# Rediscovering PHP

## Modern Practices Beyond Legacy

Horacio Gonzalez

2026-04-20

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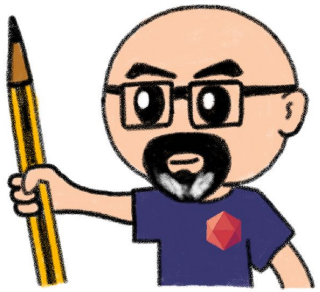

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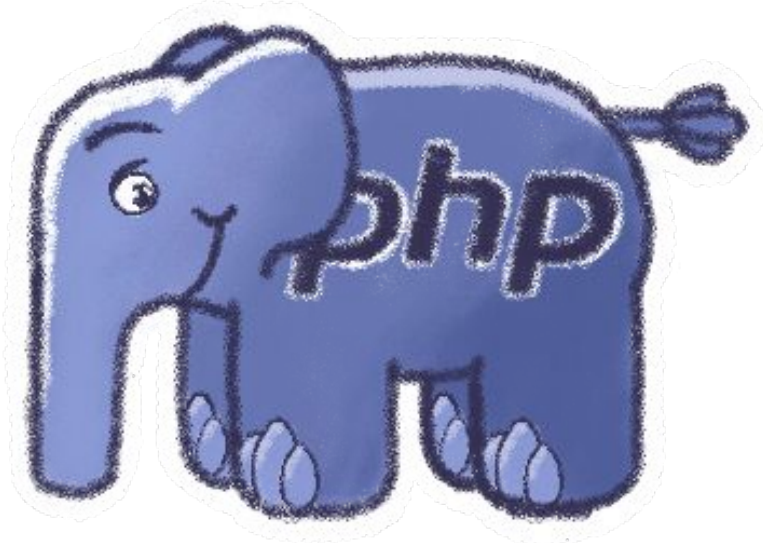
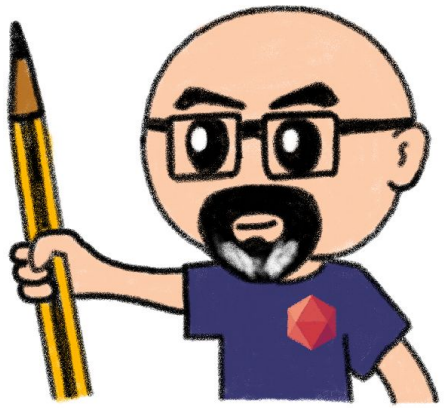


