

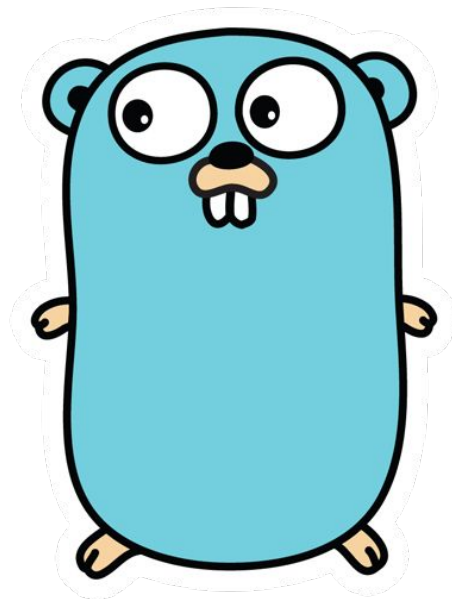
GoLang





What is GoLang?

- Compiled language (cross compiler)
- Single executable file
- Statically typed language
- Managed language
- Goroutine
- Channel
- No Class (Struct and Interface)
- Pointer
- Low learning curve





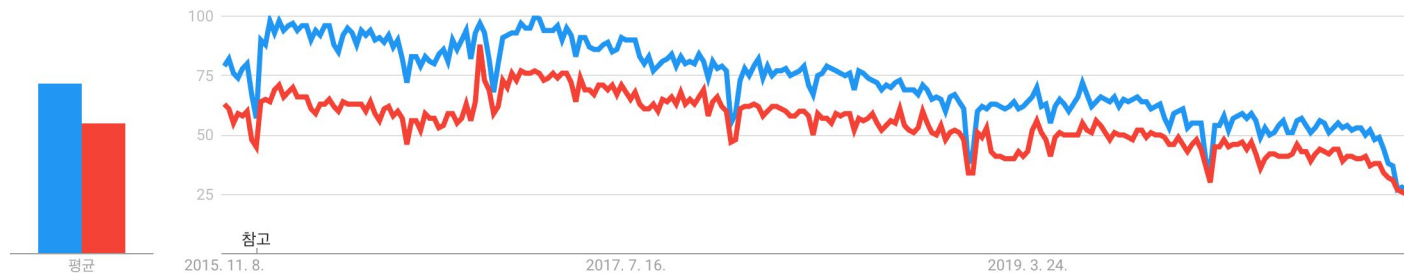
Disadvantage

- No Generic (will be added in Go 2) ([Type Parameter Draft](#) in Go 1)
- Error Handling (Too many **if err != nil**)
- Workaround
 - Code generating (<https://github.com/awalterschulze/goderive>)
 - Monad (<https://awalterschulze.github.io/blog/post/monads-for-goprogrammers>)



Language Popularity (ruby)

시간 흐름에 따른 관심도 변화 ?





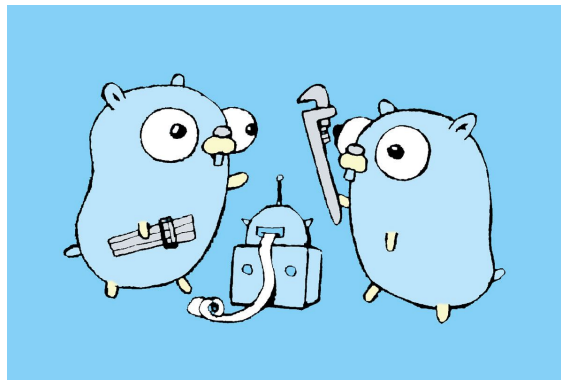
Framework and Library

1. Cloud
 - Docker
 - Kubernetes
 - Terraform
2. Database
 - InfluxDB (<https://github.com/influxdata/influxdb>)
 - Cockroach (<https://github.com/cockroachdb/cockroach>)
3. Web
 - Gin (<https://github.com/gin-gonic/gin>)
 - Beego (<https://github.com/astaxie/beego>)
 - Echo (<https://github.com/labstack/echo>)



Built in tools

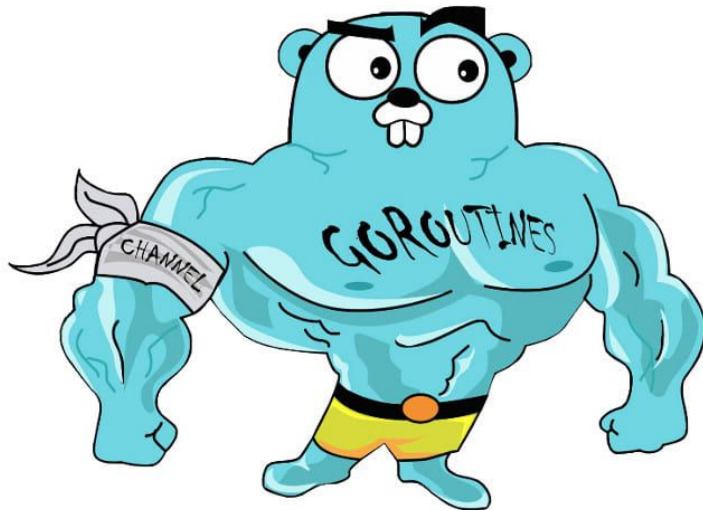
- Lint (go vet)
- Fomat (go fmt)
- Testing (go test)
- Dependency management (go mod)
- vscode plugin (<https://github.com/golang/vscode-go>)





