

Ios Swift Game Development Cookbook Simple Solutions For Game Development Problems

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. Mastering iOS 14 Programming is the fourth book in the Mastering iOS series, which started back in 2016 with iOS 10. In this latest edition, you'll learn how to build robust iOS apps by harnessing advanced techniques and making the best use of iOS 14's features.

Ready to make amazing games for the iPhone, iPad, and iPod touch? With Apple's Swift programming language, it's never been easier. This updated cookbook provides detailed recipes for a managing wide range of common iOS game-development issues, ranging from 2D and 3D math to SpriteKit and OpenGL to performance—all revised for Swift. You get simple, direct solutions to common problems found in iOS game programming. Need to figure out how to give objects physical motion, or want a refresher on gaming-related math problems? This book provides sample projects and straightforward answers. All you need to get started is some familiarity with iOS development, Swift, and Objective-C. Design the architecture and code layout of your game Build and customize menus with UIKit Detect and respond to user input Use techniques to play sound effects and music Learn different ways to store information for later use Create 2D graphics with SpriteKit Create 3D graphics with SceneKit Add two-dimensional physics simulation Learn beginning, intermediate, and advanced 3D graphics with OpenGL Create challenges with artificial intelligence Take advantage of game controllers and external displays Overcome the vexing issues you're likely to face when creating apps for the iPhone, iPad, or iPod touch. With new and thoroughly revised recipes in this updated cookbook, you'll quickly learn the steps necessary to work with the iOS 7 SDK--including ways to store and protect data, send and receive notifications, enhance and animate graphics, manage files and folders, and take advantage of UI Dynamics.

Find out how to use the Unity Game Engine to its fullest for both 3D and 2D game development—from the basics to the hottest new tricks in virtual reality. With this unique cookbook, you'll get started in two ways: First, you'll learn about the Unity game engine by following very brief exercises that teach specific features of the software Second, this tutorial-oriented guide provides a collection of snippets that solve common gameplay problems, like determining if a player has completed a lap in a race Using our cookbook format, we pinpoint the problem, set out the solution, and discuss how to solve your problem in the best and most straightforward way possible so you can move onto the next step in the project. Unity Game Development Cookbook is ideal for beginning to intermediate Unity developers. Beginners will get a broad immersion into the Unity development environment, while intermediate developers will learn how to apply the foundational Unity skills they have to solve real game development problems.

Get valuable hands-on experience with Swift, the open source programming language developed by Apple. With this practical guide, skilled programmers with little or no knowledge of Apple development will learn how to code with the latest version of Swift by developing a working iOS app from start to finish. You'll begin with Swift programming basics—including guidelines for making your code "Swifty"—and learn how to work with Xcode and its built-in Interface Builder. Then you'll dive step-by-step into building and customizing a basic app for taking, editing, and deleting selfies. You'll also tune and test the app for performance and manage the app's presence in the App Store. Divided into four parts, this book includes: Swift 4 basics: Learn Swift's basic building blocks and the features of object-oriented development Building the Selfiegram app: Build model objects and the UI for your selfie app and add location support, user settings, and notifications Polishing Selfiegram: Create a theme and support for sharing and add custom views, image overlays, and localization Beyond app development: Debug and performance test with Xcode, automate chores with Fastlane, and user-test the app with TestFlight Over 40 recipes to accelerate the process of learning game design and solving development problems using Unreal Engine About This Book Explore the quickest way to tackle common challenges faced in Unreal Engine Create your own content, levels, light scenes, and materials, and work with Blueprints and C++ scripting An intermediate, fast-paced Unreal Engine guide with targeted recipes to design games within its framework Who This Book Is For This book is for those who are relatively experienced with Unreal Engine 4 and have knowledge of its fundamentals. Working knowledge of C++ is required. What You Will Learn Discover editor functionalities for an in-depth insight into game design Develop environments using terrain for outdoor areas and a workflow for interiors as well using brushes Design various kinds of materials with unique features, such as mirrors and glows Explore the various ways that lighting can be used in the engine Build various level effects using Blueprints, Unreal's visual scripting system Set up a development environment and develop custom functionality with C++ for your games Create healthbars and main menus with animations using Slate, Unreal's UI solution, through the UMG Editor Package and create an installer to get your project out into the world In Detail Unreal Engine is powerful tool with rich functionalities to create games. It equips you with the skills to easily build mobile and desktop games from scratch without worrying about which platform they will run on. You can focus on the individual complexities of game development such as animation and rendering. This book takes you on a journey to jumpstart your game design efforts. You will learn various aspects of the Unreal engine commonly encountered with practical examples of how it can be used, with numerous references for further study. You will start by getting acquainted with Unreal Engine 4 and building out levels for your game. This will be followed by recipes to help you create environments, place meshes, and implement your characters. You will then learn to work with lights, camera, and shadows to include special effects in your game. Moving on, you'll learn Blueprint scripting and C++ programming to enable you to achieve trigger effects and add simple functionalities. By the end of the book, you will see how to create a healthbar and main menu, and then get your game ready to be deployed and published. Style and

