

Swiftui Essentials Ios Edition Learn To Develop I

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Pro iPhone Development with Swift 5 Wallace Wang 2019 If you've already learned the basics of Swift and iOS programming, it's time to take your skills to the next level. In this follow up work to the best-selling Beginning iPhone Development with Swift, you'll learn tips for organizing and debugging Swift code, using multi-threaded programming with Grand Central Dispatch, passing data between view controllers, and designing apps for multiple languages. You'll also see how to play audio and video files, access the camera and save pictures to the Photos library, use location services to pinpoint your position on a map, display web pages, and create animation to spice up any user interface. Finally, you'll learn how to use Apple's advanced frameworks for machine learning, facial and text recognition, and creating augmented reality apps. Pro iPhone Development with Swift 5 provides insightful instruction on how to improve your existing apps or create powerful new iOS apps using the latest version of the Swift programming language.

SwiftUI Cookbook Giordano Scalzo 2020-10-19 SwiftUI is an innovative new framework to build UI for all Apple platforms using Swift. This recipe-based guide covers the new features of SwiftUI 2 introduced on iOS14 and helps you migrate from UIKit with a simple learning curve through practical solutions. Learn how SwiftUI combines with Apple dev tools to build truly cross-platform Apple apps.

Red Hat Enterprise Linux 8 Essentials Neil Smyth 2019-06-13 Arguably one of the most highly regarded and widely used enterprise level operating systems available today is the Red Hat Enterprise Linux 8 distribution. Not only is it considered to be among the most stable and reliable operating systems, it is also backed by the considerable resources and technical skills of Red Hat, Inc. Red Hat Enterprise Linux 8 Essentials is designed to provide detailed information on the installation, use and administration of the Red Hat Enterprise Linux 8 distribution. For beginners, the book covers topics such as operating system installation, the basics of the GNOME desktop environment, configuring email and web servers and installing packages and system updates using App Streams. Additional installation topics such as dual booting with Microsoft Windows are also covered, together with all important security topics such as configuring a firewall and user and group administration. For the experienced user, topics such as remote desktop access, the Cockpit web interface, logical volume management (LVM), disk partitioning, swap management, KVM virtualization, Secure Shell (SSH), Linux Containers and file sharing using both Samba and NFS are covered in detail to provide a thorough overview of this enterprise class operating system.

[Programming iOS 14](#) Matt Neuburg 2020-10-08 If you're grounded in the basics of Swift, Xcode, and the Cocoa framework, this book provides a structured explanation of all essential real-world iOS app

components. Through deep exploration and copious code examples, you'll learn how to create views, manipulate view controllers, and add features from iOS frameworks. Create, arrange, draw, layer, and animate views that respond to touch Use view controllers to manage multiple screens of interface Master interface classes for scroll views, table views, collection views, text, popovers, split views, web views, and controls Dive into frameworks for sound, video, maps, and sensors Access user libraries: music, photos, contacts, and calendar Explore additional topics, including files, networking, and threads Stay up-to-date on iOS 14 innovations, such as: Control action closures and menus Table view cell configuration objects Collection view lists and outlines New split view controller architecture Pointer customization on iPad New photo picker and limited photos authorization Reduced accuracy location Color picker, new page control behavior, revised date pickers, and more! Want to brush up on the basics? Pick up iOS 14 Programming Fundamentals with Swift to learn about Swift, Xcode, and Cocoa. Together with Programming iOS 14, you'll gain a solid, rigorous, and practical understanding of iOS 14 development.

SwiftUI Cookbook Giordano Scalzo 2021-11 Find practical, logical, and efficient recipes for building cross-platform apps for iOS 15, macOS, and watchOS using Swift 5.5, Xcode 13, and SwiftUI 3.0 Key Features: Apply the declarative programming paradigm to build cross-platform UIs for Apple devices Learn to integrate UIKit, Core Data, Firebase, and Sign in with Apple with SwiftUI Adopt the new SwiftUI 3.0 features to build visually appealing UIs speedily Book Description: SwiftUI provides an innovative and simple way to build beautiful user interfaces (UIs) for all Apple platforms, from iOS and macOS through to watchOS and tvOS, using the Swift programming language. In this recipe-based cookbook, you'll cover the foundations of SwiftUI as well as the new SwiftUI 3 features introduced in iOS 15 and explore a range of essential techniques and concepts that will help you through the development process. The cookbook begins by explaining how to use basic SwiftUI components. Once you've learned the core concepts of UI development, such as Views, Controls, Lists, and ScrollViews, using practical implementations in Swift, you'll advance to adding useful features to SwiftUI using drawings, built-in shapes, animations, and transitions. You'll understand how to integrate SwiftUI with exciting new components in the Apple development ecosystem, such as Combine for managing events and Core Data for managing app data. Finally, you'll write iOS, macOS, and watchOS apps by sharing the same SwiftUI codebase. By the end of this SwiftUI book, you'll have discovered a range of simple, direct solutions to common problems encountered when building SwiftUI apps. What You Will Learn: Explore various layout presentations in SwiftUI such as HStack, VStack, LazyHStack, and LazyVGrid Create widgets to quickly display relevant content at glance Get up to speed with drawings in SwiftUI using built-in shapes, custom paths, and polygons Discover modern animation and transition techniques in SwiftUI Add user authentication using Firebase and Sign in with Apple Manage concurrency with Combine and async/await in SwiftUI Solve the most common SwiftUI problems, such as integrating a MapKit map, unit testing, snapshot testing, and previewing layouts Who this book is for: This book is for mobile developers who want to learn SwiftUI as well as experienced iOS developers transitioning from UIKit to SwiftUI. The book assumes knowledge of the Swift programming language. Knowledge of object-oriented design and data structures will be useful but not necessary. You'll also find this book to be a helpful resource if you're looking for reference material regarding the implementation of various features in SwiftUI.

iOS 13 Programming for Beginners Ahmad Sahar 2020-01-24 A step-by-step guide to learning iOS app development and exploring the latest Apple development tools Key Features Explore the latest features of Xcode 11 and the Swift 5 programming language in this updated fourth edition Kick-start your iOS programming career and have fun building your own iOS apps Discover the new features of iOS 13 such as Dark Mode, iPad apps for Mac, SwiftUI, and more Book Description iOS 13 comes with features ranging from Dark Mode and Catalyst through to SwiftUI and Sign In with Apple. If you're a beginner and are looking to experiment and work with these features to create your own apps, then this updated

fourth edition gets you off to a strong start. The book offers a comprehensive introduction for programmers who are new to iOS, covering the entire process of learning the Swift language, writing your own apps, and publishing them on the App Store. This edition is updated and revised to cover the new iOS 13 features along with Xcode 11 and Swift 5. The book starts with an introduction to the Swift programming language, and how to accomplish common programming tasks with it. You'll then start building the user interface (UI) of a complete real-world app, using the latest version of Xcode, and also implement the code for views, view controllers, data managers, and other aspects of mobile apps. The book will then help you apply the latest iOS 13 features to existing apps, along with introducing you to SwiftUI, a new way to design UIs. Finally, the book will take you through setting up testers for your app, and what you need to do to publish your app on the App Store. By the end of this book, you'll be well versed with how to write and publish apps, and will be able to apply the skills you've gained to enhance your apps. What you will learn

