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Nota di contenuto	1. Introduction -- 2. What is C++? -- 3. C++ Compilers -- 4. Our First Program -- 5. Types -- 6. Exercises -- 7. Operators -- 8. Standard Input -- 9. Exercises -- 10. Arrays -- 11. Pointers -- 12. References -- 13. Introduction to Strings -- 14. Automatic Type Deduction -- 15. Exercises -- 16. Statements -- 17. Constants -- 18. Exercises -- 19. Functions -- 20. Exercises -- 21. Scope and Lifetime -- 22. Exercises -- 23. Classes - Introduction -- Part I -- 24. Exercises -- 25. Classes - Inheritance and Polymorphism -- Part II -- 26. Exercises -- 27. The static Specifier -- 28. Templates -- 29. Enumerations -- 30. Exercises -- 31. Organizing code -- 32. Exercises -- 33. Conversions -- 34. Exceptions -- 35. Smart Pointers -- 36. Exercises -- 37. Input/Output Streams -- 38. C++ Standard Library and Friends -- 39 Exercises -- 40. C++ Standards -- 41. Projects.
Sommario/riassunto	Learn the C++ programming language in a structured, straightforward, and friendly manner. This updated version of the book teaches the basics of the modern C++ programming language, the C++ Standard Library, and modern C++ standards, including C++23. No previous

programming experience is required. C++ is a language like no other, surprising in its complexity, yet wonderfully sleek and elegant in so many ways. It is also a language that cannot be learned by guessing, one that is easy to get wrong and challenging to get right. To overcome this, each section is filled with real-world examples that gradually increase in complexity. Modern C++ for Absolute Beginners, Second Edition teaches more than just programming in C++23. It provides a solid C++ foundation to build upon. The author takes you through the C++ programming language, the Standard Library, and the C++11 to C++23 standard basics. Each chapter is accompanied by the right amount of theory and plenty of source code examples. You will work with C++23 features and standards, yet you will also compare and take a look into previous versions of C++. After reading this book, you'll be able to start programming in modern C++ standards. You will do so with plenty of relevant source code examples, freely available on this book's GitHub page. You will:

- Work with the basics of C++: types, operators, variables, constants, expressions, functions, classes, I/O, smart pointers, and more
- Set up the Visual Studio environment on Windows and GCC on Linux, where you can write your own code
- Declare and define functions, classes, and objects, and organize code into namespaces
- Discover object-oriented programming including encapsulation, inheritance, polymorphism, using the most advanced C++ features
- Manage the basics of lambdas, inheritance, polymorphism, smart pointers, templates, modules, contracts, concepts, and more.