# Who are we?

## Introducing myself and introducing Clever Cloud



# Horacio Gonzalez

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## @LostInBrittany

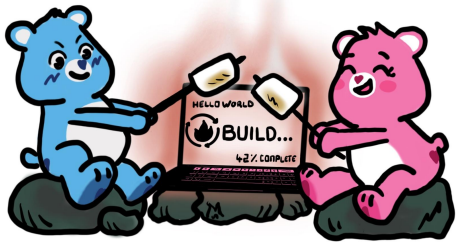
Spaniard Lost in Brittany

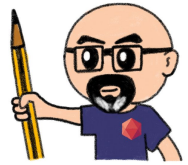
Old(ish) Developer

Head of DevRel

clever cloud

Finist Devs



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# Clever Cloud

## From Code to Product

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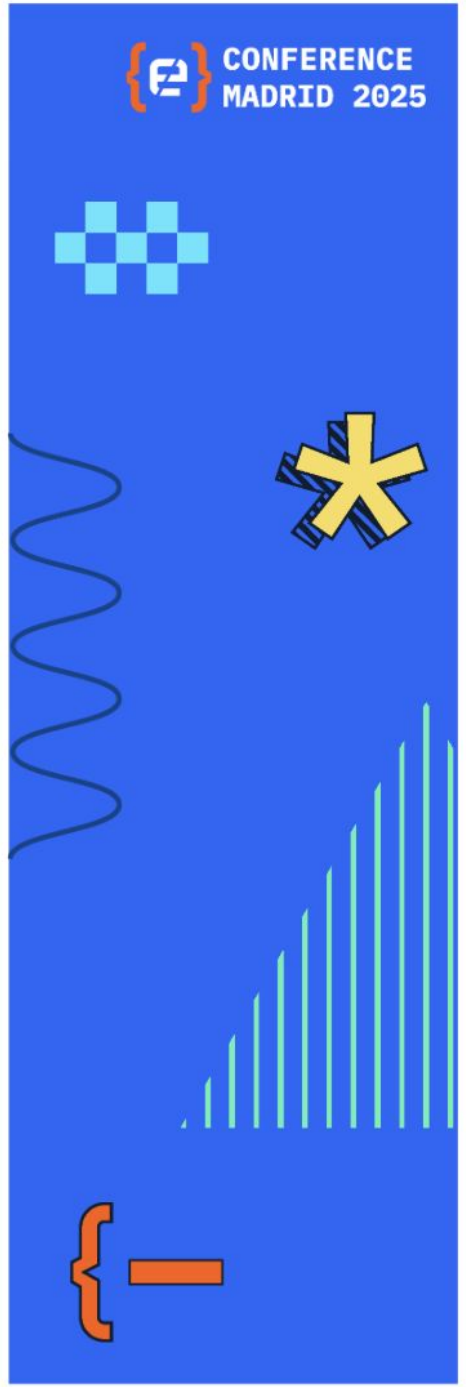
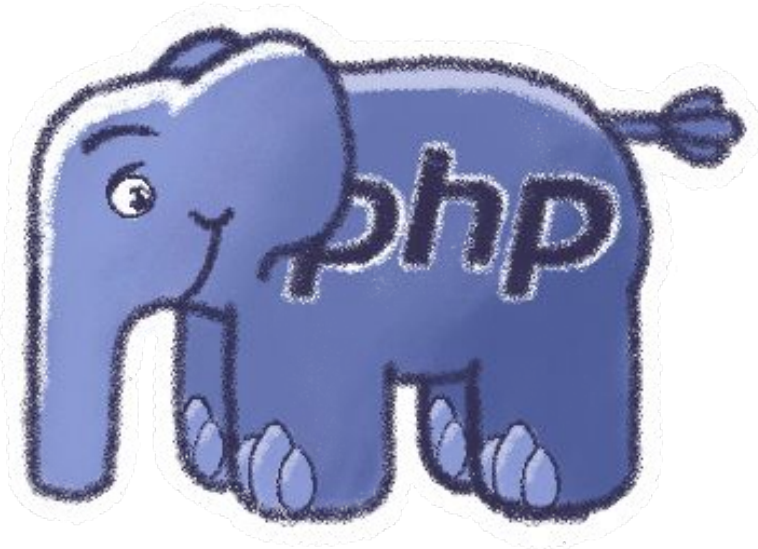


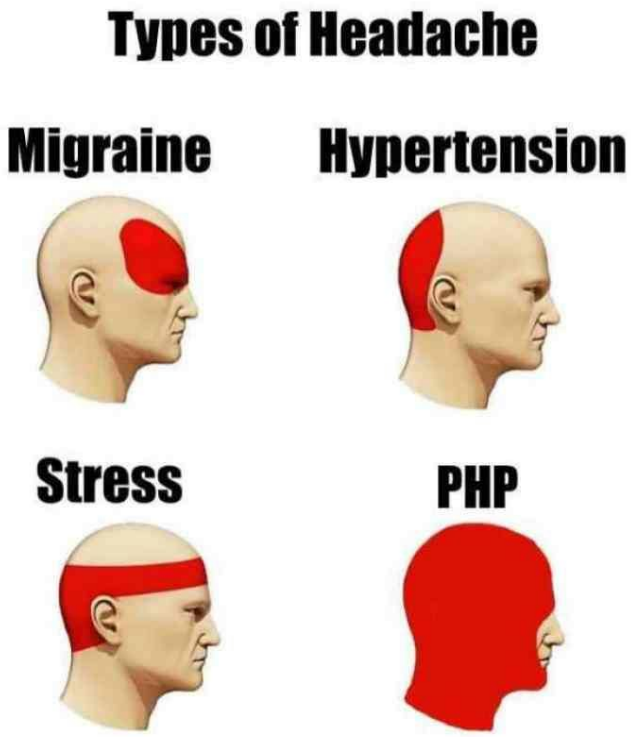
# You're going to talk about PHP ?!?!