approach This book offers detailed, easy-to-follow recipes that will help you master a wide range of Unreal Engine 4's features. Every recipe provides step-by-step instructions, with explanations of how these features work, and alternative approaches and research materials so you can learn even more.

Unity is an incredibly powerful and popular game creation tool, and Unity 4 brings even more great features, including Mechanim animation. Learn Unity 4 for iOS Game Development will show you how to use Unity with Xcode to create fun, imaginative 3D games for iPhone, iPad, and iPod touch. You'll learn how to optimize your game for both speed and quality, how to test and profile your game, and how to get the most out of your iOS device features, including the gyroscope and accelerometer. You'll also learn how to incorporate the latest Game Center improvements in iOS 6 into your game, how to make sure your game gets into the App Store, and even how to promote your app and track revenue. If you have a great 3D game idea, and you want to make it a reality in the App Store, then Learn Unity 4 for iOS Game Development has exactly what you need. What you'll learn How to build, debug and test a Unity iOS game How to include iAds How to integrate Game Center leaderboards and achievements How to process touch, accelerometer and gyroscope input How to profile and optimize performance How to promote your app and track its revenue Who this book is for iOS developers interested in using Unity and Unity developers who want to customize their games for iOS devices. Table of ContentsChapter 1: Getting Started Chapter 2: A Unity Tour Chapter 3: Making a Scene Chapter 4: Making it Move: Scripting the Cube Chapter 5: Let's Dance! Animation and Sound Chapter 6: Let's Roll! Physics and Controls Chapter 7: Let's Bowl! Advanced Physics Chapter 8: Let's Play! Scripting the Game Chapter 9: The Game GUI Chapter 10: Using Unity iOS Chapter 11: Building for Real: Device testing and App Submission Chapter 12: Presentation: Screens and Icons Chapter 13: Handling Device Input Chapter 14: Game Center Chapter 15: iAds Chapter 16: Optimization Chapter 17: Where Do We Go from Here?

If you are an experienced Objective-C programmer and are looking for quick solutions to many different coding tasks in Swift, then this book is for you. You are expected to have development experience, though not necessarily with Swift.

Ready to build truly stunning apps for iPhone, iPad, and Apple Watch? This cookbook—written exclusively in Swift 3—provides more than 120 proven solutions for tackling the latest features in iOS 10 and watchOS 3. With these code-rich recipes, you'll learn how to build dynamic voice interfaces with Siri and messaging apps with iMessage. You'll also learn how to use interactive maps, multitasking functionality, the UI Testing framework, and many other features. This cookbook is ideal for intermediate and advanced iOS developers looking to work with the newest versions of Apple's mobile operating systems. Each recipe includes reusable code that's available on GitHub, so you can put it to work right away. Let users interact with your apps and services through Siri Write your own iMessage extensions that allow added interactivity Work with features in Swift 3, Xcode 8, and Interface Builder Build standalone apps for Apple Watch Create vibrant user interfaces with new UIKit features Use Spotlight APIs to make your app content searchable Add Picture in Picture playback functionality to iPad apps Take advantage of MapKit and Core Location updates Use Apple's new UI Testing framework Liven up your UI with gravity and turbulence fields