Get to grips with the fundamentals of Xcode 11 and Swift 5, the building blocks of iOS development

Understand how to prototype an app using storyboards

Discover the Model-View-Controller design pattern, and how to implement the desired functionality within the app

Implement the latest iOS features such as Dark Mode and Sign In with Apple

Understand how to convert an existing iPad app into a Mac app

Design, deploy, and test your iOS applications with industry patterns and practices

Who this book is for

This book is for anyone who has programming experience but is completely new to Swift and iOS app development. Experienced programmers looking to explore the latest iOS 13 features will also find this book useful.

Advanced Swift Chris Eidhof 2016-03-18 Advanced Swift takes you through Swift's features, from low-level programming to high-level abstractions. In this book, we'll write about advanced concepts in Swift programming. If you have read the Swift Programming Guide, and want to explore more, this book is for you. Swift is a great language for systems programming, but also lends itself for very high-level programming. We'll explore both high-level topics (for example, programming with generics and protocols), as well as low-level topics (for example, wrapping a C library and string internals).

SwiftUI Essentials - iOS 16 Edition Neil Smyth 2022-09-12 This book aims to teach the skills necessary to build iOS 16 applications using SwiftUI, Xcode 14, and the Swift 5.7 programming language. Beginning with the basics, this book outlines the steps to set up an iOS development environment, together with an introduction to using Swift Playgrounds to learn and experiment with Swift. The book also includes in-depth chapters introducing the Swift 5.7 programming language, including data types, control flow, functions, object-oriented programming, property wrappers, structured concurrency, and error handling. A guided tour of Xcode in SwiftUI development mode follows an introduction to the key concepts of SwiftUI and project architecture. The book also covers creating custom SwiftUI views and explains how these views are combined to create user interface layouts, including stacks, frames, and forms. Other topics covered include data handling using state properties and observable, state, and environment objects, as are key user interface design concepts such as modifiers, lists, tabbed views, context menus, user interface navigation, and outline groups. The book also covers graphics and chart drawing, user interface animation, view transitions and gesture handling, WidgetKit, document-based apps, Core Data, CloudKit, and SiriKit integration. Chapters also explain how to integrate SwiftUI views into existing UIKit-based projects and integrate UIKit code into SwiftUI. Finally, the book explains how to package up a completed app and upload it to the App Store for publication. Along the way, the topics covered in the book are put into practice through detailed tutorials, the source code for which is also available for download. The aim of this book, therefore, is to teach you the skills to build your own apps for iOS 16 using SwiftUI. Assuming you are ready to download the iOS 16 SDK and Xcode 14 and have an Apple Mac system, you are ready to get started.

Objective-C Programming Aaron Hillegass 2013-11-20 Want to write iOS apps or desktop Mac applications? This introduction to programming and the Objective-C language is your first step on the journey from someone who uses apps to someone who writes them. Based on Big Nerd Ranch's popular Objective-C Bootcamp, Objective-C Programming: The Big Nerd Ranch Guide covers C, Objective-C, and the common programming idioms that enable developers to make the most of Apple technologies. Compatible with Xcode 5, iOS 7, and OS X Mavericks (10.9), this guide features short chapters and an engaging style to keep you motivated and moving forward. At the same time, it encourages you to think critically as a programmer. Here are some of the topics covered: Using Xcode, Apple's documentation, and other tools Programming basics: variables, loops, functions, etc. Objects, classes, methods, and messages Pointers, addresses, and memory management with ARC Properties and Key-Value Coding (KVC) Class extensions Categories Classes from the Foundation framework Blocks Delegation, target-action, and notification design patterns Key-Value Observing (KVO) Runtime basics

SwiftUI For Dummies Wei-Meng Lee 2020-08-12 The simplest way to create world-class apps Have a unique app idea but worried you don't quite have the coding skills to build it? Good news: You can stop fretting about someone beating you to market with the same idea and start work right now using SwiftUI. SwiftUI is a gateway app development framework that has become one of the best ways for fledgling developers to get iOS apps off the ground without having to become a coding expert overnight. SwiftUI For Dummies makes that process even faster, providing a friendly introduction to the SwiftUI and Swift programming language and helping you feel right at home creating and building with playgrounds. The book also covers the frameworks and APIs that make it so easy to create smooth, intuitive interfaces—just dive right in and have fun! Combine projects into workspaces Employ Xcode editing tools Use constants and variables Test your code on iOS Simulator Time is of the essence, and with SwiftUI For Dummies, it's also on your side. Get going with this friendly guide today, and you'll be celebrating the successful launch of your app way before you thought possible!

Learn SwiftUI Chris Barker 2020-04-03 Get to grips with Apple's new SwiftUI framework for creating robust UIs for iOS and iPadOS using Swift programming Key FeaturesUse SwiftUI for building dynamic apps for Apple devices from scratchUnderstand declarative syntax in cross-platform development and how states work within SwiftUILearn to develop watchOS apps by reusing SwiftUI codeBook Description SwiftUI is the new and powerful interface toolkit that lets you design and build iOS, iPadOS, and macOS apps using declarative syntax. It is a powerful way to develop the UI elements of applications, which would normally be tightly coupled to application logic. Learn SwiftUI will get you up to speed with the framework and cross-device UI development in no time. Complete with detailed explanations and practical examples, this easy-to-follow guide will teach you the fundamentals of the SwiftUI toolkit. You'll learn how to build a powerful iOS and iPadOS application that can be reused for deployment on watchOS. As you progress, you'll delve into UI and unit testing in iOS apps, along with learning how to test your SwiftUI code for multiple devices. The book will also show you how to integrate SwiftUI features such as data binding and network requests into your current application logic. By the end of this book, you will have learned how to build a cross-device application using the SwiftUI framework and Swift programming. What you will learnExplore the fundamentals of SwiftUI and compare it with existing UI frameworksWrite SwiftUI syntax and understand what should and shouldn't be included in SwiftUI's layerAdd text and images to a SwiftUI view and decorate them using SwiftUI's modifiersCreate basic forms, and use camera and photo library functions to add images to themUnderstand the core concepts of Maps in iOS apps and add a MapView in SwiftUIDesign extensions within your existing apps to run them on watchOSHandle networking calls in SwiftUI to retrieve data from external sourcesWho this book is for This SwiftUI book helps any mobile app developer looking to understand the fundamentals of the new SwiftUI framework along with the benefits of cross-device development. A solid understanding of iOS

and macOS app development, along with some knowledge of the Swift programming language, will be beneficial. Basic programming knowledge is essential to grasp the concepts covered in the book effectively.