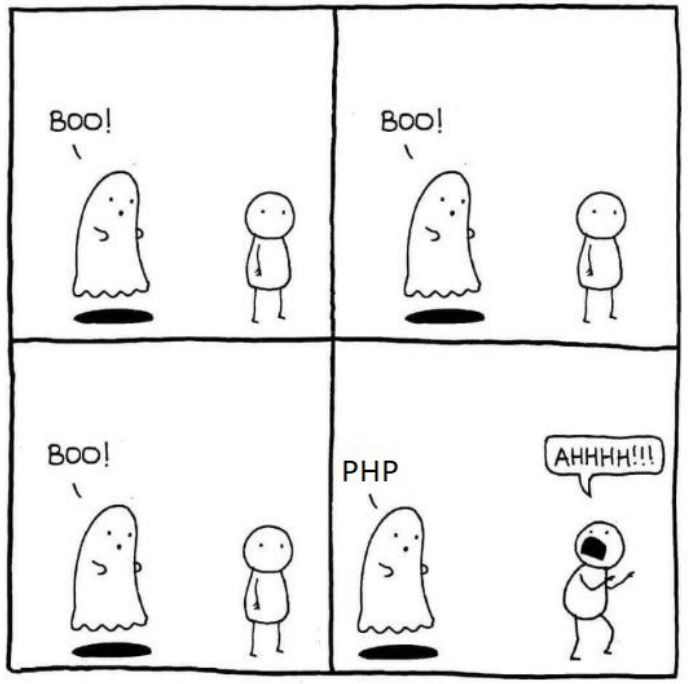
## The elephpant IS in the room



# So yeah, I know both PHP and its reputation...

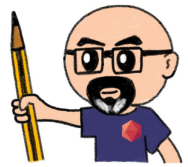






And in 2004 is was quite accurate, PHP felt like the Wild West



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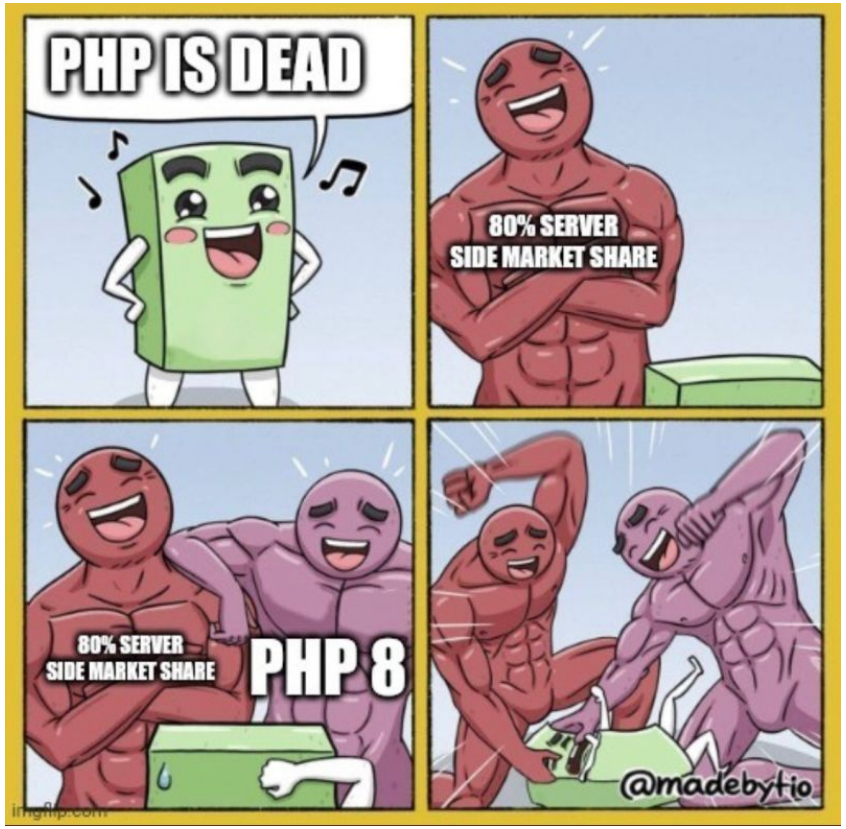
# If you think PHP is inconsistent, insecure, and strictly procedural...



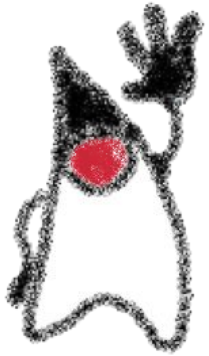



You were right 15 years ago !

