

1. Record Nr.	UNINA9910411924803321
Autore	Dmitrovic Slobodan
Titolo	Modern C++ for Absolute Beginners : A Friendly Introduction to C++ Programming Language and C++11 to C++20 Standards / / by Slobodan Dmitrovi
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2020
ISBN	9781484260470 1484260473
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIX, 304 p. 3 illus.)
Disciplina	005.133
Soggetti	Programming languages (Electronic computers) Software engineering Computer programming Programming Languages, Compilers, Interpreters Software Engineering Programming Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
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. Functions -- 19. Exercises -- 20. Scope and Lifetime -- 21. Exercises -- 22. Classes - Part I -- 23. Exercises -- 24. Classes -- Part II -- 25. The static Specifier -- 26. Templates -- 27. Enumerations -- 28. Organizing code -- 29. Exercises -- 30. Conversions -- 31. Exceptions -- 32. Smart Pointers -- 33. C++ Standard Library and Friends -- 34. C++ Standards -- 35. C++11 -- 36. C++14 -- 37. C++17 -- 38. C++20.
Sommario/riassunto	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. This book is an effort to introduce the reader to a C++ programming language in a structured, straightforward, and

friendly manner. The book teaches the basics of the modern C++ programming language, C++ Standard Library, and modern C++ standards. No previous programming experience is required. Each section is filled with real-world examples that gradually increase in complexity. Modern C++ for Absolute Beginners teaches more than just programming in C++. 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++20 standard basics. Each chapter is accompanied by the right amount of theory and plenty of source code examples. You will work with C++20 features and standards, yet you will also compare and take a look into previous versions of C++. You will do so with plenty of relevant source code examples. You will:

- Work with the basics of C++: types, operators, variables, constants, expressions, references, functions, classes, I/O, smart pointers, polymorphism, 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: classes and objects, encapsulation, inheritance, polymorphism, and more using the most advanced C++ features
- Employ best practices in organizing source code and controlling program workflow
- Get familiar with C++ language dos and don'ts, and more
- Master the basics of lambdas, inheritance, polymorphism, smart pointers, templates, modules, contracts, concepts, and more.

---