iOS 14 Programming Fundamentals with Swift Matt Neuburg 2020-09-23 Move into iOS development by getting a firm grasp of its fundamentals, including the Xcode 12 IDE, Cocoa Touch, and the latest version of Apple's acclaimed programming language, Swift 5.3. With this thoroughly updated guide, you'll learn the Swift language, understand Apple's Xcode development tools, and discover the Cocoa framework. Become familiar with built-in Swift types Dive deep into Swift objects, protocols, and generics Tour the life cycle of an Xcode project Learn how nibs are loaded Understand Cocoa's event-driven design Communicate with C and Objective-C In this edition, catch up on the latest iOS programming features: Multiple trailing closures Code editor document tabs New Simulator features Resources in Swift packages Logging and testing improvements And more! Once you master the fundamentals, you'll be ready to tackle the details of iOS app development with author Matt Neuburg's companion guide, *Programming iOS 14*.

SwiftUI Projects Craig Clayton 2020-12-11 Learn SwiftUI by designing and building complex user interfaces for watchOS, iPadOS, and iOS with the help of projects including a financial app, a sports news app, and a POS system Key Features Learn SwiftUI with the help of practical cross-platform development projects Understand the design considerations for building apps for different devices such as Apple Watch, iPhone, and iPad using SwiftUI's latest features Work with advanced SwiftUI layout features, including SF Symbols, SwiftUI grids, and forms in SwiftUI Book Description Released by Apple during WWDC 2019, SwiftUI provides an innovative and exceptionally simple way to build user interfaces for all Apple platforms with the power of Swift. This practical guide involves six real-world projects built from scratch, with two projects each for iPhone, iPad, and watchOS, built using Swift programming and Xcode. Starting with the basics of SwiftUI, you'll gradually delve into building these projects. You'll learn the fundamental concepts of SwiftUI by working with views, layouts, and dynamic types. This SwiftUI book will also help you get hands-on with declarative programming for building apps that can run on multiple platforms. Throughout the book, you'll work on a chart app (watchOS), NBA draft app (watchOS), financial app (iPhone), Tesla form app (iPhone), sports news app (iPad), and shoe point-of-sale system (iPad), which will enable you to understand the core elements of a SwiftUI project. By the end of the book, you'll have built fully functional projects for multiple platforms and gained the knowledge required to become a professional SwiftUI developer. What you will learn Understand the basics of SwiftUI by building an app with watchOS Work with UI elements such as text, lists, and buttons Create a video player in UIKit and import it into SwiftUI Discover how to leverage an API and parse JSON in your app using Combine Structure your app to use Combine and state-driven features Create flexible layouts on iPad Who this book is for SwiftUI Projects is intended for anyone who is already comfortable with Swift. We do not cover Swift topics in detail, so you need to be familiar with these already. All of the SwiftUI topics are taught as if this is the first time you've learned them and will gradually get more difficult.

SwiftUI Essentials - iOS 16 Edition Neil Smyth 2022-09-12

iOS 10 App Development Essentials Neil Smyth 2016-10-28

iOS Development with Swift Craig Grummit 2017-12 "iOS development with Swift" is a hands-on guide to creating iOS apps. It takes you through the experience of building an app-- from idea to App store. After setting up your dev environment, you'll learn the basics by experimenting in Swift playgrounds. Then you'll build a simple app layout, adding features like animations and UI widgets. Along the way,

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you'll retrieve, format, and display data; interact with the camera and other device features; and touch on cloud and networking basics.

iOS 14 Programming for Beginners Ahmad Sahar 2020-11-27 Publisher's note: This edition from 2020 is outdated and does not make use of the most recent iOS and swift features. A new sixth edition, updated for iOS 15 and including new advanced topics, such as Mac Catalyst, SwiftUI, Swift Concurrency, and SharePlay, has now been published Key Features Explore the latest features of Xcode 12 and the Swift 5.3 programming language in this updated fifth edition Kick-start your iOS programming career and have fun building your own iOS apps Discover the new features of iOS 14 such as Mac Catalyst, SwiftUI, widgets and App Clips Book Description If you're looking to work and experiment with powerful iOS 14 features such as widgets and App Clips to create your own apps, this iOS programming guide is for you. The book offers a comprehensive introduction for experienced programmers who are new to iOS, taking you through the entire process of learning the Swift language, writing your own apps, and publishing them on the App Store. Fully updated to cover the new iOS 14 features, along with Xcode 12 and Swift 5.3, this fifth edition of iOS 14 Programming for Beginners starts with an introduction to the Swift programming language and shows you how to accomplish common programming tasks with it. You'll then start building the user interface (UI) of a complete real-world app using the storyboards feature in the latest version of Xcode and implement the code for views, view controllers, data managers, and other aspects of mobile apps. The book will also help you apply iOS 14 features to existing apps and introduce you to SwiftUI, a new way to build apps for all Apple devices. Finally, you'll set up testers for your app and understand what you need to do to publish your app on the App Store. By the end of this book, you'll not only be well versed in writing and publishing applications, but you'll also be able to apply your iOS development skills to enhance existing apps. What you will learn Get to grips with the fundamentals of Xcode 12 and Swift 5.3, the building blocks of iOS development Understand how to prototype an app using storyboards Discover the Model-View-Controller design pattern and how to implement the desired functionality within an app Implement the latest iOS features, such as widgets and App Clips Convert an existing iPad app into an Apple Silicon Mac app Design, deploy, and test your iOS applications with design patterns and best practices Who this book is for This book is for anyone who has programming experience but is new to Swift and iOS app development. Experienced programmers looking to explore the latest iOS 14 features will also find this book useful.

iOS 15 Programming for Beginners - Sixth Edition Ahmad Sahar 2021-12-24 Learn iOS app development and work with Xcode 13 and Apple's iOS 15 simulators Key Features: Explore the latest features of Xcode 13 and the Swift 5.5 programming language in this updated sixth edition Start your iOS programming career and have fun building your own iOS apps Discover the new features of iOS 15 such as Mac Catalyst, SwiftUI, Swift Concurrency, and SharePlay Book Description: With almost 2 million apps on the App Store, iOS mobile apps continue to be incredibly popular. Anyone can reach millions of customers around the world by publishing their apps on the App Store. iOS 15 Programming for Beginners is a comprehensive introduction for those who are new to iOS. It covers the entire process of learning the Swift language, writing your own app, and publishing it on the App Store. Complete with hands-on tutorials, projects, and self-assessment questions, this easy-to-follow guide will help you get well-versed with the Swift language to build your apps and introduce exciting new technologies that you can incorporate into your apps. You'll learn how to publish iOS apps and work with Mac Catalyst, SharePlay, SwiftUI, Swift concurrency, and much more. By the end of this iOS development book, you'll have the knowledge and skills to write and publish interesting apps, and more importantly, to use the online resources available to enhance your app development journey. What You Will Learn: Get to grips with the fundamentals of Xcode 13 and Swift 5.5, the building blocks of iOS development Understand how to prototype an app using storyboards Discover the Model-View-Controller design pattern and how to

implement the desired functionality within an app Implement the latest iOS features such as Swift Concurrency and SharePlay Convert an existing iPad app into a Mac app with Mac Catalyst Design, deploy, and test your iOS applications with design patterns and best practices Who this book is for: This book is for anyone who has programming experience but is new to Swift and iOS app development. Basics knowledge of programming, including loops, boolean, and so on, is necessary.

