

Go Language

it's just an instrument, so it will make you more effective, but it's not a major point to know.

Book: Go 101

Official Docs:

-  [Documentation - The Go Programming Language](#)

Tour of Go:

-  [A Tour of Go](#)

Deep dive:

-  [Effective Go - The Go Programming Language](#)

Basic operators:

-  [Effective Go - The Go Programming Language](#)

Functions

-  [Effective Go - The Go Programming Language](#)

Array

-  [Effective Go - The Go Programming Language](#)

Slice

-  [Effective Go - The Go Programming Language](#)



Map

-  [Effective Go - The Go Programming Language](#)

Pointers

-  Effective Go - The Go Programming Language

Interfaces:

-  Effective Go - The Go Programming Language
-  Effective Go - The Go Programming Language



Go code review:

-  CodeReviewComments



Type switch:

-  Effective Go - The Go Programming Language





Context:





- <https://pkg.go.dev/context>
- <https://go.dev/blog/context>
- <https://www.digitalocean.com/community/tutorials/how-to-use-contexts-in-go>
- <https://github.com/golang/go/issues/22602>
- Concurrency patterns:  Go Concurrency Patterns: Context - The Go Programming Language
- Examples:  How To Use Contexts in Go | DigitalOcean

Errors:

-  Effective Go - The Go Programming Language
-  Working with Errors in Go 1.13 - The Go Programming Language

Concurrency:

-  Effective Go - The Go Programming Language
-  sync package - sync - Go Packages
-  The Go Programming Language Specification - The Go Programming Language
-  errgroup package - golang.org/x/sync/errgroup - Go Packages

-  atomic package - sync/atomic - Go Packages
-  Разбираемся с новым sync.Map в Go 1.9
-  Go by Example: Worker Pools
-  Visualizing Concurrency in Go · divan's blog

Worker pool

- <https://gobyexample.com/worker-pools>
- https://divan.dev/posts/go_concurrency_visualize/

Synchronisation

- <https://pkg.go.dev/sync>
- https://go.dev/ref/spec#Channel_types
- <https://pkg.go.dev/golang.org/x/sync/errgroup>
- <https://pkg.go.dev/sync/atomic>
- <https://habr.com/ru/post/338718/>

50 Go Gotchas:

- http://devs.cloudimmunity.com/gotchas-and-common-mistakes-in-go-golang/index.html#blocked_goroutines

Go proverbs

- <https://go-proverbs.github.io/> - A little copying is better than a little dependency.
- <https://blog.softwaremill.com/redelivery-with-rabbitmq-5a32ce8269f1>
- **Observability and distributed tracing**
- <https://m.facebook.com/ciklum/videos/ciklum-speakers-corner-golang/247514096834663/> 45:45

SOLID

- <https://dave.cheney.net/2016/08/20/solid-go-design>
- <https://habr.com/ru/post/348852/>

Packages

- <https://go.dev/blog/package-names>
- https://dave.cheney.net/practical-go/presentations/qcon-china.html#consider_fewer_larger_packages

Validation

- github.com/go-playground/validator

Internal package

- <https://go.dev/doc/go1.4#internalpackages>

Go 1.20

- <https://go.dev/blog/go1.20> or better <https://go.dev/doc/go1.20>

Data races

- https://go.dev/doc/articles/race_detector

Testing

- <https://martinfowler.com/articles/practical-test-pyramid.html>

Go mod





- <https://go.dev/ref/mod#minimal-version-selection>
- <https://go.dev/ref/mod>

Uber style guide:  <https://github.com/uber-go/guide/blob/master/style.md>

Go modules:

-  [Using Go Modules - The Go Programming Language](#)

Additional reading:

-  [Dave Cheney | The acme of foolishness](#)
- Latency and in memory cache:  [Latency need not always require scaling your Microservice \(a story of an in memory cache\)](#)
- Garbage collector:  [Getting to Go: The Journey of Go's Garbage Collector - The Go Programming Language](#)
- Million web sockets in Go:  [A Million WebSockets and Go](#)

Go generics:  [Tutorial: Getting started with generics - The Go Programming Language](#)

12 factor app: [The Twelve-Factor App](#) ,  [An illustrated guide to 12 Factor Apps](#)