# PSR-7, middlewares e o futuro dos frameworks

## Quem?

#### Elton Minetto

Developer since 1997
Teacher since 2004
Co-founder at Coderockr since 2010
Zend Framework Evangelist
Author of http://bit.ly/zf2napratica and http://bit.ly/
doctrinenapratica
@eminetto

## PSR-7

## "Http Is The Foundation Of The Web"

#### Um cliente manda uma request

```
1 $method = $request->getMethod();
2 $accept = $request->getHeader('Accept');
3 $path = $request->getUri()->getPath();
4 $controller = $request->getAttribute('controller');
```

#### O servidor retorna uma response

```
1 $response->getBody()->write('Hello world!');
2 $response = $response
3 ->withStatus(200, 'OK')
4 ->withHeader('Content-Type', 'text/plain');
```

## Middlewares

"Between the request and response"

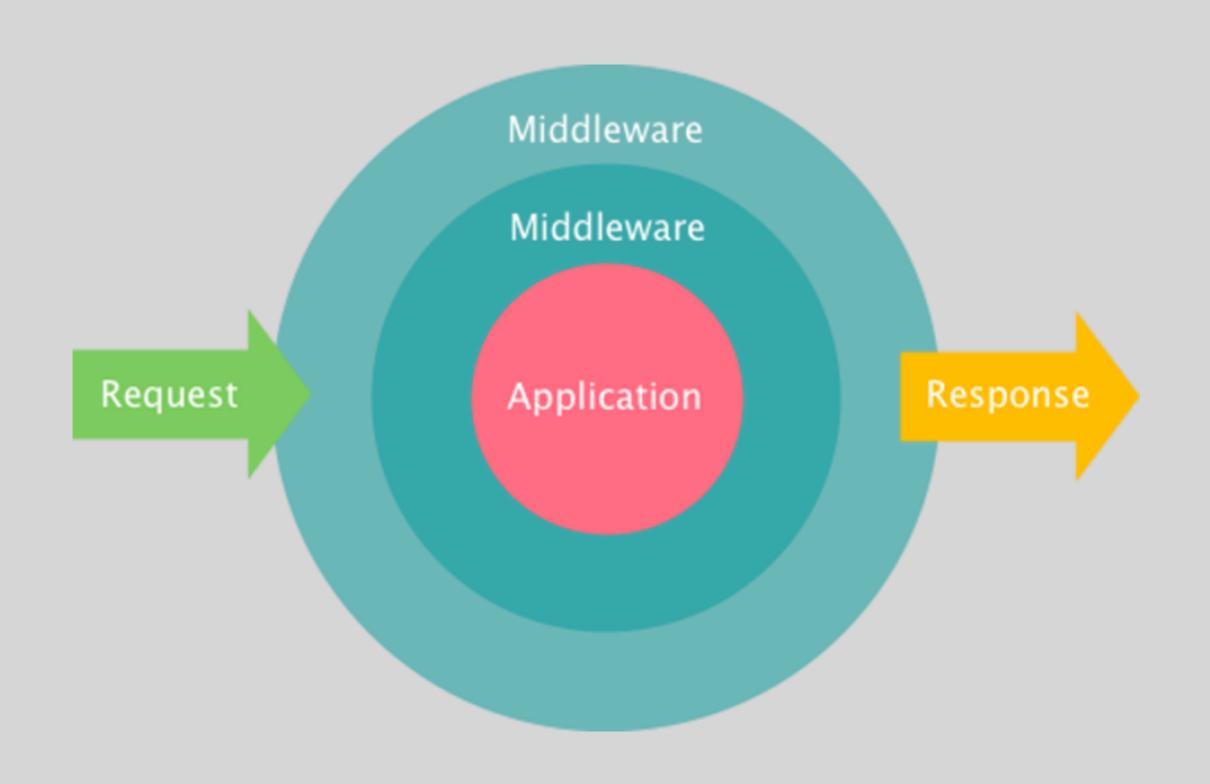
**Enrico Zimuel** 

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

Paul M. Jones

"In other words, we'll no longer write Zend Framework or Symfony or Laravel or frameworkflavor-of-the-day applications or modules/bundles/ packages/what-have-you. We'll write middleware that solves a discrete problem, potentially using other third-party libraries, and then compose them into our applications — whether those are integrated into a framework or otherwise."

