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Titolo	Swift Game Programming for Absolute Beginners / / by Arjan Egges
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Descrizione fisica	1 online resource (353 p.)
Disciplina	004
Soggetti	Computer games—Programming Programming languages (Electronic computers) Game Development Programming Languages, Compilers, Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Design and code fun games for iOS"--Cover. Includes index.
Nota di contenuto	Contents at a Glance; Contents; About the Author; About the Technical Reviewer; Acknowledgments; Introduction; Part I: Getting Started; Chapter 1: The Swift Language; Computers and Programs; Processors and Memory ; Programs ; Programming Languages ; Programming Games; Developing Games; Small Scale: Edit-Compile-Run; Large Scale: Design-Specify-Implement; Building Your First Swift Program; Building Your First Swift Game; A Few Observations; What You Have Learned; Chapter 2: Game Programming Basics; Building Blocks of a Game; The Game World; The Game Loop; The Game Loop in Swift The Structure of a Program Types of Applications; Functions ; Syntax Diagrams; Calling a Function ; Program Layout; Comments ; Instructions vs. Lines ; Whitespace and Indentation ; What You Have Learned; Chapter 3: Creating a Game World; Basic Types and Variables; Types ; Declaration and Assignment of Variables; Instructions and Expressions ; Operators and More Complex Expressions; Arithmetic Operators ; Priority of Operators ; Other Numeric Types ; The DiscoWorld Game ; Scope of Variables ; What You Have Learned; Chapter 4: Game Assets; Locating Sprites Loading and Drawing Sprites Resolutions and Aspect Ratios; Moving

Sprites; Loading and Drawing Multiple Sprites; Configuring the Device Orientation; Music and Sounds ; What You Have Learned; Part II: Painter; Chapter 5: Reacting to Player Input; Dealing With Touch Input; Using the Touch Location to Change the Game World; Conditional Execution Based on Touch; Testing for Alternatives; Comparison Operators; Logic Operators; The Boolean Type; Changing the Color of the Cannon; A Few Final Remarks; What You Have Learned; Chapter 6: A Flying Ball; Methods

Parameter Names and Labels Default Parameter Values; Reorganizing Instructions into Methods; Moving Between Local and World Coordinates; Adding a Ball to the Game World; Shooting the Ball; Updating the Ball Position; Fixed Timestep vs. Variable Timestep; Updating the Ball Color; What You Have Learned; Chapter 7: Game Object Types; Creating Multiple Objects of the Same Type; Classes as Types; Input Handling in a Separate Class; Initializing Objects; The Self Keyword; Accessing Other Objects Using Static Variables; The Double Role of Classes

Writing a Class with Multiple Instances Dealing with Randomness in Games; Calculating a Random Velocity and Color; Updating the Paint Can; What You Have Learned; Chapter 8: Colors and Collisions; A Different Way to Represent Colors; Controlled Data Access for Objects; Adding a Computed Property to a Class; Handling Collisions Between the Ball and the Cans; Values and References; Structs; What You Have Learned; Chapter 9: Limited Lives; Maintaining the Number of Lives; Indicating the Number of Lives to the Player; Executing Instructions Multiple Times

A Shorter Notation for Incrementing Counters

Sommario/riassunto

"Concepts of game programming are explained well, and no prior knowledge of Swift language programming is required. ... The images and audio provided are professional and clean." William Fahle, Computing Review, May 31, 2016 Swift Game Programming for Absolute Beginners teaches Apple's Swift language in the context of four, fun and colorful games. Learn the Swift 2.0 language, and learn to create game apps for iOS at the same time – a double win! The four games you'll develop while reading this book are: Painter Tut's Tomb Penguin Pairs Tick Tick These four games are casual, arcade-style games representing the aim-and-shoot, casual, puzzle, and platform styles of game play. Professionally developed game assets form part of the book download. You'll get professionally drawn sprites and imagery that'll have you proud to show your learning to friends and family. The approach in Swift Game Programming for Absolute Beginners follows the structure of a game rather than the syntax of a language. You'll learn to create game worlds, manage game objects and game states, define levels for players to pass through, implement animations based upon realistic physics, and much more. Along the way you'll learn the language, but always in the context of fun and games. Swift is Apple's new programming language introduced in 2014 to replace Objective-C as the main programming language for iOS devices and Mac OS X. Swift is a must learn language for anyone targeting Apple devices, and Swift Game Programming for Absolute Beginners provides the most fun you'll ever have in stepping over the threshold toward eventual mastery of the language.