# I've been a Java developer since '97



Java

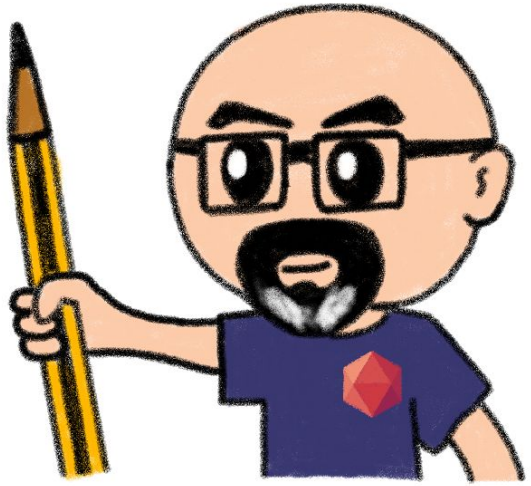


Kotlin

GRAILS

play

STRUTS

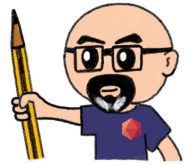


Lit

HTML CSS JS TS

node JS

And I have done tons of frontend in HTML/CSS/JS



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# But I've also written and debugged lots of PHP



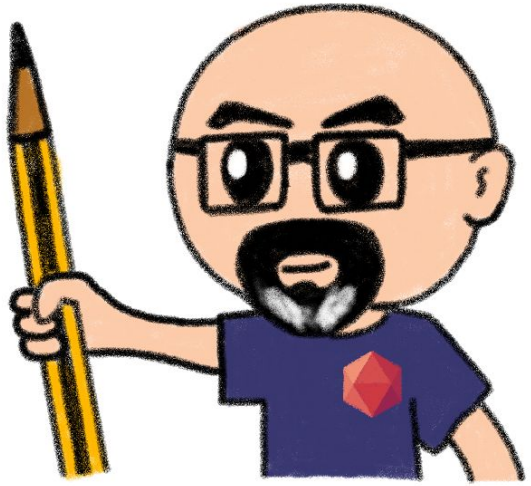
dotclear

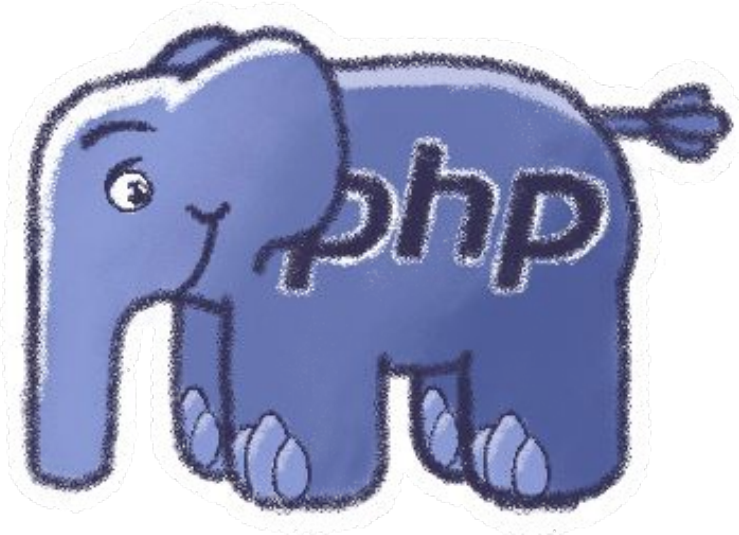
WordPress

TYPO3

Drupal™

PrestaShop






I even made a living of it!

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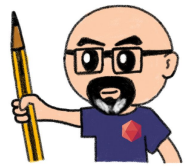
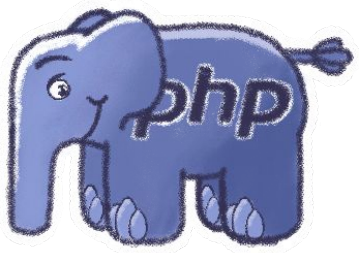


