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Autore	Gregoire Marc R
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Nota di contenuto	Professional C++; Contents; Introduction; Part I: Introduction to Professional C++; Chapter 1: A Crash Course in C++; The Basics of C++; The Obligatory Hello, World; Namespaces; Variables; Operators; Types; Conditionals; Loops; Arrays; Functions; Those Are the Basics; Diving Deeper into C++; Pointers and Dynamic Memory; Strings in C++; References; Exceptions; The Many Uses of const; C++ as an Object- Oriented Language; Declaring a Class; The Standard Library; Your First Useful C++ Program; An Employee Records System; The Employee Class; The Database Class; The User Interface Evaluating the ProgramSummary; Chapter 2: Designing Professional C++ Programs; What Is Programming Design?; The Importance of Programming Design; What's Different about C++ Design?; Two Rules for C++ Design; Abstraction; Reuse; Reusing Code; A Note on Terminology; Deciding Whether or Not to Reuse Code; Strategies for Reusing Code; Bundling Third-Party Applications; Open-Source

Libraries; The C++ Standard Library; Designing with Patterns and Techniques; Designing a Chess Program; Requirements; Design Steps; Summary; Chapter 3: Designing With Objects; Am I Thinking Procedurally? The Object-Oriented Philosophy; Classes; Components; Properties; Behaviors; Bringing It All Together; Living in a World of Objects; Overobjectification; Overly General Objects; Object Relationships; The Has-A Relationship; The Is-A Relationship (Inheritance); The Fine Line between Has-A and Is-A; The Not-A Relationship; Hierarchies; Multiple Inheritance; Mix-in Classes; Abstraction; Interface versus Implementation; Deciding on an Exposed Interface; Designing a Successful Abstraction; Summary; Chapter 4: Designing for Reuse; The Reuse Philosophy; How to Design Reusable Code; Use Abstraction Structure Your Code for Optimal Reuse; Design Usable Interfaces; Reconciling Generality and Ease of Use; Summary; Chapter 5: Coding with Style; The Importance of Looking Good; Thinking Ahead; Elements of Good Style; Documenting Your Code; Reasons to Write Comments; Commenting Styles; Comments in This Book; Decomposition; Decomposition through Refactoring; Decomposition by Design; Decomposition in This Book; Naming; Choosing a Good Name; Naming Conventions; Using Language Features with Style; Use Constants; Use References Instead of Pointers; Use Custom Exceptions; Formatting The Curly Brace Alignment Debate; Coming to Blows over Spaces and Parentheses; Spaces and Tabs; Stylistic Challenges; Summary; Part II: C++ Coding the Professional Way; Chapter 6: Gaining Proficiency with Classes and Objects; Introducing the Spreadsheet Example; Writing Classes; Class Definitions; Defining Methods; Using Objects; Object Life Cycles; Object Creation; Object Destruction; Assigning to Objects; Distinguishing Copying from Assignment; Summary; Chapter 7: mastering classes and Objects; Dynamic Memory Allocation in Objects; The Spreadsheet Class; Freeing Memory with Destructors Handling Copying and Assignment

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## Sommario/riassunto

Essential reading for experienced developers who are determined to master the latest release of C++ Although C++ is often the language of choice from game programming to major commercial software applications, it is also one of the most difficult to master. With this no-nonsense book, you will learn to conquer the latest release of C++. The author deciphers little-known features of C++, shares detailed code examples that you can then plug into your own code, and reveals the significant changes to C++ that accompany the latest release. You'll discover how to design and build applic

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