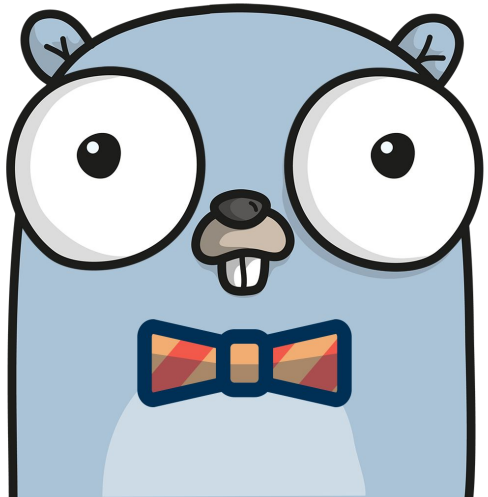
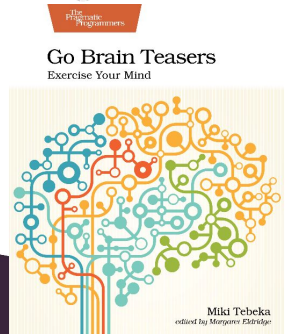
Practical Go

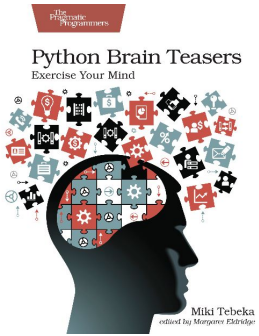
For Developers

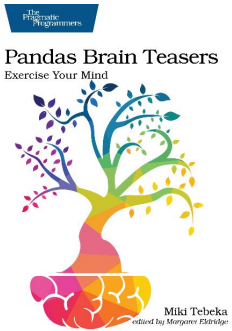


miki @tebeka

CEO,
CTO,
UFO

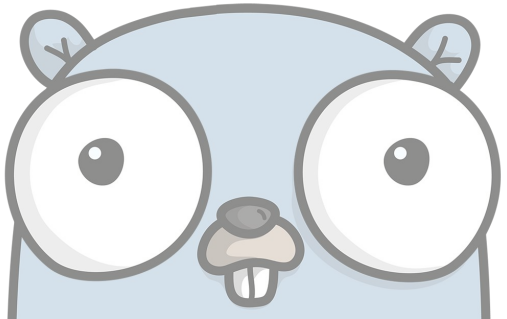






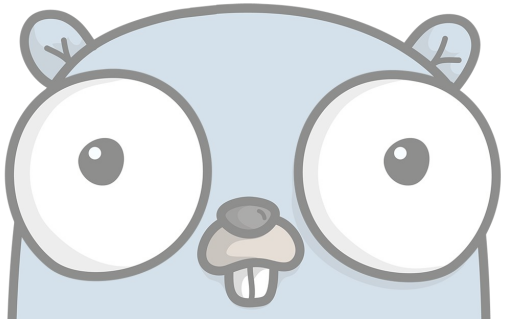
Background

- Developed and backed by Google
  - Robert Griesemer, Rob Pike and Ken Thompson
- Open sourced November 2009
- Version 1 March 2012



Notable Users

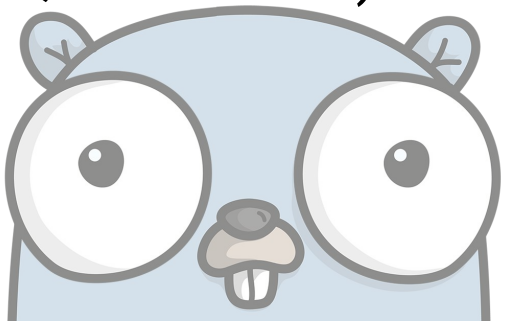
- Google
  - dl.google.com
- Docker & Kubernetes are written in Go
- AT&T
- Facebook
- Netflix
- And many more ... (see here)



Why Go?