This book follows an informal, demystifying approach to the world of game development with the Unity game engine. With no prior knowledge of game development or 3D required, you will learn from scratch, taking each concept at a time working up to a full 3D mini-game. You'll learn scripting with C# or JavaScript and master the Unity development environment with easy-to-follow stepwise tasks. If you're a designer or animator who wishes to take their first steps into game development or prototyping, or if you've simply spent many hours sitting in front of video games, with ideas bubbling away in the back of your mind, Unity and this book should be your starting point. No prior knowledge of game production is required, inviting you to simply bring with you a passion for making great games.

iOS Swift Game Development CookbookSimple Solutions for Game Development Problems"O'Reilly Media, Inc."

This book is for developers who are willing to explore iOS game programming in depth. Good knowledge level and understanding of iOS game development will be an added advantage. You should already have a working installation of Xcode and Sprite kit.

Join the game development revolution today! XNA 3.0 greatly simplifies the development of your own games, lowering the barrier for programmers to get into game development. In XNA, you can start coding your games from the very start, a true revelation compared to other game programming environments. XNA doesn't sacrifice power for this ease of use—it is built entirely on DirectX technology. Completely updated for XNA 3.0, expert Riemer Grootjans brings together a selection of the hottest recipes in XNA programming for the Xbox 360, PC, and Zune. Advanced XNA programmers, experienced coders new to game development, and even complete beginners will find XNA 3.0 Game Programming Recipes an invaluable companion whether building games for fun or as commercial products.

To create successful games for the iPhone family of mobile devices, developers need to know how touch-input, real-time graphics, and sound come together in the iOS environment. iOS Game Development: Developing Games for iPad, iPhone, and iPod Touch takes you from the basics of app coding to releasing and marketing your game on the App Store. The book offers a wealth of previously unpublished information about the iOS platform. The text focuses on the concrete requirements of game developers, presenting in-depth details on each step in the mobile game development process. It explains the use of OpenGL ES for 2D/3D graphics and OpenAL for sound, both of which are recommended for game performance on the iOS platform. It also covers new APIs such as the GLKit, GameKit, and Box2D Physics Engine. To better understand the explanations, the author encourages you to access more than 30 iOS example apps from his website. Each app represents a small piece of the complex field of game

development in a straightforward manner. The apps can be run on any device in the iPhone family and have been extensively tested with various iOS versions. Suitable for both newcomers and more advanced developers, this color book helps you get started with iOS game development. By following the book's clear descriptions and example programs, you will understand how to implement the fundamentals in smaller game projects and be able to create your first game for the App Store.

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.