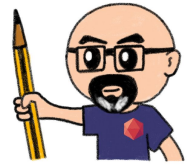
# For years I kept away from PHP





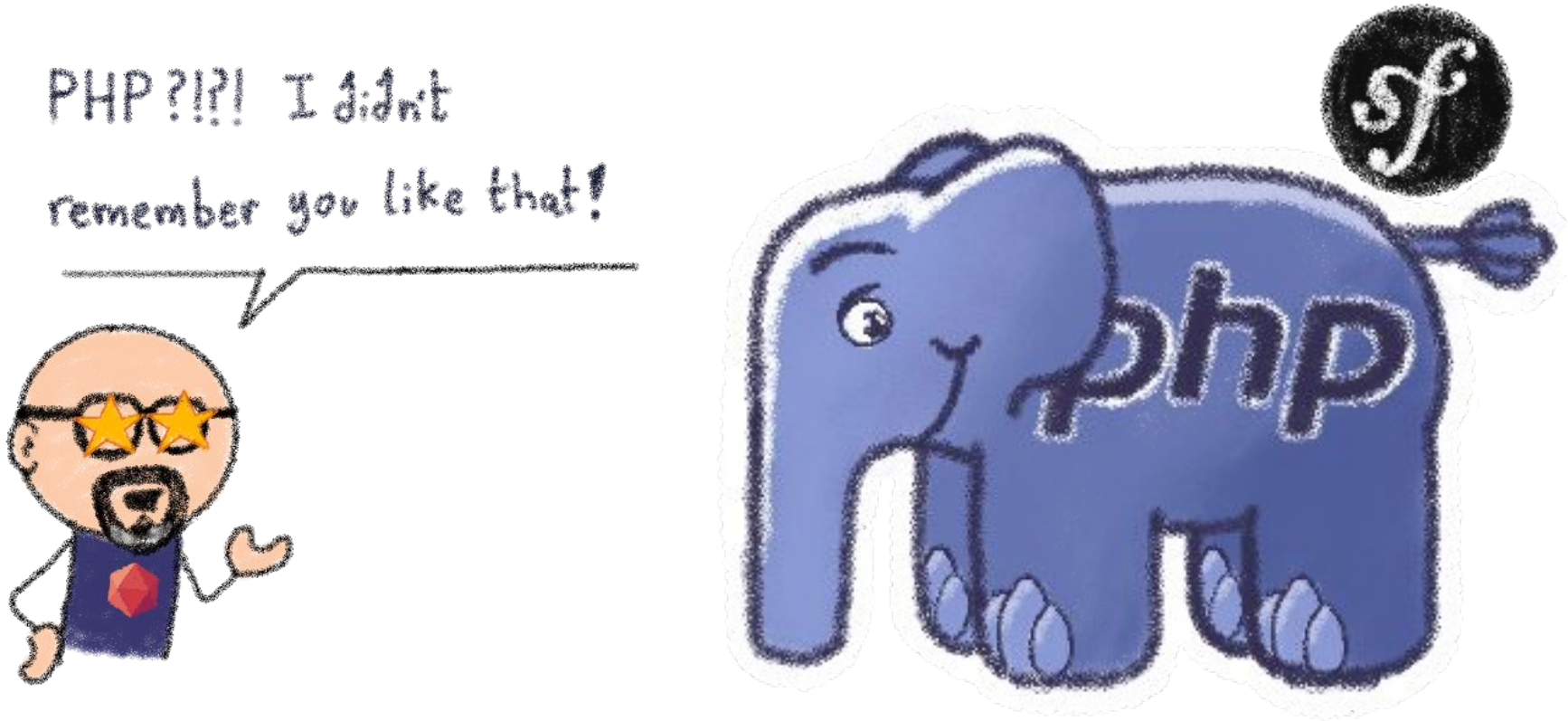


I reckon I was a bit snobbish about it…

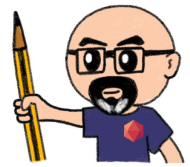


# Until I joined Clever Cloud and rediscovered it



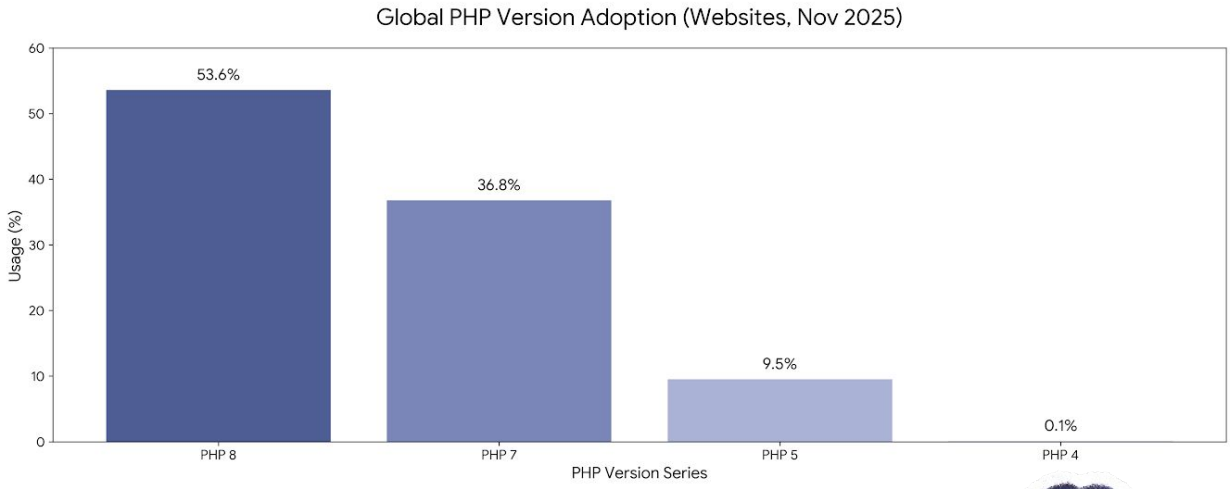



And, mate, it was so much better!

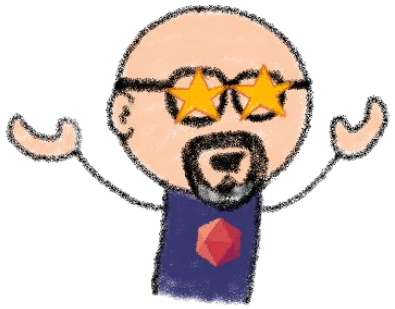


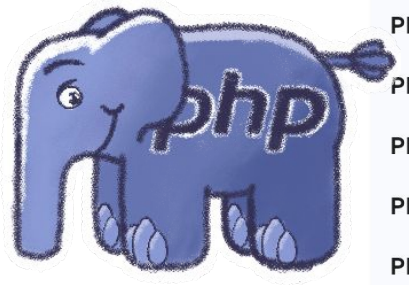
# PHP is not like PHP 4 anymore



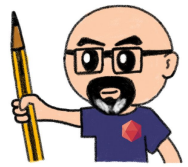



| Version | Release Date | Key Note |
|---|---|---|
| **PHP 3.0** | June 6, 1998 | The version that established the "PHP" name. |
| **PHP 4.0** | May 22, 2000 | Introduced the Zend Engine. |
| **PHP 5.0** | July 13, 2004 | Introduced robust Object-Oriented Programming (OOP). |