SwiftUI Essentials - iOS 14 Edition Neil Smyth 2020-12-07 The goal of this book is to teach the skills necessary to build iOS 14 applications using SwiftUI, Xcode 12 and the Swift 5.3 programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an iOS development environment together with an introduction to the use of Swift Playgrounds to learn and experiment with Swift. The book also includes in-depth chapters introducing the Swift 5.3 programming language including data types, control flow, functions, object-oriented programming, property wrappers and error handling. An introduction to the key concepts of SwiftUI and project architecture is followed by a guided tour of Xcode in SwiftUI development mode. The book also covers the creation of custom SwiftUI views and explains how these views are combined to create user interface layouts including the use of stacks, frames and forms. Other topics covered include data handling using state properties in addition to observable, state and environment objects, as are key user interface design concepts such as modifiers, lists, tabbed views, context menus, user interface navigation, and outline groups. The book also includes chapters covering graphics drawing, user interface animation, view transitions and gesture handling, WidgetKit, document-based apps and SiriKit integration. Chapters are also provided explaining how to integrate SwiftUI views into existing UIKit-based projects and explains the integration of UIKit code into SwiftUI. Finally, the book explains how to package up a completed app and upload it to the App Store for publication. Along the way, the topics covered in the book are put into practice through detailed tutorials, the source code for which is also available for download. The aim of this book, therefore, is to teach you the skills necessary to build your own apps for iOS 14 using SwiftUI. Assuming you are ready to download the iOS 14 SDK and Xcode 12 and have an Apple Mac system you are ready to get started.

Pro iPhone Development with SwiftUI Wallace Wang 2022-01-21 You know the basics. Your Swift code flows with logic and ease. This isn't your first time building a workable app for iOS platforms. Now, it's time to build a magical app for iOS platforms! Move beyond what you mastered in the best-selling Beginning iPhone Development with SwiftUI. Debug Swift code, use multi-threaded programming with Grand Central Dispatch, pass data between view controllers, and design apps functional in multiple languages. Not only will your apps run like magic under the hood but, with the new standard of SwiftUI, you'll add animations, scaling, multiscreen support, and so much more to your interfaces. You'll also see how to integrate audio and video files in your apps, access the camera and send pictures to and from the Photos library, use location services to pinpoint your user's position on a map, and display web pages in-app. Don't just stop at flawless code and stickily engaging interfaces. Give your apps a mind with Apple's advanced frameworks for machine learning, facial and text recognition, and augmented reality. Pro iPhone Development with SwiftUI enlightens you to the world of rich design, solid code, and thoughtful processing needed to make apps that wow. Integrate all these extraordinary iOS features and embrace the world of possibilities in the Swift programming language with SwiftUI. What You Will Learn Save and retrieve data when apps close or get pushed in the background Recognize speech with Apple's advanced frameworks Create augmented reality apps Understand spoken commands with Siri Who This Book is For Aspiring iOS app developers familiar with the Apple Swift programming language and/or the iOS SDK, but ready to move to the next level.

iOS 15 Programming Fundamentals with Swift Matt Neuburg 2021-10 Move into iOS development by getting a firm grasp of its fundamentals, including the Xcode 13 IDE, Cocoa Touch, and the latest version

of Apple's acclaimed programming language, Swift 5.5. With this thoroughly updated guide, you'll learn the Swift language, understand Apple's Xcode development tools, and discover the Cocoa framework. Explore Swift's object-oriented concepts Become familiar with built-in Swift types Dive deep into Swift objects, protocols, and generics Tour the life cycle of an Xcode project Learn how nibs are loaded Understand Cocoa's event-driven design Communicate with C and Objective-C In this edition, catch up on the latest iOS programming features: Structured concurrency: async/await, tasks, and actors Swift native formatters and attributed strings Lazy locals and throwing getters Enhanced collections with the Swift Algorithms and Collections packages Xcode tweaks: column breakpoints, package collections, and Info.plist build settings Improvements in Git integration, localization, unit testing, documentation, and distribution And more!

Beginning Flutter Marco L. Napoli 2019-09-17 Build your first app in Flutter—no experience necessary! *Beginning Flutter: A Hands-On Guide to App Development* is the essential resource for both experienced and novice developers interested in getting started with Flutter—the powerful new mobile software development kit. With Flutter, you can quickly and easily develop beautiful, powerful apps for both Android and iOS, without the need to learn multiple programming languages or juggle more than one code base. This book walks you through the process step by step. In Flutter, you'll be working with Dart, the programming language of choice for top app developers. Even if you're just starting out in your development career, you can learn Dart quickly, eliminating the barrier to entry for building apps. This is a more efficient way to develop and maintain cross-platform mobile apps, and this book makes the process even easier with a teach-by-example approach. Focus on providing quality content by eliminating the need to switch between multiple coding languages Learn the ins and outs of Flutter, including all the frameworks, widgets, and tools available to developers Accelerate your app development pace, keeping all the code for your cross-platform app in a single code base Leapfrog barriers to entry to the mobile software market, creating your first app with no experience necessary The Flutter community is growing rapidly and transforming the way Android and iOS apps get made. *Beginning Flutter* allows you to get on board with the latest app development technology, giving your mobile development career a big head start.

Swift 5 for Absolute Beginners Stefan Kaczmarek 2019-06-26 Stay motivated and overcome obstacles while learning to use Swift Playgrounds and Xcode 10.2 to become a great iOS developer. This book, fully updated for Swift 5, is perfect for those with no programming background, those with some programming experience but no object-oriented experience, or those that have a great idea for an app but haven't programmed since school. Many people have a difficult time believing they can learn to write iOS apps. *Swift 5 for Absolute Beginners* will show you how to do so. You'll learn Object-Oriented Programming (OOP) and be introduced to User Interface (UI) design following Apple's Human Interface Guidelines (HIG) using storyboards and the Model-View-Controller (MVC) pattern before moving on to write your own iPhone and Apple Watch apps from scratch. What You'll Learn Work with Swift classes, properties, and functions Examine proper User Interface (UI) and User Experience (UX) design Understand Swift data types: integers, floats, strings, and booleans Use Swift data collections: arrays and dictionaries Review Boolean logic, comparing data, and flow control Use the Xcode debugger to troubleshoot problems with your apps Store data in local app preferences and Core Data databases Who This Book Is For Anyone who wants to learn to develop apps for the Mac, iPhone, iPad, and Apple Watch using the Swift programming language. No previous programming experience is necessary.