Create enthralling Android games with Unity Faster Than Ever Before About This Book Develop complex Android games with the help of Unity's advanced features such as artificial intelligence, high-end physics, and GUI transformations. Create amazing Graphical User Interfaces (GUIs) with Unity's new uGUI system Unravel and deploy exciting games across Android devices Who This Book Is For If you are a Unity 5 developer and want to expand your knowledge of Unity 5 to create high-end complex Android games, then this book is for you. Readers are expected to have a basic understanding of Unity 5, working with its environment, and its basic concepts. What You Will Learn Develop your own Jetpack Joyride clone game Explore the advanced features of Unity 5 by building your own Action Fighting game Develop remarkable Graphical User Interfaces (GUIs) with Unity's new uGUI system Enhance your game by adding stunning particle systems and complex animations Build pleasing virtual worlds with special effects, lights, sky cube maps, and cameras Make your game more realistic by providing music and sound effects Debug and deploy your games on different Android devices In Detail Game engines such as Unity are the power-tools behind the games we know and love. Unity is one of the most widely-used and best loved packages for game development and is used by everyone, from hobbyists to large studios, to create games and interactive experiences for the Web, desktop, mobile, and console. With Unity's intuitive, easy-to-learn toolset and this book, it's never been easier to become a game developer. You will begin with the basic concepts of Android game development, a brief history of Android games, the building blocks of Android games in Unity 5, and the basic flow of games. You will configure an empty project for the Jetpack Joyride Clone Game, add an environment and characters, and control them. Next you will walk through topics such as particle systems, camera management, prefabs, animations, triggers, colliders, and basic GUI systems. You will then cover the basic setup for 3D action fighting games, importing models, textures and controlling them with a virtual on-screen joystick. Later you will set up Scene for 3D Configuration, create basic gameplays, and manage input controls. Next you will learn to create the interface for the main menu, gameplay, game over, achievements, and high score screens. Finally you will polish your game with stats, sounds, and Social Networking, followed by testing the game on Android devices and then publishing it on Google Play, Amazon, and OUYA Stores. Style and approach A step-by-step and detailed guide to developing high-end complex Android games utilizing the advanced concepts of Unity.

Get up to speed on Cocoa and Objective-C, and start developing applications on the iOS and OS X platforms. If you don't have experience with Apple's developer tools, no problem! From object-oriented programming to storing app data in iCloud, the fourth edition of this book covers everything you need to build apps for the iPhone, iPad, and Mac. You'll learn how to work with the Xcode IDE, Objective-C's Foundation library, and other developer tools such as Event Kit framework and Core Animation. Along the way, you'll build example projects, including a simple Objective-C application, a custom view, a simple video player application, and an app that displays calendar events for the user. Learn the application lifecycle on OS X and iOS Work with the user-interface system in Cocoa and Cocoa Touch Use AV Foundation to display video and audio Build apps that let users create, edit, and work with documents Store data locally with the file system, or on the network with iCloud Display lists or collections of data with table views and collection views Interact with the outside world with Core Location and Core Motion Use blocks and operation queues for multiprocessing

Create and implement AI-based features in your Swift apps for iOS, macOS, tvOS, and watchOS. With this practical book, programmers and developers of all kinds will find a one-stop shop for AI and machine learning with Swift. Taking a task-based approach, you'll learn how to build features that use powerful AI features to identify images, make predictions, generate content, recommend things, and more. AI is increasingly essential for every developer—and you don't need to be a data scientist or mathematician to take advantage of it in your apps. Explore Swift-based AI and ML techniques for building applications. Learn where and how AI-driven features make sense. Inspect tools such as Apple's Python-powered Turi Create and Google's Swift for TensorFlow to train and build models. I: Fundamentals and Tools—Learn AI basics, our task-based approach, and discover how to build or find a dataset. II: Task Based AI—Build vision, audio, text, motion, and augmentation-related features; learn how to convert preexisting models. III: Beyond—Discover the theory behind task-based practice, explore AI and ML methods, and learn how you can build it all from scratch... if you want to

Learn how to develop an ace game for your iOS device, using Sprite Kit About This Book Learn about the Sprite Kit engine and create games on the iOS platform from the ground up Acquaint your Sprite Kit knowledge with Swift programming and turn your 2D game conceptualization into reality in no time An abridged and focused guide to develop an exhaustive mobile game Who This Book Is For This book is for beginners who want to start their game development odyssey in the iOS platform. If you are an intermediate or proficient game developer hailing from a different development platform, this book will be a perfect gateway to the Sprite Kit engine. The reader does not need to have any knowledge of Sprite Kit and building games on the iOS platform. What You Will Learn Learn about the Sprite Kit game engine and create indie games in no time Set sail on the quest of game development career by successfully creating a runner