| **PHP 5.3** | June 30, 2009 | Added Namespaces and Closures. |
| **PHP 5.6** | Aug 28, 2014 | Last version of the PHP 5 series. |
| **PHP 7.0** | Dec 3, 2015 | Major performance boost (2x speed); PHP 6 was skipped. |
| **PHP 7.4** | Nov 28, 2019 | Introduced Typed Properties; last of the 7.x series. |
| **PHP 8.0** | Nov 26, 2020 | Introduced JIT Compiler and Union Types. |
| **PHP 8.1** | Nov 25, 2021 | Enums and Readonly properties. |
| **PHP 8.2** | Dec 8, 2022 | Readonly classes. |
| **PHP 8.3** | Nov 23, 2023 | Typed class constants. |
| **PHP 8.4** | Nov 21, 2024 | Property hooks and asymmetric visibility. |






PHP powers 75%+ of the web...
and 90% of that usage looks nothing like WordPress 3.0



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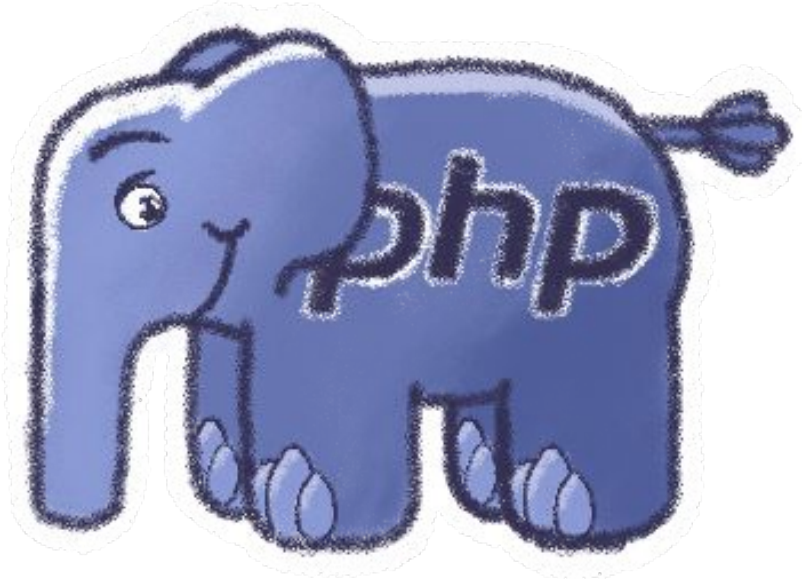
# PHP – The Language

