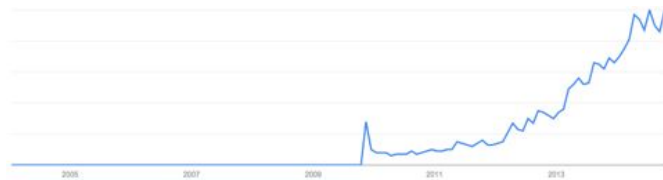
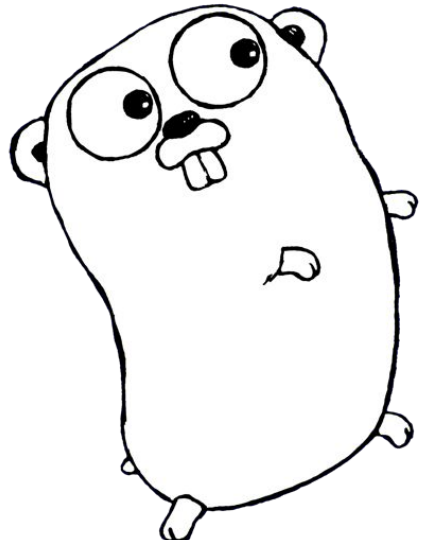
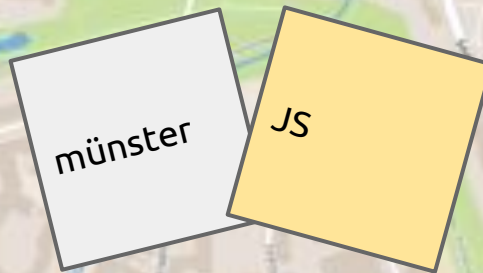


# Go

@MoR





münster

JS

Dienstag, 4. November um 19:00



# Why did Google invent Go?

- Efficiency
- Safety
- Concurrency
- Scalability
- Fast dev. cycle



# The language

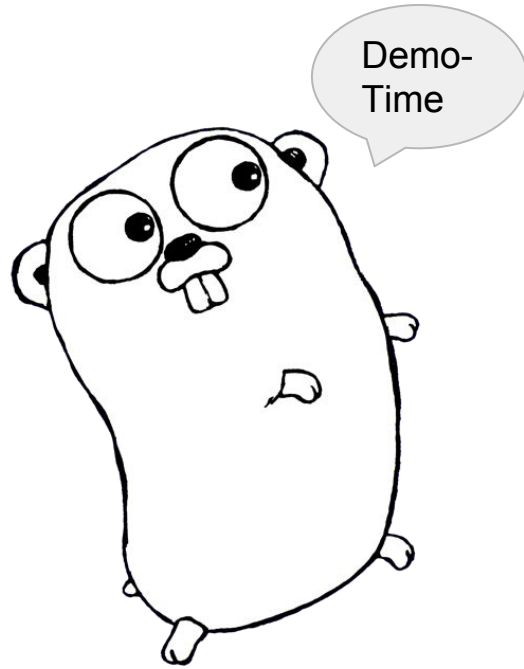
- Somehow like C
- { Braces are mandatory }
- compiled, statically-typed

```
package main

import "fmt"

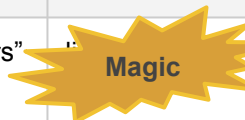
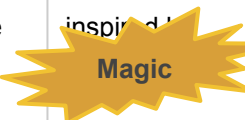
func main() {
    fmt.Println("Hello World!")
}
```