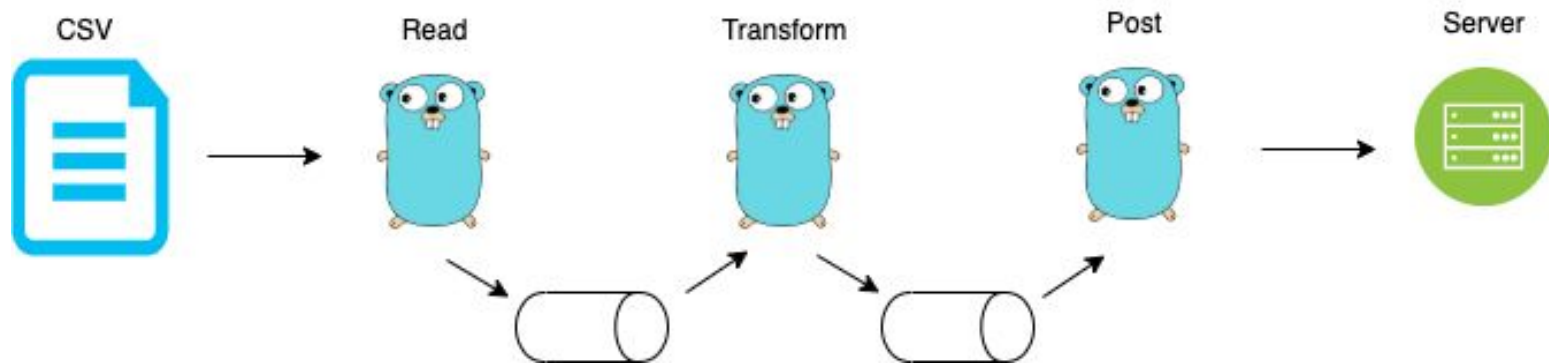
Goroutine

- Term
 - Lightweight logical thread
 - Managed by Go runtime
- Usage
 - Pipeline
 - Asynchronous
 - Concurrency

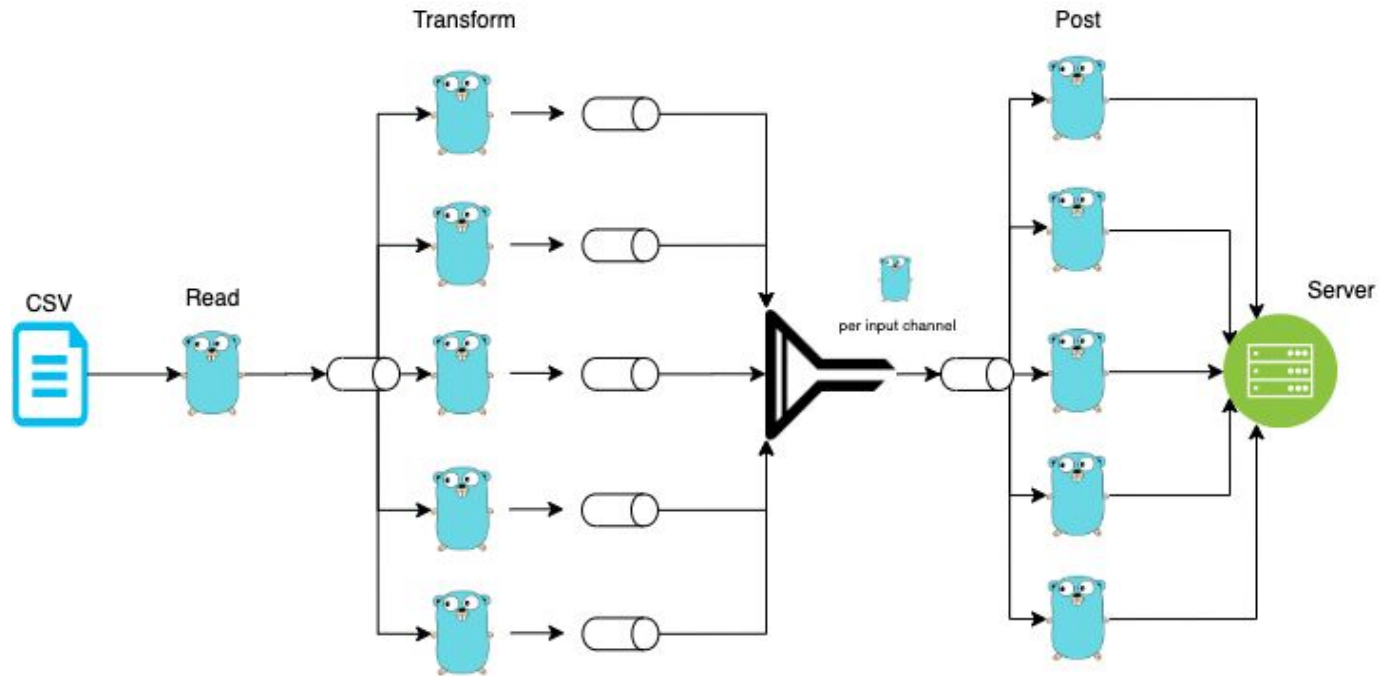




Pipeline



Fan Out / Fan In





Reference

- Golang News (<https://github.com/golangkorea/golang-news>)
- A Tour of Go (<https://tour.golang.org/welcome/1>)
- Learning Functional Programming in Go
(<https://www.oreilly.com/library/view/learning-functional-programming/9781787281394/>)
- Concurrency in Go (<http://acornpub.co.kr/book/concurrency-in-go>)