game Know more about the IDE provided by Apple for game development – Xcode Get an overview of Apple's latest programming language, Swift Discover the functionalities of scenes and nodes in a game Explore how physics bodies work and how to add this feature into your game Grasp knowledge of particle effect and shaders Add a scoring system into your game to visualize high scores In Detail Game development has always been an exciting subject for game enthusiasts and players and iOS game development takes a big piece of this cake in terms of perpetuating growth and creativity. With the newest version of iOS and Sprite Kit, comes a series of breathtaking features such as Metal rendering support, camera nodes, and a new and improved Scene Editor. Conceptualizing a game is a dream for both young and old. Sprite Kit is an exciting framework supported by Apple within the iOS development environment. With Sprite Kit, creating stunning games has become an easy avenue. Starting with the basics of game development and swift language, this book will guide you to create your own fully functional game. Dive in and learn how to build and deploy a game on your iOS platform using Sprite Kit game engine. Go on a detailed journey of game development on the iOS platform using the Sprite Kit game engine. Learn about various features implemented in iOS 8 that further increase the essence of game development using Sprite Kit. Build an endless runner game and implement features like physics bodies, character animations, scoring and other essential elements in a game. You will successfully conceive a 2D game along with discovering the path to reach the pinnacle of iOS game development. By the end of the book, you will not only have created an endless runner game but also have in-depth knowledge of creating larger games on the iOS platform. Style and approach An easy-to-follow, comprehensive guide that makes your learning experience more intriguing by gradually developing a Sprite Kit game. This book discusses each topic in detail making sure you attain a clear vision of the subject.

Ready to make amazing games for the iPhone and iPad? With Apple's Swift programming language, it's never been easier. This updated cookbook provides detailed recipes for managing a wide range of common iOS game-development issues, ranging from 2D and 3D math, SpriteKit, and OpenGL to augmented reality with ARKit. You get simple, direct solutions to common problems found in iOS game programming. Need to figure out how to give objects physical motion, or want a refresher on gaming-related math problems? This book provides sample projects and straightforward answers. All you need to get started is some familiarity with iOS development in Swift.

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.

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 Center Develop 2D and 3D Augmented Reality games using Apple's new ARKit framework Publish your game to the App Store Who 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.

Swift Recipes provides a problem solution approach for dealing with key aspects of the Swift programming language (covering version 1.2), ensuring you have the indispensable reference you need to successfully execute common programming tasks. You'll learn how to use the unique features of the Swift programming language as well as its use with Cocoa and Cocoa touch frameworks and libraries. Solutions are available for a range of problems, including application development with Xcode; working with strings, numbers, and object collections; dealing with threads, multi-core processing, and asynchronous processing; and building applications that take advantage of dates and timers and memory management. This book is an essential core reference for every Swift programmer and offers solutions in a concise and easy-to-follow manner. T. Michael Rogers has developed iOS applications for Fortune 100 brands and startups, and has trained new and experienced iOS developers via the iOS Boot Camp in New York City, online courses, and in private settings. He brings his expertise to offer you the ability to use and exploit Swift to get the most out of all your projects for your app creations, whether you use iOS or Mac OS X.

Swift 5.3 is a powerful and accessible programming language that offers a variety of features to build robust mobile, desktop, and server-side applications and machine learning models. This book will help you gain a solid understanding of Swift programming using focused recipes for building Swift apps efficiently.

Explore modern game programming and rendering techniques to build games using C++ programming language and its popular libraries

Key Features Learn how you can build basic 2D and complex 3D games with C++ Understand shadows, texturing, lighting, and rendering in 3D game development using OpenGL Uncover modern graphics programming techniques and GPU compute methods using the Vulkan API

Book Description Although numerous languages are currently being used to develop games, C++ remains the standard for fabricating expert libraries and tool chains for game development. This book introduces you to the world of game development with C++. C++ Game Development By Example starts by touching upon the basic concepts of math, programming, and computer graphics and creating a simple side-scrolling action 2D game. You'll build a solid foundation by studying basic game concepts such as creating game loops, rendering 2D game scenes using SFML, 2D sprite creation and animation, and collision detection. The book will help you advance to creating a 3D physics puzzle game using modern OpenGL and the Bullet physics engine. You'll understand the graphics pipeline, which entails creating 3D objects using vertex and index buffers and rendering them to the scene using vertex and fragment shaders. Finally, you'll create a basic project using the Vulkan library that'll help you get to grips with creating swap chains, image views, render passes, and frame buffers for building high-performance graphics in your games. By the end of this book, you'll be ready with 3 compelling projects created with SFML, the Vulkan API, and OpenGL, and you'll be able take your game and graphics programming skills to the next level.