## Syntax for the Java Mind



# Code Organization: Namespaces & Autoloading

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## The Good Old Days

```php
include 'config.php';
include 'database.php';
include 'functions.php';
include 'models/user.php';
include 'models/admin.php';
include 'controllers/user_controller.php';
include 'lib/email.php';
include 'lib/validator.php';
// ... 50 more includes ...// Everything is global
$user = new User();
$admin = new Admin();
// Name collision disasters waiting to happen:
function send_email() { } // From email.php
function send_email() { } // Oops, redeclared in another file!
```

## The Modern Way

```php
namespace App\Http\Controllers;
use App\Services\UserService;
use App\Models\User;
use App\Mail\WelcomeEmail;

class UserController
{
    public function __construct(
        private UserService $userService
    ) {}

    …
}
```

PSR-4 Autoloading: clean namespace hierarchy

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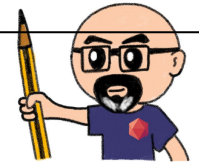

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# Typing



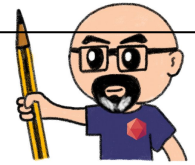
## The Good Old Days

```php
function createUser($name, $age, $active) {
   // Is $age an int? "20"? 20.5?
   // Is $active a boolean? 0? 1? "yes"?

   if ($active == 1) {
       return "User: " . $name . " is " . $age;
   }

   // Returns null implicitly if condition fails
   // Inconsistent return types!
}

$u = createUser("Horacio", "45", "true");
// Works, but relies on "Magic" casting.
```

## The Modern Way

```php
declare(strict_types=1); // <--- The "Java Switch"
    // Contract-based programming. If you violate the contract,
    // the application stops immediately. No guessing.
final class UserFactory
{
   // Typed Arguments, Return Type, Visibility
   public function create(
       string $name, int $age, bool $isActive
   ): string {
       if ($isActive) {
           return sprintf("User: %s is %d", $name, $age);
       }

       throw new InactiveUserException();
   }
}
```

From "Anything Goes" to Strictness



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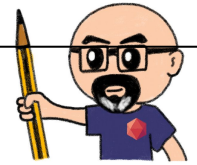
# The Type System Flex (Union & Intersection Types)

**The Modern Way**

```php
public function handle(User|Guest $entity): Response
{
    // Type system knows it's one of these
    // IDE autocomplete works
    // Static analysis validates it

    return match(true) {
        $entity instanceof User => $this->handleUser($entity),
        $entity instanceof Guest => $this->handleGuest($entity),
    };
}
// Return type unions: much cleaner than Optional
public function findUser(int $id): User|null
{
    return $this->repository->find($id);
}
// Must satisfy BOTH interfaces
public function log(Loggable&Serializable $event): void
```

No need for overloading boilerplate.



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# Constructor Property Promotion (PHP 8.0+)

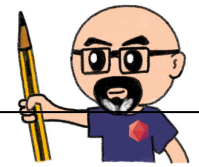


## The Good Old Days

```php
class User
{
    private string $name;
    private string $email;
    private int $age;

    public function __construct(string $name, string $email, int $age)
    {
        $this->name = $name;
        $this->email = $email;
        $this->age = $age;
    }

    public function getName(): string { return $this->name; }
    public function getEmail(): string { return $this->email; }
    public function getAge(): int { return $this->age; }
}
```

## The Modern Way

```php
class UserProfile
{
    public function __construct(
        // Visibility + Type + Name = Property Created & Assigned
        private string $name,
        private string $email,
        private int $age,
    ) {}
    // That's it. Properties are declared, assigned, and accessible.
    // Getters are optional - you decide based on your encapsulation needs.

}

// Want to make it immutable like a Java Record?
// Just add 'readonly' (PHP 8.2+):
class ImmutableUser
{
    public function __construct(
        public readonly string $name,
        public readonly string $email,
    ) {}
}
```



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# Attributes: the End of "Code in Comments"

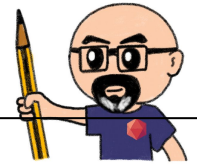


## The Good Old Days

```php
class UserController
{
    /**
     * @Route("/api/users", methods={"GET"})
     * @IsGranted("ROLE_ADMIN")
     *
     * This is technically a comment.
     * If I typo "@Rout", nothing crashes...
     * until the app runs and the route is missing.
     */
    public function list()
    {
        // ...
    }
}
```