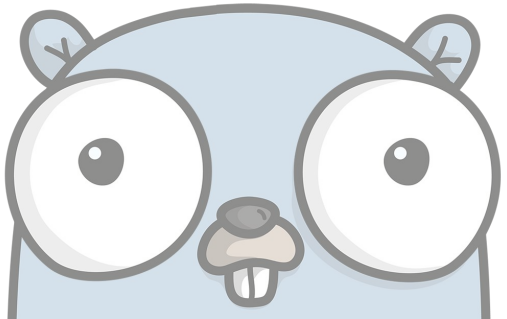
Built for Modern Times

- The free lunch is over
  - goroutines
  - channels
- The C10k problem
  - goroutines
  - Production ready HTTP server (TLS, HTTP 2 ...)



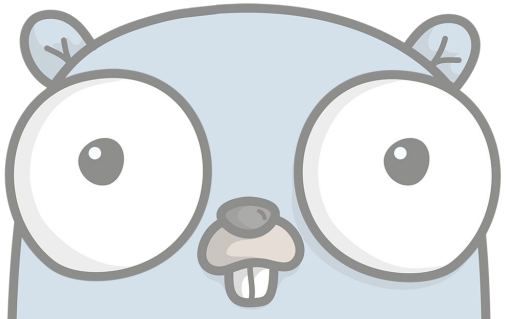
Built for Large Teams

- Small language
  - C based syntax
- Simple language
  - Easy to understand & maintain
- Module system
  - Reusability
- Interfaces
  - Modularity



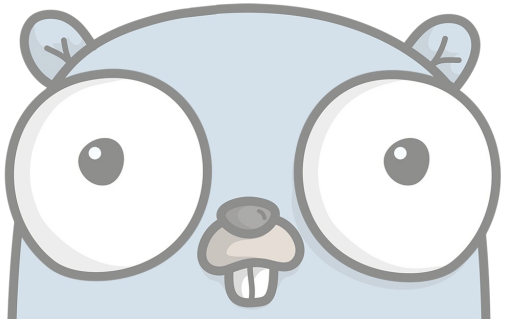
Robust & Productive

- Static types
  - Yet feels dynamic
- Garbage collector
  - Sub millisecond pauses
- Rich & mature standard library
- Fast compilation
- Forces you to check errors



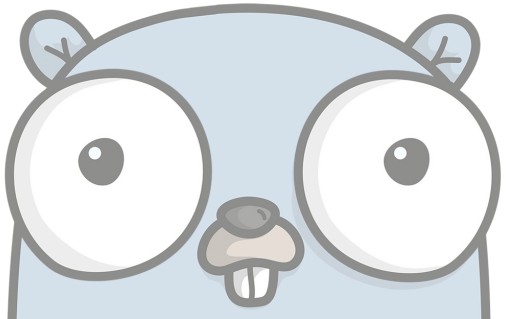
Great Tooling

- The go tool
  - build, run, test, benchmark, install ...
- Modules
  - Dependency management
- Build in profiler & tracer
  - With web interface
- Built in logging & metrics
- A lot of 3rd party modules



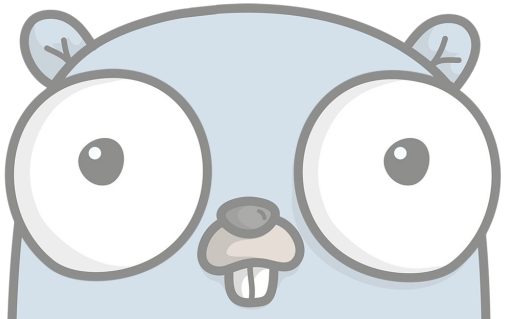
Will Save You Money

- lovable went down from 200 to 10 servers
  - 12% faster request times
- Stable API
- Compiles to static executable
  - Easy deployment
- Easy to cross compile