Test-Driven iOS Development with Swift Dr. Dominik Hauser 2016-02-22 Create fully-featured and highly functional iOS apps by writing tests first About This Book Learn test-driven principles to help you build apps with fewer bugs and better designs Become more efficient while working with Swift to move

on to your next project faster! Learn how to incorporate all of the principles of test-driven development (TDD) in to your daily programming workflow Who This Book Is For If debugging iOS apps is a nerve-racking task for you and you are looking for a fix, this book is for you. What You Will Learn Implement TDD in swift application development/span Get to know the fundamentals, life cycle, and benefits of TDD/span Explore the tools and frameworks to effectively use TDD/span Develop models and controllers driven by tests/span Construct the network layer using stubs/span Use functional tests to ensure the app works as planned/span Automate and streamline the building, analysing, testing, and archiving of your iOS apps In Detail Test-driven development (TDD) is a proven way to find software bugs early. Writing tests before your code improves the structure and maintainability of your app. Test-driven iOS Development with Swift will help you understand the process of TDD and how it impacts your applications written in Swift. Through practical, real-world examples, you'll start seeing how to implement TDD in context. We will begin with an overview of your TDD workflow and then deep-dive into unit testing concepts and code cycles. We will showcase the workings of functional tests, which will help you improve the user interface. Finally, you will learn about automating deployments and continuous integration to run an environment. Style and approach This is an easy-to-follow example-driven tutorial, packed with lots of tips and tricks that explore TDD bit-by-bit in the process of making an iOS application.

Swift in 30 Days Gaurang Ratnaparkhi 2021-09-03 Designing iOS mobile apps using simple Swift codes and libraries. KEY FEATURES ● Combines the fundamentals of Swift and power-packed libraries, including SwiftUI. ● Includes graphical illustrations and step-by-step instructions on coding your first iOS application. ● Covers end-to-end iOS app development with code debugging and best practices. DESCRIPTION 'Swift in 30 Days' teaches young graduates and coding applicants to enter the field of rapid development of applications through simplified, pragmatic, and quick programming learning without much theory. The book examines the basics of Swift programming, fundamental Swift building blocks, how to write syntax, constructs, define classes, arrays, model data with interfaces, and several examples of Swift programming. The book will help you to create the environment for app development, including tools and libraries like Xcode and SwiftUI. You will learn to work with Xcode and Swift libraries and finally make an independently developed Swift application. You will have access to design patterns and learn how to handle errors, debug, and work with protocols. By the end of this book, you will become a trusted Swift programmer and a successful iOS developer who will dive deeper into Apple's intelligent app programming challenge. WHAT YOU WILL LEARN ● Create an iOS app from scratch and learn fundamental Swift concepts such as operators and control flow. ● Create intuitive and intelligent user interfaces with an understanding of self-design and constraints. ● Recap OOP concepts and Swift protocol-based programming. ● Work with design patterns, write clean codes, and build expert tables and navigations. ● Work with Xcode and SwiftUI 2.0. WHO THIS BOOK IS FOR This book is for students, graduates, and entry-level coders who want to learn iOS app development without prior Swift or mobile app development experience. TABLE OF CONTENTS Week 1 (Beginner) 1. Building Your First App 2. Swift Programming Basics 3. Auto Layout 4. Types and Control Flow Week 2 (Intermediate) 5. Optional Type and More 6. Code Structuring Week 3 (Advanced) 7. OOP in Swift 8. Protocols and Delegates Week 4 (Bonus) 9. Error handling and Debugging 10. SwiftUI

Swift in Depth Tjeerd in 't Veen 2018-12-10 Summary Now updated for Swift 5! Swift is more than just a fun language to build iOS applications with. It features a host of powerful tools that, if effectively used, can help you create even better apps with clean, crystal-clear code and awesome features. Swift in Depth is designed to help you unlock these tools and quirks and get developing next-gen apps, web services, and more! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology It's fun to create your first toy iOS or Mac app in Swift. Writing secure, reliable, professional-grade software is a different animal altogether. The Swift language

includes an amazing set of high-powered features, and it supports a wide range of programming styles and techniques. You just have to roll up your sleeves and learn Swift in depth. About the Book Swift in Depth guides you concept by concept through the skills you need to build professional software for Apple platforms, such as iOS and Mac; also on the server with Linux. By following the numerous concrete examples, enlightening explanations, and engaging exercises, you'll finally grok powerful techniques like generics, efficient error handling, protocol-oriented programming, and advanced Swift patterns. Author Tjeerd in 't Veen reveals the high-value, difficult-to-discover Swift techniques he's learned through his own hard-won experience. What's inside Covers Swift 5 Writing reusable code with generics Iterators, sequences, and collections Protocol-oriented programming Understanding map, flatMap, and compactMap Asynchronous error handling with Result Best practices in Swift About the Reader Written for advanced-beginner and intermediate-level Swift programmers. About the Author Tjeerd in 't Veen is a senior software engineer and architect in the mobile division of a large international banking firm. Table of Contents Introducing Swift in depth Modeling data with enums Writing cleaner properties Making optionals second nature Demystifying initializers Effortless error handling Generics Putting the pro in protocol-oriented programming Iterators, sequences, and collections Understanding map, flatMap, and compactMap Asynchronous error handling with Result Protocol extensions Swift patterns Delivering quality Swift code Where to Swift from here

Ubuntu 20.04 Essentials Neil Smyth 2020-05-13 Arguably one of the most highly regarded and widely used enterprise level operating systems available today is the Ubuntu 20.04 distribution. Not only is it considered to be among the most stable and reliable operating systems, it is also backed by the considerable resources and technical skills of Canonical, Ltd. Ubuntu 20.04 Essentials is designed to provide detailed information on the installation, use and administration of the Ubuntu 20.04 distribution. For beginners, the book covers topics such as operating system installation, the basics of the GNOME desktop environment, configuring email and web servers and installing packages and system updates. Additional installation topics such as dual booting with Microsoft Windows are also covered, together with all important security topics such as configuring a firewall and user and group administration. For the experienced user, topics such as remote desktop access, the Cockpit web interface, logical volume management (LVM), disk partitioning, swap management, KVM virtualization, Secure Shell (SSH), Linux Containers and file sharing using both Samba and NFS are covered in detail to provide a thorough overview of this enterprise class operating system.