What you will learn Understand shaders and how to write a basic vertex and fragment shader Build a Visual Studio project and add SFML to it Discover how to create sprite animations and a game character class Add sound effects and background music to your game Grasp how to integrate Vulkan into Visual Studio Create shaders and convert them to the SPIR-V binary format

Who this book is for If you're a developer keen to learn game development with C++ or get up to date with game development, this book is for you. Some knowledge of C++ programming is assumed.

Ready to make amazing games for the iPhone and iPad? With Apple's Swift programming language, it's never been easier. This updated cookbook provides detailed recipes for managing a wide range of common iOS game-development issues, ranging from 2D and 3D math, SpriteKit, and OpenGL to augmented reality with ARKit. You get simple, direct solutions to common problems found in iOS game programming. Need to figure out how to give objects physical motion, or want a refresher on gaming-related math problems? This book provides sample projects and straightforward answers. All you need to get started is some familiarity with iOS development in Swift. For more information and resources, check out the book's website at <https://www.secretlab.com.au/books/ios-?game-dev-cookbook-swift>.

Build full-stack shopping list applications from scratch for web and mobile platforms using Xcode, Vapor, and Swift

Key Features Build, package, and deploy an end-to-end app solution for mobile and web with Swift 4 Increase developer productivity by creating reusable client and server components Develop backend services for your apps and websites using Vapor framework

Book Description Making Swift an open-source language enabled it to share code between a native app and a server. Building a scalable and secure server backend opens up new possibilities, such as building an entire application written in one language—Swift. This book gives you a detailed walk-through of tasks such as developing a native shopping list app with Swift and creating a full-stack backend using Vapor (which serves as an API server for the mobile app). You'll also discover how to build a web server to support dynamic web pages in browsers, thereby creating a rich application experience. You'll begin by planning and then building a native iOS app using Swift. Then, you'll get to grips with building web pages and creating web views of your native app using Vapor. To put things into perspective, you'll learn how to build an entire full-stack web application and an API server for your native mobile app, followed by learning how to deploy the app to the cloud, and add registration and authentication to it. Once you get acquainted with creating applications, you'll build a tvOS version of the shopping list app and explore how easy is it to create an app for a different platform with maximum code shareability. Towards the end, you'll also learn how to create an entire app for different platforms in Swift, thus enhancing your productivity.

What you will learn Get accustomed to server-side programming as well as the Vapor framework Learn how to build a RESTful API Make network requests from your app and handle error states when a network request fails Deploy your app to Heroku using the CLI command Write a test for the Vapor backend Create a tvOS version of your shopping list app and explore code-sharing with an iOS platform Add registration and authentication so that users can have their own shopping lists

Who this book is for This book is for developers who are looking to build full-stack web and native mobile applications using Swift. An understanding of HTML, CSS, and JavaScript would be beneficial when building server-rendered pages with Vapor.

iOS 11, Swift 4, and Xcode 9 provide many new APIs for iOS developers. With this cookbook, you'll learn more than 170 proven solutions for tackling the latest features in iOS 11 and watchOS 4, including new ways to use Swift and Xcode to make your day-to-day app development life easier. This collection of code-rich recipes also gets you up to speed on continuous delivery and continuous integration systems. Ideal for intermediate and advanced iOS developers looking to work with the newest version of iOS, these recipes include reusable code on GitHub, so you can put them to work in your project right away. Among the topics covered in this book: New features in Swift 4 and Xcode 9 Tools for continuous delivery and continuous integration Snapshot testing and test automation Creating document-based applications Updated Map view and Core Location features iOS 11's Security and Password Autofill Data storage with Apple's Core Data Creating lively user interfaces with UI Dynamics Building iMessage applications and sticker packages Integrating Siri into your apps with Siri Kit Creating fascinating apps for Apple Watch

This book helps you use the open-source Flutter framework for building native mobile apps using Dart. You'll learn about Dart programming and add functionalities to your Android and iOS apps for truly native performance. The book also covers recipes for solving almost any issue that you may face while developing multi-platform applications.