Great Community

- People *will* help you
- A lot of reference material
  - A Tour of Go
  - The Go Programming Language
- GopherCon conferences
- Meetups

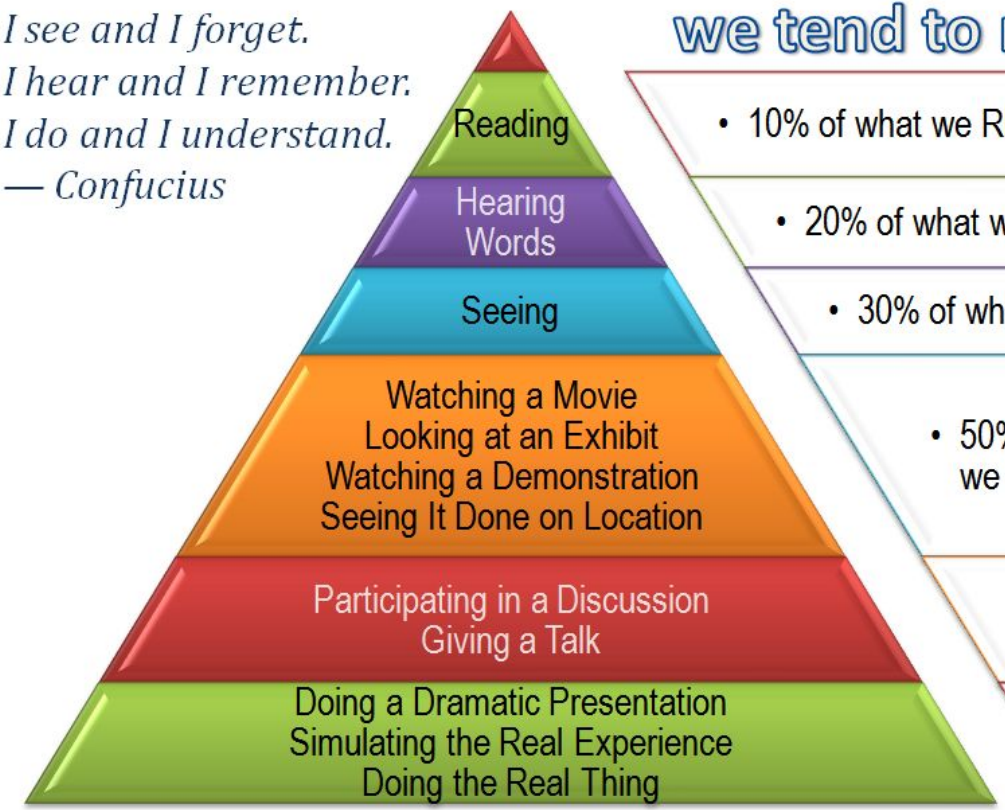


The vodka is good, but the meat is rotten.

The Cone of Learning

sparkinsight.com

I see and I forget.
I hear and I remember.
I do and I understand.
— Confucius



After 2 weeks, we tend to remember ...

- 10% of what we READ
- 20% of what we HEAR
- 30% of what we SEE
- 50% of what we SEE & HEAR
- 70% of what we SAY
- 90% of what we SAY & DO

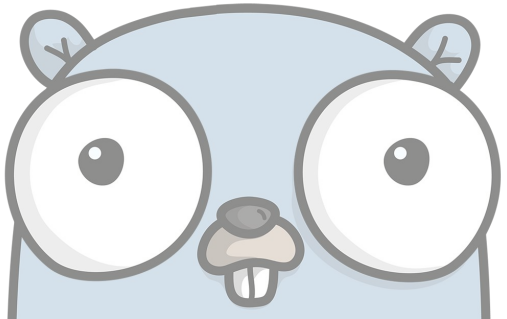
Passive

Active

Source: Edgar Dale (1969)

You **learn** something by **doing it yourself**, by **asking questions**, by **thinking**, and by **experimenting**.

Richard Feynman

DO NOT
ENTER

Let's Roll!