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Autore	Vivien Vladimir
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Nota di contenuto	Cover -- Copyright -- Credits -- About the Author -- About the Reviewers -- www.PacktPub.com -- Table of Contents -- Preface -- Chapter 1: A First Step in Go -- The Go programming language -- Playing with Go -- No IDE required -- Installing Go -- Source code examples -- Your first Go program -- Go in a nutshell -- Functions -- Packages -- The workspace -- Strongly typed -- Composite types -- The named type -- Methods and objects -- Interfaces -- Concurrency and channels -- Memory management and safety -- Fast compilation -- Testing and code coverage -- Documentation -- An extensive library -- The Go Toolchain -- Summary -- Chapter 2: Go Language Essentials -- The Go source file -- Optional semicolon -- Multiple lines -- Go identifiers -- The blank identifier -- Muting package imports -- Muting unwanted function results -- Built-in identifiers -- Types -- Values -- Functions -- Go variables -- Variable declaration -- The zero-value -- Initialized declaration -- Omitting variable types -- Short variable declaration -- Restrictions for short variable declaration -- Variable scope and visibility -- Variable declaration block -- Go constants -- Constant literals -- Typed constants -- Untyped constants -- Assigning untyped constants -- Constant declaration block -- Constant enumeration -- Overriding the default enumeration type -- Using iota in expressions -- Skipping enumerated values -- Go operators -- Arithmetic operators -- The increment and decrement

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An insightful guide to learning the Go programming language About This Book Insightful coverage of Go programming syntax, constructs, and idioms to help you understand Go code effectively Push your Go skills, with topics such as, data types, channels, concurrency, object-oriented Go, testing, and network programming Each chapter provides working code samples that are designed to help reader quickly understand respective topic Who This Book Is For If you have prior exposure to programming and are interested in learning the Go programming language, this book is designed for you. It will quickly run you through the basics of programming to let you exploit a number of features offered by Go programming language. What You Will Learn Install and configure the Go development environment to quickly get started with your first program. Use the basic elements of the language including source code structure, variables, constants, and control flow primitives to quickly get started with Go Gain practical insight into the use of Go's type system including basic and composite types such as maps, slices, and structs. Use interface types and techniques such as embedding to create idiomatic object-oriented programs in Go. Develop effective functions that are encapsulated in well-organized package structures with support for error handling and panic recovery. Implement goroutine, channels, and other concurrency primitives to write highly-concurrent and safe Go code Write tested and benchmarked code using Go's built test tools Access OS resources by calling C libraries and interact with program environment at runtime In Detail The Go programming language has firmly established itself as a

favorite for building complex and scalable system applications. Go offers a direct and practical approach to programming that let programmers write correct and predictable code using concurrency idioms and a full-featured standard library. This is a step-by-step, practical guide full of real world examples to help you get started with Go in no time at all. We start off by understanding the fundamentals of Go, followed by a detailed description of the Go data types, program structures and Maps. After this, you learn how to use Go concurrency idioms to avoid pitfalls and create programs that are exact in expected behavior. Next, you will be familiarized with the tools and libraries that are available in Go for writing and exercising tests, benchmarking, and code coverage. Finally,...