Matthew O'phinney



#### Onion Style

```
1 class Auth implements MiddlewareInterface
 2 {
       public function __invoke(Request $request, Response $response, callable
 3
                                 $out = null)
       {
 5
           if(! $request->hasHeader('authorization')){
6
               return $response->withStatus(401);
           }
9
           if (!$this->isValid($request)) {
10
               return $response->withStatus(403);
11
12
           }
13
           return $out($request, $response);
14
       }
15
16 }
```

#### Stacks or Pipelines

```
1 $api = AppFactory::create();
 2 $api->get('/', function ($request, $response, $next) {
       $response->getBody()->write('Hello, beers of world!');
      return $response;
 5 });
 7 $app = AppFactory::create();
8 $app->pipe(new Auth());
 9 $app->pipe($api);
10 $app->pipe(new Format());
11
12 $app->run();
```

#### Lambda Style

```
1 $middleware = function (Request $request)
2 {
3     // do some work
4     return $response;
5 };
6 $response = $middleware($request);
```

## Exemplo

### RestBeer



#### Multiple response formats (JSON, HTML)

http://restbeer.com/beer

http://restbeer.com/style

http://restbeer.com/beer/Guinness

http://restbeer.com/beer/Heineken

http://restbeer.com/style/Pilsen

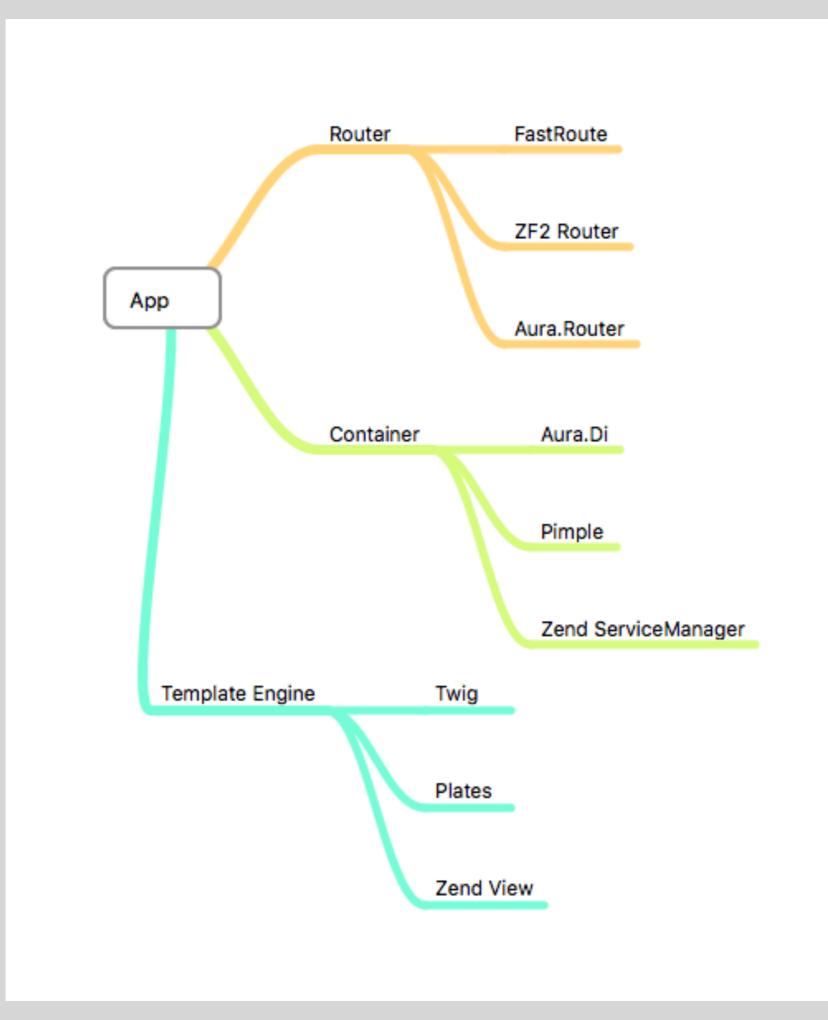
http://restbeer.com/style/Stout

## Expressive

"Expressive allows you to write PSR-7 middleware applications for the web. It is a simple micro-framework built on top of Stratigility, providing:

Dynamic routing
Dependency injection via container-interop
Templating
Error Handling"

http://devzone.zend.com/6615/announcing-expressive/



## Installing

#### composer.json

```
1 {
2     "require": {
3          "zendframework/zend-expressive": "^0.5",
4          "zendframework/zend-expressive-fastroute": "^0.1",
5          "zendframework/zend-expressive-twigrenderer": "^0.1",
6          "zendframework/zend-servicemanager": "^2.6"
7     }
8 }
```

#### Installing

```
curl -s http://getcomposer.org/installer | php
php composer.phar install
```

#### **FOLDERS** PalestraMiddlewares src src RestBeer Auth.php m Format.php vendor views content.twig {} composer.json \* composer.lock 👫 index.php