If you want to make cross-platform games without the hassle and dangers of writing platform-specific code, or If you are a game programmer who may have some experience with Java and you want to learn everything you need to know about Libgdx to produce awesome work, this is the book for you. To take full advantage of the recipes in this book, you are expected to be familiar with java with good game programming knowledge.

Develop games for iOS and Android using Cocos2d with the aid of over 70 step-by-step recipes About This Book Learn to efficiently use Cocos2d to develop cross-platform games, and have them work on iOS as well as Android Get acquainted with industry-wide professional tools such as Glyph Designer, Texture Packer, and Physics Editor, as well as using the Swift/ Sprite builder implementation of Cocos2d Use the easy-to-follow recipes to develop as well as deploy games to the Playstore and the App Store Who This Book Is For This book is for intermediate game developers and especially the ones who are generally curious to find out what's new in Cocos2d v 3.3. What You Will Learn Build custom sprites with custom animations for the game Build interactivity into your game by adding gestures and touch interactions Understand AI enemy programming and path finding to make games more exciting Add physics to your game to make it more lively and interactive Get familiar with the Swift and Sprite builder implementations along with Objective-C programming Perform hassle-free deployment of games built in iOS onto Android Add effects and particle systems to make the game more colorful In Detail Cocos2d is the world's leading game development framework for developing iOS games. With the introduction of Swift and Spritebuilder, it has become easier than ever to develop the games of your dreams without much effort. With Cocos2d, you can also deploy the game on Android, thereby maximizing profit and reducing development and porting costs. The book starts off with a detailed look at how to implement sprites and animations into your game to make it livelier. You will then learn to add scenes to the game such as the gameplay scene and options scene and create menus and buttons in these scenes, as well as creating transitions between them. From there on, you will get an understanding of how to program user interactions such as tapping, holding, and swiping. You'll then add accelerometer inputs and physics to the scene, and make objects respond back to the inputs. A game is practically incomplete without audio being added, so this will be covered next. The next section will include ways to add Artificial Intelligence to enemies in the game, allowing them to patrol, chase, and shoot in a projectile manner. You will then learn to use UserDefaults to save and load game progress, and create and access files using JSON, Plist, and XML files for custom storage and retrieval of data. Then you will learn to add dynamic lighting to your game and will use industry-wide tools such as Texture Packer, Glyph Designer, Physics Editor, Particle Designer, and Sprite Illuminator to create more visually appealing and performance-optimized games. Towards the end of the book, we dive into Apple's latest programming language—Swift, highlighting the major differences between Objective C and Swift. The book culminates with taking your existing game developed for iOS and porting it to Android, showing you how to install the Android Xcode plugin as well. Style and approach The book is written in an extremely lucid and step-by-step manner; it can be understood easily by anyone. The topics included are broken down into individual chapters so you can refer to the specific chapter to get answers on the subject you are interested in. Want to build games with iOS technologies? This cookbook provides detailed recipes for a wide range of common iOS game-development issues, ranging from 2D and 3D math to Game Center integration, and OpenGL to performance. If you're familiar with iOS, Objective-C, and Swift this is the problem-solving guide you want. Rather than focus on specific game engines for iOS, such as Cocos2D or the Corona SDK, the recipes in this cookbook strictly deal with baked-in iOS technologies. You'll learn solutions for everything from tile-matching games to racing, with working code that you can use right away. Lay out the structure of your game Build and customize menus with UIKit Detect and respond to user input Use advanced techniques to play sound effects and music Work with data, using iOS devices and the cloud Create 2D graphics with SpriteKit Add physics simulation to your game Learn beginning to advanced 3D graphics Create challenges with artificial intelligence Use networking to add multiplayer capabilities Work with game controllers and multiple screens

Unity has established itself as a powerful force for developing games. If you love mobile games and want to learn how to create them but have no idea where to begin, this book is for you. It takes a step-by-step approach to build an endless runner game using Unity, along with covering examples on how to create a game that is uniquely your own.