## The Modern Way

```php
use Symfony\Component\Routing\Attribute\Route;
use Symfony\Component\Security\Http\Attribute\IsGranted;

class UserController
{
    // Native syntax. "Route" is a real class found via "use"
    #[Route('/api/users', methods: ['GET'])]
    #[IsGranted('ROLE_ADMIN')]
    public function list(): Response
    {
        // ...
    }
}

// How to make your own Attribute? It's just a class!
#[Attribute]
class MyCustomMetadata
{
    public function __construct(public string $info) {}
}
```



# Enums (The Real Deal)

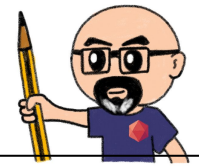


## The Good Old Days

```php
class BlogPost
{
   // These are just strings.
   // Nothing prevents me from passing "garbage" to a function expecting a status.
   const STATUS_DRAFT = 'draft';
   const STATUS_PUBLISHED = 'published';
   const STATUS_ARCHIVED = 'archived';

   public function setStatus(string $status) {
       // I have to manually validate if $status is one of the allowed constants
       if (!in_array($status, [self::STATUS_DRAFT, ...])) {
            throw new Exception();
       }
       $this->status = $status;
   }
}
```

## The Modern Way

```php
/ 1. Defined using 'enum' keyword
enum Status: string
{
   case Draft = 'draft';
   case Published = 'published';
   case Archived = 'archived';
   // 2. THEY CAN HAVE METHODS! (Just like Java)
   public function color(): string
   {
       return match($this) {
           self::Draft => 'gray',
           self::Published => 'green',
           self::Archived => 'red',
       };
   }
}
// 3. Type Safety is absolute
function updateStatus(Status $newStatus): void {
   // Impossible to pass "foo" or "draft" string here.
}
// 4. Accessing values
echo Status::Published->value; // "published"
echo Status::Published->color(); // "green"
```



# Match Expressions

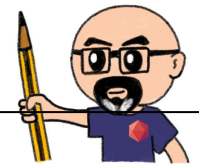


## The Good Old Days

```php
// The problem:
// 1. Loose comparison ('200' string matches 200 int)
// 2. Requires 'break' (easy to forget = fallthrough bugs)
// 3. Verbose assignment logic

$status = 200;
$message = null;

switch ($status) {
    case 200:
        $message = 'OK';
        break;
    case 300:
    case 301:
        $message = 'Redirect';
        break;
    case 404:
        $message = 'Not Found';
        break;
    default:
        $message = 'Unknown';
}
```

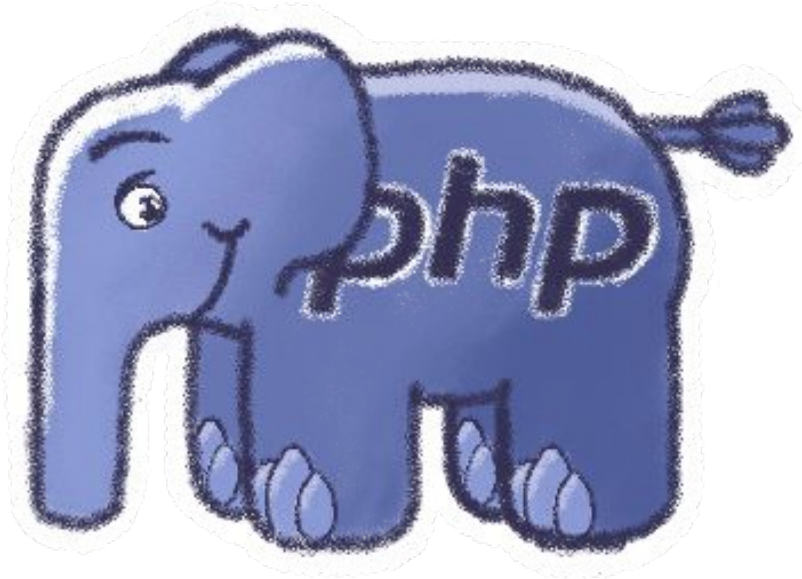
## The Modern Way

```php
$status = 200;

// 1. Assign result directly to variable
// 2. Strict comparison ('200' string will NOT match 200 int)
// 3. