

1. Record Nr.	UNINA9910300747603321
Autore	Nesteruk Dmitri
Titolo	Design Patterns in Modern C++ : Reusable Approaches for Object-Oriented Software Design // by Dmitri Nesteruk
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2018
ISBN	9781484236031 1484236033
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (xiii, 314 pages) : illustrations
Disciplina	004
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
Note generali	Includes index.
Nota di contenuto	1. Introduction -- Pt I Creational Patterns -- 2. Builder -- 3. Factories -- 4. Prototype -- 5. Singleton -- Pt II Structural Patterns -- 6. Adapter -- 7. Bridge -- 8. Composite -- 9. Decorator -- 10. Façade -- 11. Flyweight -- 12. Proxy -- Pt III Behavioral Patterns -- 13. Chain of Responsibility -- 14. Command -- 15. Interpreter -- 16. Iterator -- 17. Mediator -- 18. Null Object -- 19. Observer -- 20. State -- 21. Strategy -- 22. Template Method -- 23. Visitor -- 24. Maybe Monad -- Pt IV Appendix -- 25. Appendix A: Functional Design Patterns.
Sommario/riassunto	Apply modern C++17 to the implementations of classic design patterns. As well as covering traditional design patterns, this book fleshes out new patterns and approaches that will be useful to C++ developers. The author presents concepts as a fun investigation of how problems can be solved in different ways, along the way using varying degrees of technical sophistication and explaining different sorts of trade-offs. Design Patterns in Modern C++ also provides a technology demo for modern C++, showcasing how some of its latest features (e.g., coroutines) make difficult problems a lot easier to solve. The

examples in this book are all suitable for putting into production, with only a few simplifications made in order to aid readability. You will:

- Apply design patterns to modern C++ programming
- Use creational patterns of builder, factories, prototype and singleton
- Implement structural patterns such as adapter, bridge, decorator, facade and more
- Work with the behavioral patterns such as chain of responsibility, command, iterator, mediator and more
- Apply functional design patterns such as Monad and more.

---