# Desenvolvendo APIs usando middlewares

Elton Minetto

@eminetto

http://eltonminetto.net

http://asemanago.com.br

elton@planrockr.com

# Http Is The Foundation Of The Web

#### Um cliente manda uma request

```
r.Method - HTTP method (GET, POST, PUT, PATCH, DELETE etc.)
r.URL.Path - Request path (/things/123)
r.URL.String() - Full URL
r.URL.Query() - Query parameters (q=something&p=2)
r.Body - io.ReadCloser of the request body
```

### O servidor retorna uma response

```
type ResponseWriter interface {
   Header() Header
   Write([]byte) (int, error)
   WriteHeader(int)
}
```

# Miccelewares

#### Between the request and response

Enrico Zimuel

HTTP middleware is not for your Domain work. The middleware is a path in to, and out of, the core Domain.

Paul M. Jones

Run code before and after handler code

Mat Ryer

#### Middleware

Middleware

Request

Application

Response

# Exemolos

```
func middlewareOne(next http.Handler) http.Handler {
   return http.HandlerFunc(func(w http.ResponseWriter, r *http.Request) {
     log.Println("Executing before middlewareOne")
     next.ServeHTTP(w, r)
     log.Println("Executing after middlewareOne")
   })
}
```

```
func middlewareTwo(next http.Handler) http.Handler {
 return http.HandlerFunc(func(w http.ResponseWriter, r *http.Request) {
    log.Println("Executing before middlewareTwo")
   if r.URL.Path != "/" {
     return
   next.ServeHTTP(w, r)
    log.Println("Executing after middlewareTwo")
 })
func final(w http.ResponseWriter, r *http.Request) {
  log.Println("Executing finalHandler")
 w.Write([]byte("OK"))
```

```
func main() {
    finalHandler := http.HandlerFunc(final)
    http.Handle("/", middlewareOne(middlewareTwo(finalHandler)))
    http.ListenAndServe(":8000", nil)
}
```

## https://github.com/justinas/alice

```
func main() {
    finalHandler := http.HandlerFunc(final)
    chain := alice.New(middlewareOne, middlewareTwo).Then(finalHandler)
    http.ListenAndServe(":8000", chain)
}
```

```
package main
import (
    "github.com/justinas/alice"
    "net/http"
   "planrockr"
func getCurrentSubscription(w http.ResponseWriter, r *http.Request) { ...
func main() {
   chain := alice.New(planrockr.Auth,
    planrockr.GetUserByToken).
    Then(http.HandlerFunc(getCurrentSubscription))
   http.ListenAndServe(":8000", chain)
```

```
package main
import (
    "github.com/justinas/alice"
    "net/http"
   "planrockr"
func processEvent(next http.Handler) http.Handler { ...
func main() {
   chain := alice.New(processEvent,
    planrockr.ValidateHookData).
    Then(http.HandlerFunc(planrockr.Enqueue))
   http.ListenAndServe(":8000", chain)
```

## Links

https://gist.github.com/eminetto/ e3bab34426ac9a0b83a538a0e421bbc8

### Contato

@eminetto

http://eltonminetto.net

http://asemanago.com.br

elton@planrockr.com