#### index.php

https://gist.github.com/eminetto/558ab7c0a10ff48d6652

#### src\RestBeer\Auth.php

https://gist.github.com/eminetto/d2eea1f559a02a10549a

#### src\RestBeer\Format.php

https://gist.github.com/eminetto/47b66d47715468da73fe

#### views\content.twig

https://gist.github.com/eminetto/89e3cbc4631aabf3cb47

## Testing

php -S localhost:8080

## Outros middlewares

https://packagist.org/search/?q=middleware

# Estrutura mais "profissional"

composer create-project -s rc zendframework/zend-expressiveskeleton expressive

```
Installing_zendframework/zend-expressive-skeleton (0.4.0)

    Installing zendframework/zend-expressive-skeleton (0.4.0)

   Downloading: 100%
Created project in /Users/samsonasik/www/zend-expressive-skeleton
> App\Composer\OptionalPackages::install
Setup data and cache dir
Betting up optional packages
 Which router you want to use?
 [1] Aura.Router
 [2] FastRoute
 [3] Zend Router
 Make your selection or type a composer package name and version (Aura.Router): 3

    Adding package zendframework/zend-mvc (*2.5)

    Adding package zendframework/zend-psr7bridge (^0.1.0)

    Copying /config/autoload/routes.global.php

 Which container you want to use for dependency injection?
 [1] Aura.Di
 [2] Pimple-interop
 [3] Zend ServiceManager
 Make your selection or type a composer package name and version (Zend ServiceManager): 3

    Adding package zendframework/zend-servicemanager (^2.5)

    Adding package ocramius/proxy-manager (*1.0)

    Copying /config/container.php

 Which template engine you want to use?
 [1] Plates
 [2] Twig
 [3] Zend View installs Zend ServiceManager
 [n] None of the above
 Make your selection or type a composer package name and version (n): 3

    Adding package zendframework/zend-view (^2.5)

    Adding package zendframework/zend-filter (^2.5)

    Adding package zendframework/zend-i18n (^2.5)

    Adding package zendframework/zend-servicemanager (^2.5)

    Copying /config/autoload/templates.global.php

 - Copying /templates/error/404.phtml

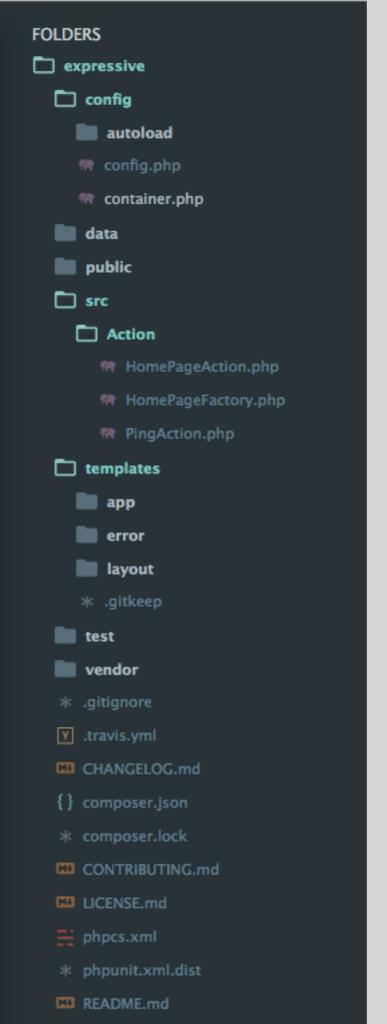
    Copying /templates/error/error.phtml

    Copying /templates/layout/default.phtml

    Copying /templates/app/home-page.phtml

 Which error handler do you want to use during development?
 [1] Whoops
 [n] None of the above
 Make your selection or type a composer package name and version (Whoops): 1

    Adding package filp/whoops (*1.1)
```



## O futuro?

"We see ZF3 as a movement: an end to framework silos, by providing quality, commodity code that can be used everywhere and anywhere. An end to saying "I'm a ZF developer," or "I'm a Laravel developer", and a return to, "I'm a PHP developer."

Matthew O'phinney

## Links

https://github.com/zendframework/zend-diactoros/blob/master/doc/book/custom-responses.md

https://github.com/zendframework/zend-stratigility

https://mwop.net/blog/2015-01-08-on-http-middleware-and-psr-7.html

https://beau.io/talks/2015/05/16/hello-psr-7-phpday-2015/

http://paul-m-jones.com/archives/6125

https://mwop.net/blog/2015-01-26-psr-7-by-example.html

http://srcmvn.com/blog/2015/02/18/psr-7-and-the-future-of-php/

http://www.sitepoint.com/stackphp-explained/

http://framework.zend.com/blog/zend-framework-3-update-and-roadmap.html

## Contato

# http://eltonminetto.net @eminetto eminetto@coderockr.com http://asemanaphp.com.br http://coderockr.com