Do you want to build mobile games, but lack game development experience? No problem. This practical guide shows you how to create beautiful, interactive content for iOS and Android devices with the Unity game engine. Authors Jon Manning and Paris Buttfield-Addison (iOS Swift Game Development Cookbook) provide a top-to-bottom overview of Unity's features with specific, project-oriented guidance on how to use them in real game situations. Over the course of this book, you'll learn hands-on how to build 2D and 3D games from scratch that will hook and delight players. If you have basic programming skills, you're ready to get started. Explore the basics of Unity, and learn how to structure games, graphics, scripting, sounds, physics, and particle systems Use 2D graphics and physics features to build a side-scrolling action game Create a 3D space combat simulator with projectile shooting and respawning objects, and learn how to manage the appearance of 3D models Dive into Unity's advanced features, such as precomputed lighting, shading, customizing the editor, and deployment

If you are a game developer, designer, artist, or a beginner in the gaming industry, and want to make iOS games efficiently at a low cost, this book is ideal for you.

Design and develop sophisticated 2D games that are as much fun to make as they are to play. From particle effects and pathfinding to social integration and monetization, this complete tour of Apple's powerful suite of game technologies covers it all. Familiar with Swift but new to game development? No problem. Start with the basics and then layer in the complexity as you work your way through three exciting - and fully playable - games. In the end, you'll know everything you need to go off and create your own video game masterpiece for any Apple platform. Discover the power of Apple Game Frameworks, Xcode, and Swift by building three exciting games: Gloop Drop - a new twist on a classic arcade game, Val's Revenge - a roguelike dungeon crawler, and Hog - a social player vs. player mobile dice game. With Apple Game Frameworks, you can create high-performance, power-efficient games that work across all Apple platforms, including iOS, macOS, tvOS, and watchOS. In this book, you'll discover how to... Design and develop rich 2D gaming experiences using Apple's built-in game frameworks. Harness the power of SpriteKit using Xcode and Swift to create engaging player experiences. Use the visual Scene Editor to build complete scenes. Unleash the power of the Particle Editor to create amazing effects. Use GameplayKit to add advanced features to your games like pathfinding, artificial intelligence, and complex rule systems. Build larger, more complex worlds with tile maps and Xcode's visual Tile Map editor. Bring people together using

GameKit and Game Center, Apple's social gaming network. Increase revenue with third-party banner ads and rewarded ads using Google AdMob (tm). Monetize your games with StoreKit and in-app purchases. So, grab your gear and get your game on - it's time to level up your skills. What You Need: macOS Mojave 10.14.6 or newer Xcode 11.3 or newer Basic knowledge of Swift 5.1.4 or newer

iOS 7 Development Recipes: A Problem-Solution Approach is your code reference and guide to developing solutions on the iPad, iPhone, and other iOS 7 SDK devices and platforms. This book provides in-depth code samples and discussions for scenarios that developers face every day. You'll find numerous examples of real-world cases that will enable you to build fully functional applications quickly and efficiently. The recipes included in this book are wide in scope and have been geared toward the professional developer. You'll find clear and concise code samples accompanying each recipe, and you will be presented with cutting-edge solutions that bring forth the best that the iOS 7 SDK has to offer. The recipes include: Working with Auto Layout to build flexible user interfaces that adapt to different screen sizes Building applications that incorporate multimedia Building location-aware apps Understanding best practices for application design and development You'll find this book to be an indispensable reference for all your iOS development.

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