of practical applications of Rust. After reading the book, you will be able to apply your Rust knowledge to build your own projects. What You Will Learn Write Rust code that runs on microcontrollers

Build a 2D game Create Rust-based mobile Android applications Use Rust to build AI and machine learning applications Who This Book Is For Someone with basic Rust knowledge, wishing to learn more about how to apply Rust in a real-world scenario.
What others in the trenches say about The Pragmatic Programmer... “The cool thing about this book is that it’s great for keeping the programming process fresh. The book helps you to continue to grow and clearly comes from people who have been there.” —Kent Beck, author of Extreme Programming Explained: Embrace Change “I found this book to be a great mix of solid advice and wonderful analogies!” —Martin Fowler, author of Refactoring and UML Distilled “I would buy a copy, read it twice, then tell all my colleagues to run out and grab a copy. This is a book I would never loan because I would worry about it being lost.” —Kevin Ruland, Management Science, MSG-Logistics “The wisdom and practical experience of the authors is obvious. The topics presented are relevant and useful.... By far its greatest strength for me has been the outstanding analogies—tracer bullets, broken windows, and the fabulous helicopter-based explanation of the need for orthogonality, especially in a crisis situation. I have little doubt that this book will eventually become an excellent source of useful information for journeymen programmers and expert mentors alike.” —John Lakos, author of Large-Scale C++ Software Design “This is the sort of book I will buy a dozen copies of when it comes out so I can give it to my clients.” —Eric Vought, Software Engineer “Most modern books on software development fail to cover the basics of what makes a great software developer, instead spending their time on syntax or technology where in reality the greatest leverage possible for any software team is in having talented developers who really know their craft well. An excellent book.” —Pete McBreen, Independent Consultant “Since reading this book, I have implemented many of the practical suggestions and tips it contains. Across the board, they have saved my company time and money while helping me get my job done quicker! This should be a desktop reference for everyone who works with code for a living.” —Jared Richardson, Senior Software Developer, iRenaissance, Inc. “I would like to see this issued to every new employee at my company....” —Chris Cleeland, Senior Software Engineer, Object Computing, Inc. “If I’m putting together a project, it’s the authors of this book that I want. . . . And failing that I’d settle for people who’ve read their book.” —Ward Cunningham Straight from the programming trenches, The Pragmatic Programmer cuts through the increasing specialization and technicalities of modern software development to examine the core process--taking a requirement and producing working, maintainable code that delights its users. It covers topics ranging from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you'll learn how to Fight software rot; Avoid the trap of duplicating knowledge; Write flexible, dynamic, and adaptable code; Avoid programming by coincidence; Bullet-proof your code with contracts, assertions, and exceptions; Capture real requirements; Test ruthlessly and effectively; Delight your users; Build teams of pragmatic programmers; and Make your developments more precise with automation. Written as a series of self-contained sections and filled with entertaining anecdotes, thoughtful examples, and interesting analogies, The Pragmatic Programmer illustrates the best practices and major pitfalls of many different aspects of software development. Whether you're a new coder, an experienced programmer, or a manager responsible for software projects, use these

lessons daily, and you'll quickly see improvements in personal productivity, accuracy, and job satisfaction. You'll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You'll become a Pragmatic Programmer.

Written by Chitram Lutchman, a project management professional with more than 20 years of field and business experience, Project Execution: A Practical Approach to Industrial and Commercial Project Management gives you a more optimistic view of this exciting and challenging area. The book focuses on the essential requirements for successful executi

Practical Android14 Complete Projects on Advanced Techniques and ApproachesApress

Android development is hot, and many programmers are interested in joining the fun. However, because this technology is based on Java, you should first obtain a solid grasp of the Java language and its foundational APIs to improve your chances of succeeding as an Android app developer. After all, you will be busy learning the architecture of an Android app, the various Android-specific APIs, and Android-specific tools. If you do not already know Java fundamentals, you will probably end up with a massive headache from also having to quickly cram those fundamentals into your knowledge base. Learn Java for Android Development, Second Edition teaches programmers of any skill level the essential Java language and foundational Java API skills that must be learned to improve the programmer’s chances of succeeding as an Android app developer. Each of the book’s 14 chapters provides an exercise section that gives you the opportunity to reinforce your understanding of the chapter’s material. Answers to the book’s more than 500 exercises are provided in an appendix. A second appendix provides a significant game-oriented Java application, which you can convert into an Android app. Once you complete this book, you should be ready to dive into beginning Android app development. Maybe, start that journey with Apress' Beginning Android.

Android Crash Course: Step By Step Guide to Mastering Android App Programming!Want to learn Android Programming? Need to learn it?Want to develop an app quick and easy?How about starting an app from scratch? Learn the step by step of building an app through programming?PG Wizards gives you a walk through from building android apps to running them to finally testing them!And don't worry PG Wizards walks you through publishing the App as well!You will get all your basic information as well for all new programmers!Such as Operating systems & SDK and beyond!Whether your just starting out or looking to reinforce your current skills? Perfect either way everything & anything you could think about will be in this book!The most economical buys that will get you all you need to know to learn Android programming quickly and efficiently!Purchase now and don't wait as Android Crash Course

Expert photographer and instructor Tim Daly presents over 20 practical projects for the budding photographer to develop their technical and research skills.Each project is a ready-made resource - the assignments vary in size and complexity,

exploring a wide range of outputs (print, photobook, blog) and are mindful of limited resources, travelling distances and access to expensive equipment. Within each section are examples of notable photographers from around the world, suggested responses, practice tips, readings from key thinkers and further resources. This book blends understanding of context and technique to help photographers find new ways to work through the creative process.

Take a practical approach to becoming a leading-edge Android developer, learning by example while combining the many technologies needed to create a successful, up-to-date web app. Practical Android Projects introduces the Android software development kit and development tools of the trade, and then dives into building cool-looking and fun apps that put Android's amazing capabilities to work. Android is the powerful, full-featured, open source mobile platform that powers phones like Google Nexus, Motorola Droid, Samsung Galaxy S, and a variety of HTC phones and tablet computers. This book helps you quickly get Android projects up and running with the free and open source Eclipse, NetBeans, and IntelliJ IDEA IDEs. Then you build and extend mobile applications using the Android SDK, Java, Scripting Layer for Android (SL4A), and languages such as Python, Ruby, Javascript/HTML, Flex/AIR, and Lua.

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, 7 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 last chapter explains the installation of the Unity game engine, developing a simple 2D platform game in Unity, setting up touch controls for Android environment and exporting the game as a standalone .apk file ready to be installed on Android devices. 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. 7. Development of a 2D platform game: Installing Unity game engine, developing the visual part of the game, implementing the game logic in the code, setting up touch controls and exporting the game as a standalone .apk file. This book includes 237 figures and 130 code snippets that are used to explain app development concepts clearly. Full resolution colour figures and complete project files can be downloaded from the book's companion website: www.yamaclis.com/android.

Eclipse is the most adopted integrated development environment (IDE) for Java programmers. And, now, Eclipse seems to be the preferred IDE for Android apps developers. Android Apps with Eclipse provides a detailed overview of Eclipse, including steps and the screenshots to help Android developers to quickly get up to speed on Eclipse and to streamline their day-to-day software development. This book includes the following: Overview of Eclipse fundamentals for both Java and C/C++ Development. Using Eclipse Android Development Toolkit (ADT) to develop, debug, and troubleshoot Android applications. Using Eclipse C/C++ Development Toolkit (CDT) in conjunction with Android Native Development Kit (NDK) to integrate, develop and troubleshoot native Android components through Eclipse.

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.

Learn Flutter and the Dart programming language by building impressive real-world mobile applications for Android and iOS Key Features Learn cross-platform mobile development with Flutter and Dart by building 11 real-world apps Create wide array of mobile projects such as 2D game, productivity timer, movie browsing app, and more Practical projects demonstrating Flutter development techniques with tips, tricks, and best practices Book Description Flutter is a modern reactive mobile framework that removes a lot of the complexity found in building native mobile apps for iOS and Android. With Flutter, developers can now build fast and native mobile apps from a single codebase. This book is packed with 11 projects that will help you build your own mobile applications

using Flutter. It begins with an introduction to Dart programming and explains how it can be used with the Flutter SDK to customize mobile apps. Each chapter contains instructions on how to build an independent app from scratch, and each project focuses on important Flutter features.From building Flutter Widgets and applying animations to using databases (SQLite and sembast) and Firebase, you'll build on your knowledge through the chapters. As you progress, you'll learn how to connect to remote services, integrate maps, and even use Flare to create apps and games in Flutter. Gradually, you'll be able to create apps and games that are ready to be published on the Google Play Store and the App Store. In the concluding chapters, you'll learn how to use the BLoC pattern and various best practices related to creating enterprise apps with Flutter. By the end of this book, you will have the skills you need to write and deliver fully functional mobile apps using Flutter. What you will learn Design reusable mobile architectures that can be applied to apps at any scale Get up to speed with error handling and debugging for mobile application development Apply the principle of 'composition over inheritance' to break down complex problems into many simple problems Update your code and see the results immediately using Flutter's hot reload Identify and prevent bugs from reappearing with Flutter's developer tools Manage an app's state with Streams and the BLoC pattern Build a simple web application using Flutter Web Who this book is for This book is for mobile developers and software developers who want to learn Flutter to build state-of-the-art mobile apps. Although prior experience with Dart programming or Flutter is not required, knowledge of object-oriented programming (OOP), data structures and software design patterns will be beneficial.