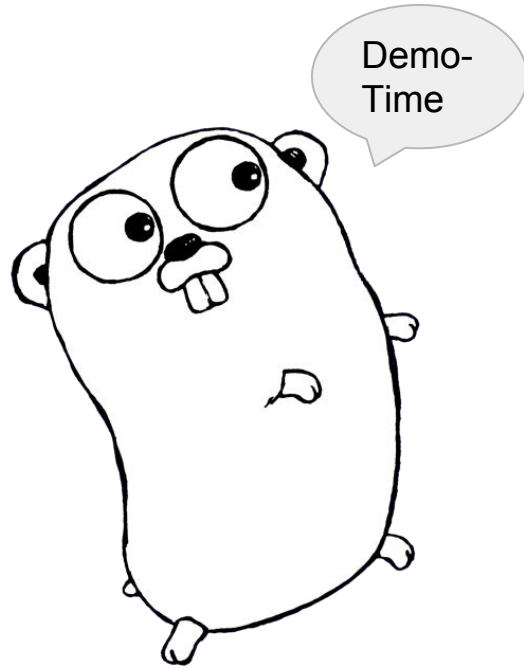
*“The first step to making Go scale, dependency-wise, is that **the language defines that unused dependencies are a compile-time error** (not a warning, **an error**).” - Rob Pike*



# Web Frameworks

- Revel
- Martini
- Negroni
- Gocraft/web
- Gorilla
- net/http

Web-Framework	Routing	Data binding	Controllers / context	Middleware	Notes
Revel (revel)	parameter, wildcards	arguments	Must have Controllers	"interceptors"	 <b>Magic</b>
Martini (Code Gangsta)	parameter, wildcards, regex	injected	DIY	middleware all over it	 <b>Magic</b>
Negroni (Code Gangsta)	BYOR	DIY	DIY	middleware all over it	<b>library / not a framework</b>
Gocraft/web (Gocraft)	parameter, regex	wrappend, web.Request	not directly	general / contextual	<b>library / not a framework</b>
Gorilla (Gorilla Web Toolkit)	paramter (&regex)	mux.Vars (request)	DIY	DIY	<b>independent libraries</b>
net/http	BYOR	DIY	DIY	DIY	<b>purist</b>

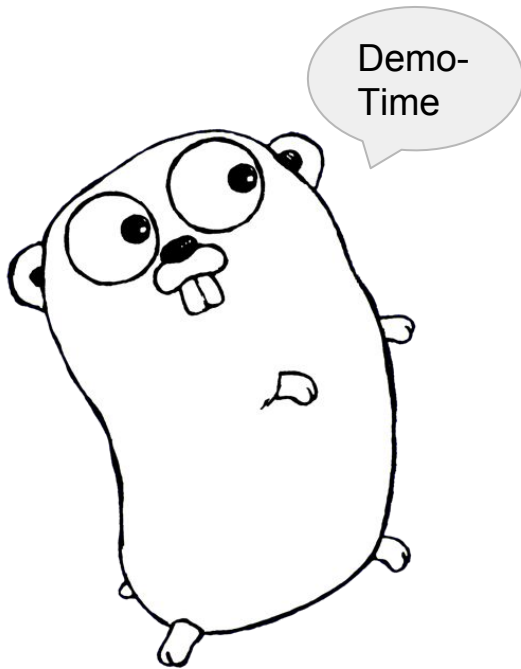


# Packages

- Everything lives in a package
- Packages can be very small, or very large
  - `package errors` → one declaration
  - `package net/http` → > 100 declarations
- Case determines visibility
  - `Foo` → exported
  - `foo` → not exported



# Structs, Interfaces and Packages





- [Integrating With External Code](#)
- [Managing Dependencies](#)
- [Deploying Go](#)
- [Go's Ecosystem](#)

# Go is used for...

- Web frameworks
- Image processing
- Crypto
- Replacing shell scripts
- Controlling flying drones ;-)
- Emulators
- Disassembler, linker, compiler.
- Mobile
- Audio
- Cloud Infrastructure
- Load balancers & servers
- System administration
- ...

# Who is using Go?



# Links and resources

<http://golang.org/>

<http://blog.golang.org/>

<http://www.golang-book.com/>

<http://openmymind.net/assets/go/go.pdf>

<http://talks.golang.org/2012/splash.article>

<http://talks.golang.org/2012/simple.slide#1>

<https://talks.golang.org/2013/bestpractices.slide#1>

<http://blog.iron.io/2013/03/how-we-went-from-30-servers-to-2-go.html>

<http://blog.iron.io/2013/08/go-after-2-years-in-production.html>

# **Q&A**

Merci