Beginning iOS 14 & Swift App Development Greg Lim 2020-10-27 In this book, we take you on a fun, hands-on and pragmatic journey to learning iOS 14 application development using Swift. You'll start building your first iOS app 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 & 2 - Working with Xcode and Swift to build a BMI calculator app. Chapter 3 - Build a Quotes app using Table View Chapter 4 - Create a To Do List app (create, read, update and delete to-do items) Chapter 5 - Implement data persistency to our To Do List app using Core Data Chapter 6 - Improve our To Do List app by adding images and swipe deletion Chapter 7 - Build a cryptocurrency price tracker app which retrieves prices via an API Chapter 8 - Build a image detection app using machine learning Chapter 9 - Create an Augmented Reality app with ARKit Chapter 10 - Publish our app on to the App store Chapter 11 - SwiftUI Chapter 12 - Widgets Chapter 13 - App Clips Chapter 14 - Dark Mode Chapter 15 - Porting your iOS App to the Mac with Project Catalyst Chapter 16 - In-App Purchases The goal of this book is to teach you iOS 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. About the Reader No previous knowledge on iOS development required, but you

should have basic programming knowledge. About the Author Greg Lim is a technologist and author of several programming books. Greg has many years in teaching programming in tertiary institutions and he places special emphasis on learning by doing.

Ubuntu 20.04 Essentials Neil Smyth 2020-05-12 Arguably one of the most highly regarded and widely used enterprise level operating systems available today is the Ubuntu 20.04 distribution. Not only is it considered to be among the most stable and reliable operating systems, it is also backed by the considerable resources and technical skills of Canonical, Ltd. Ubuntu 20.04 Essentials is designed to provide detailed information on the installation, use and administration of the Ubuntu 20.04 distribution. For beginners, the book covers topics such as operating system installation, the basics of the GNOME desktop environment, configuring email and web servers and installing packages and system updates. Additional installation topics such as dual booting with Microsoft Windows are also covered, together with all important security topics such as configuring a firewall and user and group administration. For the experienced user, topics such as remote desktop access, the Cockpit web interface, logical volume management (LVM), disk partitioning, swap management, KVM virtualization, Secure Shell (SSH), Linux Containers and file sharing using both Samba and NFS are covered in detail to provide a thorough overview of this enterprise class operating system.

Swift Cookbook Keith Moon 2021-02-26 Discover recipes for building feature-rich, reliable iOS native apps and explore the latest features in Swift 5.3 with the help of proven industry standard recipes, modern design techniques, and popular strategies Key Features Understand how closures work and make use of generics with protocols to write flexible code Discover the fundamentals of Swift and build apps with frameworks such as Foundation, Networking, and UIKit Get to grips with the new features of Swift 5.3, including SwiftUI, CoreML and the Vision Framework Book Description Swift is an exciting, multi-platform, general-purpose programming language, and with this book, you'll explore the features of its latest version, Swift 5.3. The book begins with an introduction to the basic building blocks of Swift 5.3, its syntax, and the functionalities of Swift constructs. You'll then discover how Swift Playgrounds provide an ideal platform to write, execute, and debug your Swift code. As you advance through the chapters, the book will show you how to bundle variables into tuples or sets, order your data with an array, store key-value pairs with dictionaries, and use property observers. You'll also get to grips with the decision-making and control structures in Swift, examine advanced features such as generics and operators, and explore functionalities outside of the standard library. Once you've learned how to build iOS applications using UIKit, you'll find out how to use Swift for server-side programming, run Swift on Linux, and investigate Vapor. Finally, you'll discover some of the newest features of Swift 5.3 using SwiftUI and Combine to build adaptive and reactive applications, and find out how to use Swift to build and integrate machine learning models along with Apple's Vision Framework. By the end of this Swift book, you'll have discovered solutions to boost your productivity while developing code using Swift 5.3. What you will learn Explore basic to advanced concepts in Swift 5.3 programming Understand conditional statements, loops, and how to handle errors in Swift Define flexible classes and structs using generics Use advanced operators and create custom ones Build iOS apps using the powerful features of UIKit or the new SwiftUI framework Import your own custom functionality into Swift Playgrounds Run Swift on Linux and investigate server-side programming with the server-side framework Vapor Use Swift to implement machine learning models using CoreML and Vision Who this book is for This book is for experienced iOS developers looking to learn about the diverse features offered by Swift 5.3, along with tips and tricks to efficiently code and build applications. Knowledge of general programming concepts will assist in understanding key concepts.

[iOS 9 App Development Essentials](#) Neil Smyth 2015-10-17 iOS 9 App Development Essentials is latest

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edition of this popular book series and has now been fully updated for the iOS 9 SDK, Xcode 7 and the Swift 2 programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an iOS development environment. An introduction to the architecture of iOS 9 and programming in Swift is provided, followed by an in-depth look at the design of iOS applications and user interfaces. More advanced topics such as file handling, database management, in-app purchases, graphics drawing and animation are also covered, as are touch screen handling, gesture recognition, multitasking, iAds integration, location management, local notifications, camera access and video and audio playback support. Other features are also covered including Auto Layout, Twitter and Facebook integration, App Store hosted in-app purchase content, Sprite Kit-based game development, local map search and user interface animation using UIKit dynamics. Additional features of iOS development using Xcode 7 are also covered, including Swift playgrounds, universal user interface design using size classes, app extensions, Interface Builder Live Views, embedded frameworks, CloudKit data storage and TouchID authentication. The key new features of iOS 9 and Xcode 7 are also covered in detail, including new error handling in Swift 2, designing Stack View based user interfaces, multiple storyboard support, iPad multitasking, map flyover support, 3D Touch and Picture-in-Picture media playback. The aim of this book, therefore, is to teach you the skills necessary to build your own apps for iOS 9. Assuming you are ready to download the iOS 9 SDK and Xcode 7, have an Intel-based Mac and ideas for some apps to develop, you are ready to get started.

SwiftUI by Tutorials (Fourth Edition) raywenderlich Tutorial Team 2021-11-11 Learn & Master SwiftUI! Every developer wants to build the most fluid and engaging declarative UI for their apps with as little code as possible. SwiftUI will help you do just that. Learn all the main concepts through an easy-to-follow tutorials where you'll build apps that teach you to create modern, responsive UI and animations that look great on iOS, iPadOS, watchOS, tvOS, and even macOS. Who This Book Is For? This book is for intermediate iOS developers who already know the basics of iOS, and who wish to know everything there is to know about SwiftUI. Topics Covered in SwiftUI by Tutorials? SwiftUI Overview: Learn SwiftUI features, as well as the differences between Apple's platforms with SwiftUI. Customize your apps for AppKit, UIKit, WatchKit, tvOS, iPadOS and even Catalyst. Testability: See how to apply UI Testing to your SwiftUI apps in this very simple, yet powerful course. Controls & User Input: Learn about controls such as TextField, Button, Toggle, Slider, Stepper, pickers and many more. State & Data Flow: Learn how to bind data to the UI, about reactive updates to the UI through state management, and in-depth usage of the attributes related to SwiftUI. Accessibility: Learn how to navigate your app with VoiceOver on an iOS device and use the SwiftUI Accessibility API attributes to improve your app's accessible UI. Drawing Custom Graphics & Animations: Create drawings, graphics, animations and even view transitions in SwiftUI. macOS: Learn how to create a document-based Mac app and later start with an existing iOS app and learn how to re-use code, views and assets for creating a macOS app. One thing you can count on: After you finish reading this book, you'll be able to take advantage of the latest and greatest features of SwiftUI to bring modern declarative UX to your apps.

[iOS 15 Application Development for Beginners](#) Arpit Kulsreshtha 2021-12-31 Learn iOS App development with advanced Apple technology and developer-centric tools. KEY FEATURES ● Loaded with core developer tools, including SwiftUI, Xcode, and CoreML. ● Covers app architecture, design patterns, and mobile hardware use in app development. ● Numerous examples covering database, GPS, image recognition, and ML. DESCRIPTION This book is a step-by-step, hands-on guide for Apple developers to build iOS apps using Swift programming with minimal effort. This book will help develop the knowledge and skills necessary to program Apple applications independently. This book introduces you to Swift, SwiftUI, MapKit, Xcode, and Core ML and guides you through the process of creating a strong, marketable iOS application. The book begins with the fundamentals of Swift, which will serve as the foundation for

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future app development. This book will help readers to develop user interfaces for iOS applications, using SwiftUI and Interface Builder, as well as the code for views, view controllers, and data managers. The book teaches how to use Core Data and SQLite to store databases. It will help you work with Apple technologies and frameworks, including Core Location and MapKit for GPS tracking, Camera and Photo Library for image storage, Core ML for machine learning, and implementations of artificial intelligence solutions. By the end of this book, you will have developed a solid foundation for writing Swift apps, utilizing best practices in architecture, and publishing them to the app store. The book successfully introduces you to the entire iOS application development journey in a manageable manner and instills an understanding of Apple apps.

WHAT YOU WILL LEARN

- Develop practical skills in Swift programming, Xcode, and SwiftUI.
- Learn to work around the database, file handling, and networking while building apps.
- Utilize the capabilities of mobile hardware to include sound, images, and videos.
- Bring machine learning capabilities using the Core ML framework.
- Integrate features such as App Gestures and Core Location into iOS applications.
- Utilize mobile design patterns and maintain a clean coding style.

WHO THIS BOOK IS FOR This book is ideal for beginners in programming, students, and professionals interested in learning how to program in iOS, use various developer tools, and create Apple apps. Working knowledge of any programming language is an advantage but not required.

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Cloud-Native Applications in Java Ajay Mahajan 2018-02-26 Highly available microservice-based web apps for Cloud with Java Key Features Take advantage of the simplicity of Spring to build a full-fledged application Let your applications run faster while generating smaller cloud service bills Integrate your application with various tools such as Docker and Elasticsearch and use specific tools in Azure and AWS

Book Description Businesses today are evolving so rapidly that they are resorting to the elasticity of the cloud to provide a platform to build and deploy their highly scalable applications. This means developers now are faced with the challenge of building build applications that are native to the cloud. For this, they need to be aware of the environment, tools, and resources they're coding against. If you're a Java developer who wants to build secure, resilient, robust, and scalable applications that are targeted for cloud-based deployment, this is the book for you. It will be your one stop guide to building cloud-native applications in Java Spring that are hosted in On-prem or cloud providers - AWS and Azure The book begins by explaining the driving factors for cloud adoption and shows you how cloud deployment is different from regular application deployment on a standard data centre. You will learn about design patterns specific to applications running in the cloud and find out how you can build a microservice in Java Spring using REST APIs You will then take a deep dive into the lifecycle of building, testing, and deploying applications with maximum automation to reduce the deployment cycle time. Gradually, you will move on to configuring the AWS and Azure platforms and working with their APIs to deploy your application. Finally, you'll take a look at API design concerns and their best practices. You'll also learn how to migrate an existing monolithic application into distributed cloud native applications. By the end, you will understand how to build and monitor a scalable, resilient, and robust cloud native application that is always available and fault tolerant. What you will learn See the benefits of the cloud environment when it comes to variability, provisioning, and tooling support Understand the architecture patterns and considerations when developing on the cloud Find out how to perform cloud-native techniques/patterns for request routing, RESTful service creation, Event Sourcing, and more Create Docker containers for microservices and set up continuous integration using Jenkins Monitor and troubleshoot an application

deployed in the cloud environment Explore tools such as Docker and Kubernetes for containerization and the ELK stack for log aggregation and visualization Use AWS and Azure specific tools to design, develop, deploy, and manage applications Migrate from monolithic architectures to a cloud native deployment Who this book is for Java developers who want to build secure, resilient, robust and scalable applications that are targeted for cloud based deployment, will find this book helpful. Some knowledge of Java, Spring, web programming and public cloud providers (AWS, Azure) should be sufficient to get you through the book.

SwiftUI Essentials - iOS 15 Edition Neil Smyth 2022-04-21 The goal of this book is to teach the skills necessary to build iOS 15 applications using SwiftUI, Xcode 13 and the Swift 5.5 programming language. Beginning with the basics, this book provides an outline of the steps necessary to set up an iOS development environment together with an introduction to the use of Swift Playgrounds to learn and experiment with Swift. The book also includes in-depth chapters introducing the Swift 5.5 programming language including data types, control flow, functions, object-oriented programming, property wrappers, structured concurrency, and error handling. An introduction to the key concepts of SwiftUI and project architecture is followed by a guided tour of Xcode in SwiftUI development mode. The book also covers the creation of custom SwiftUI views and explains how these views are combined to create user interface layouts including the use of stacks, frames and forms. Other topics covered include data handling using state properties in addition to observable, state and environment objects, as are key user interface design concepts such as modifiers, lists, tabbed views, context menus, user interface navigation, and outline groups. The book also includes chapters covering graphics drawing, user interface animation, view transitions and gesture handling, WidgetKit, document-based apps, Core Data, CloudKit, and SiriKit integration. Chapters are also provided explaining how to integrate SwiftUI views into existing UIKit-based projects and explains the integration of UIKit code into SwiftUI. Finally, the book explains how to package up a completed app and upload it to the App Store for publication. Along the way, the topics covered in the book are put into practice through detailed tutorials, the source code for which is also available for download. The aim of this book, therefore, is to teach you the skills necessary to build your own apps for iOS 15 using SwiftUI. Assuming you are ready to download the iOS 15 SDK and Xcode 13 and have an Apple Mac system you are ready to get started.

