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Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (296 p.)
Collana	Expert's voice in game development
Disciplina	794.8151
Soggetti	Programming languages (Electronic computers) Software engineering Programming Languages, Compilers, Interpreters Software Engineering/Programming and Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Contents at a Glance; Introduction; Chapter 1: Beginning C++; Compilers; Programming Paradigms; Procedural Programming; Object-Oriented Programming; Generic Programming; C++ Game Programming; Our First C++ Program; Summary; Part 1: Procedural Programming; Chapter 2: Writing a Guessing Game with C++ Types; Dynamic Versus Static Typed Languages; Declaring Variables; Defining Variables; Integers; Unsigned Integers; Two's Complement; Floating Point Numbers; Boolean Values; Enums; Switching from One Type to Another; static_cast; A Simple Guessing Game; Summary Chapter 3: Creating Calculators with OperatorsThe Assignment Operator; Arithmetic Operators; The Addition Operator; The Subtraction Operator; The Multiplication and Division Operators; The Modulo Operator; A Simple Arithmetic Calculator; Relational Operators; Equality Operators; Greater-Than Operators; Less-Than Operators; Simple Comparison Calculators; Bitwise Operators; Hexadecimal Number Representation; The Binary & (AND) Operator; The Binary (OR) Operator; The Binary ^ (Exclusive OR) Operator; The Left Shift (>) Operator; Logical Operators The && OperatorThe Operator; Unary Operators; Arithmetic Unary Operators; Unary Negative Operator; Unary Plus Operator; The

Increment and Decrement Operators; The Logical Not Unary Operator; The One's Complement Operator; Summary; Chapter 4: Beginning C++ Game Development with Arrays; The C++ Array; Pointers; Pointer Arithmetic; Dereferencing Pointers; Pointers and Arrays; C Style Strings in Arrays; Working with C Style Strings; `strlen`; `strcmp`; `strcpy`; `strcat`; Text Adventure Game; Summary; Chapter 5: Functions, the Building Blocks of C++; Writing Our First Function
Passing Parameters to FunctionsReturn Values; Passing by Pointer; Passing by Reference; Structures; Adding Functions to Text Adventure; Summary; Chapter 6: Making Decisions with Flow Control; The if Statement; The else and else if Statements; The for Loop; The while Loop; The switch Statement; The break and continue Keywords; The goto Statement; Adding a Game Loop to Text Adventure; Summary; Chapter 7: Organizing Projects Using Files and Namespaces; Source and Header Files; Creating Namespaces; Updating Text Adventure with Source Files, Header Files, and Namespaces; Summary
Part 2: Object-Oriented ProgrammingChapter 8: Object-Oriented Programming with Classes; Object-Oriented Programming; Encapsulation; Constructors and Destructors; Method Overloading; Operator Overloading; Updating Text Adventure to Use Classes; Summary; Chapter 9: Controlling Data with Access Modifiers; The static Keyword; Creating static Local Variables; Using static class Member Variables; Using static Member Methods; Using static to Alter Global Scope; The const Keyword; Constant Variables; Constant Pointers; Constant Parameters; Constant Member Methods; Two More Keywords
The inline Keyword

Sommario/riassunto

If you're new to C++ but understand some basic programming, then *Learn C++ for Game Development* lays the foundation for the C++ language and API that you'll need to build game apps and applications. *Learn C++ for Game Development* will show you how to: Master C++ features such as variables, pointers, flow controls, functions, I/O, classes, exceptions, templates, and the Standard Template Library (STL). Use design patterns to simplify your coding and make more powerful games. Manage memory efficiently to get the most out of your creativity. Load and save games using file I/O, so that your users are never disappointed. Most of today's popular console and PC game platforms use C++ in their SDKs. Even the Android NDK and now the iOS SDK allow for C++; so C++ is growing in use for today's mobile game apps. Game apps using C++ become much more robust, better looking, more dynamic, and better performing. After reading this book, you'll have the skills to become a successful and profitable game app or applications developer in today's increasingly competitive indie game marketplace. The next stage is to take the foundation from this book and explore SDKs such as Android/Ouya, PlayStation, Wii, Nintendo DS, DirectX, Unity3D, and GameMaker Studio to make your career really take off.
