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Autore	Pickering Robert
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Descrizione fisica	1 online resource (327 p.)
Collana	Expert's Voice in .NET
Disciplina	004
Soggetti	Microsoft software Microsoft .NET Framework Programming languages (Electronic computers) Computer programming Microsoft and .NET Programming Languages, Compilers, Interpreters Programming Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Contents at a Glance; Contents; About the Authors; About the Technical Reviewer; Acknowledgments; Foreword; Chapter 1: Getting Started; What Is Functional Programming?; Why Is Functional Programming Important?; What Is F#?; Who Is Using F#?; Who Is This Book For?; What's Next?; Chapter 2: How to Obtain, Install, and Use F#; Obtaining F# on Microsoft Windows; Obtaining F# on Apple OS X; Obtaining F# on Linux; The Examples in This Book; Summary; Chapter 3: Functional Programming; Literals; Anonymous Functions; Identifiers and let Bindings; Identifier Names; Scope; Capturing Identifiers The use BindingRecursion; Operators; Function Application; Partial Application of Functions; Pattern Matching; Control Flow; Lists; Pattern Matching Against Lists; List Comprehensions; Types and Type Inference; Defining Types; Tuple and Record Types; Union or Sum Types (Discriminated Unions); Type Definitions with Type Parameters; Recursive Type Definitions; Active Patterns; Complete Active Patterns; Partial Active Patterns; Units of Measure; Exceptions and Exception Handling; Lazy Evaluation; Summary; Chapter 4: Imperative

Programming; The Unit Type; The Mutable Keyword
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Comprehensions; Array Slicing; Control Flow; Calling Static Methods
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Working with Events from .NET Libraries; Pattern Matching over .NET
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Expressions; Defining Classes; Optional Parameters; Additional
Constructors; Defining Interfaces; Implementing Interfaces; Classes and
Inheritance
Methods and InheritanceAccessing the Base Class; Properties and
Indexers; Autoproperties; Overriding Methods from Non-F# Libraries;
Abstract Classes; Classes and Static Methods; Casting; Type Tests;
Defining Delegates; Structs; Enums; Summary; Chapter 6: Organizing,
Annotating, and Quoting Code; Modules; Namespaces; Opening
Namespaces and Modules; Giving Modules Aliases; Signature Files;
Private and Internal let Bindings and Members; Module Scope; Module
Execution; Optional Compilation; Comments; Doc Comments;
Comments for Cross-Compilation; Custom Attributes; Quoted Code;
Summary
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FSharp.Core.Operators Module; Arithmetic Operators; Floating-Point
Arithmetic Functions; Tuple Functions; The Conversion Functions; The
Bitwise Or and And Operators; The FSharp.Reflection Module; Reflection
Over Types; Reflection Over Values; The FSharp.Collections.Seq Module;
The map and iter Functions; The concat Function; The fold Function;
The exists and forall Functions; The filter, find, and tryFind Functions;
The choose Function; The init and initInfinite Functions; The unfold
Function; The cast Function
The FSharp.Text.Printf Module

Sommario/riassunto

This book is a great foundation for exploring functional-first programming and its role in the future of application development. The best-selling introduction to F#, now thoroughly updated to version 4.0, will help you learn the language and explore its new features. F# 4.0 is a mature, open source, cross-platform, functional-first programming language which empowers users and organizations to tackle complex computing problems with simple, maintainable and robust code. F# is also a fully supported language in Visual Studio and Xamarin Studio. Other tools supporting F# development include Emacs, MonoDevelop, Atom, Visual Studio Code, Sublime Text, and Vim. Beginning F#4.0 has been thoroughly updated to help you explore the new features of the language including: Type Providers Constructors as first-class functions Simplified use of mutable values Support for high-dimensional arrays Slicing syntax support for F# lists Reviewed by Don Syme, the chief architect of F# at Microsoft Research, Beginning F#4.0 is a great foundation for exploring functional programming and its role in the future of application development.