Swift Programming Matthew Mathias 2016-11-23 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Through the authors' carefully constructed explanations and examples, you will develop an understanding of Swift grammar and the elements of effective Swift style. This book is written for Swift 3.0 and will also show you how to navigate Xcode 8 and get the most out of Apple's documentation. Throughout the book, the authors share their insights into Swift to ensure that you understand the hows and whys of Swift and can put that understanding to use in different contexts. After working through the book, you will have the knowledge and confidence to develop your own solutions to a wide range of programming challenges using Swift.

SwiftUI for Masterminds J.D Gauchat 2020-02-12 Learn how to develop applications with SwiftUI today! SwiftUI for Masterminds takes the reader step by step through the technologies required to develop applications for iPhones, iPads and Mac computers. After reading this book, you will know how to program in Swift, how to design user interfaces, and how to combine traditional frameworks with the advanced features provided by SwiftUI to build modern applications. This book is a complete course on app development for Apple devices. Every chapter explores basic and advanced topics, from computer programming to graphics and databases. The information is supported by examples that guide beginners and experts through the development process and gradually introduce them to complex topics. The goal

of SwiftUI for Masterminds is to familiarize you with the latest technologies introduced by Apple for app development. It was designed to prepare you for the future and was written for the genius inside you, for Masterminds. Introduction to Swift 5.1 Swift Paradigm Declarative User Interfaces SwiftUI Framework Combine Framework Layout and Navigation Mac Catalyst UIKit in SwiftUI Collection Views Text Views MapKit Graphics and Animations Files Archiving Core Data iCloud CloudKit AVFoundation Camera and Photos Library WebKit Views Gesture Recognizers Timers Notifications Operation Queues Error Handling ...and more! iOS app development with iOS 13, Xcode 11 and Swift 5.1 App development, Swift programming, Create apps, Create app, iPhone apps, Build app, Swift language, develop application, Objective-C, Apple development, iOS development, iOS Apps, Program apps.

Beginning SwiftUI Greg Lim 2021-05-05 In this book, we take you on a fun, hands-on and pragmatic journey to learning iOS 14 development using SwiftUI. You'll start building your first SwiftUI app 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 Chapter 2: Body Mass Index Calculator Chapter 3: To-Do List App Using List Chapter 4: Persistent Data Using Core Data Chapter 5: Extending Core Data to CloudKit Chapter 6: Getting Data from an API: GitHub Users Chapter 7: Machine Learning with Core ML Chapter 8: C.R.U.D. Notes App with Firebase/Firestore Chapter 9: Building Cross Platform Apps in SwiftUI The goal of this book is to teach you SwiftUI 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. About the Reader No previous knowledge on iOS development required, but you should have basic programming knowledge. About the Author Greg Lim is a technologist and author of several programming books. Greg has many years in teaching programming in tertiary institutions and he places special emphasis on learning by doing. Follow him at www.greglim.net

Swift Game Development Siddharth Shekar 2018-09-28 Embrace the mobile gaming revolution by creating popular iOS games with Swift 4.2 Key Features Learn to create games for iPhone and iPad with the latest Swift Programming language Understand the fundamental concepts of game development like game physics, camera action, sprites, controls, among others Build Augmented reality games using ARKit for true performance Book Description Swift is the perfect choice for game development. Developers are intrigued by Swift and want to make use of new features to develop their best games yet. Packed with best practices and easy-to-use examples, this book leads you step by step through the development of your first Swift game. The book starts by introducing Swift's best features – including its new ones for game development. Using SpriteKit, you will learn how to animate sprites and textures. Along the way, you will master physics, animations, and collision effects and how to build the UI aspects of a game. You will then work on creating a 3D game using the SceneKit framework. Further, we will look at how to add monetization and integrate Game Center. With iOS 12, we see the introduction of ARKit 2.0. This new version allows us to integrate shared experiences such as multiplayer augmented reality and persistent AR that is tied to a specific location so that the same information can be replicated on all connected devices. In the next section, we will dive into creating Augmented Reality games using SpriteKit and SceneKit. Then, finally, we will see how to create a Multipeer AR project to connect two devices, and send and receive data back and forth between those devices in real time. By the end of this book, you will be able to create your own iOS games using Swift and publish them on the iOS App Store. What you will learn Deliver powerful graphics, physics, and sound in your game by using SpriteKit and SceneKit Set up a scene using the new capabilities of the scene editor and custom classes Maximize gameplay with little-known tips and strategies for fun, repeatable action Make use of animations, graphics, and particles to polish your game Understand the current mobile monetization landscape Integrate your game with Game

CenterDevelop 2D and 3D Augmented Reality games using Apple's new ARKit frameworkPublish your game to the App StoreWho this book is for If you wish to create and publish iOS games using Swift, then this book is for you. No prior game development or experience with Apple ecosystem is needed.

Mastering Swift 5.3 Jon Hoffman 2020-11-23 A comprehensive guide for programming enthusiasts who wish to gain a firm command of the fundamentals and advanced Swift concepts Key FeaturesSixth edition of this bestselling book, improved and updated to cover the latest version of the Swift 5.3 programming languageGet to grips with popular and modern design techniques to write easy-to-manage Swift codeUse core Swift features such as concurrency, generics, and copy-on-write in your codeBook Description Over the years, Mastering Swift has proven itself among developers as a popular choice for an in-depth and practical guide to the Swift programming language. This sixth edition comes with the latest features, an overall revision to align with Swift 5.3, and two new chapters on building swift from source and advanced operators. From the basics of the language to popular features such as concurrency, generics, and memory management, this in-depth guide will help you develop your expertise and mastery of the language. As you progress, you will gain practical insights into some of the most sophisticated elements in Swift development, including protocol extensions, error handling, and closures. The book will also show you how to use and apply them in your own projects. In later chapters, you will understand how to use the power of protocol-oriented programming to write flexible and easier-to-manage code in Swift. Finally, you will learn how to add the copy-on-write feature to your custom value types, along with understanding how to avoid memory management issues caused by strong reference cycles. By the end of this Swift book, you will have mastered the Swift 5.3 language and developed the skills you need to effectively use its features to build robust applications. What you will learnUnderstand core Swift components, such as operators, collections, control flows, and functionsIdentify how and when to use classes, structures, and enumerationsUse protocol-oriented design with extensions to write easy-to-manage codeLeverage design patterns with Swift to solve commonly occurring design problemsApply copy-on-write for your custom value types to improve performanceAdd concurrency to your applications using Grand Central Dispatch and operation queuesImplement generics to write flexible and reusable codeWho this book is for This book is for beginners with a basic understanding of programming and experienced developers looking to learn Swift programming. Familiarity with Apple's tools will be beneficial but not mandatory. All examples should also work on the Linux and Windows platforms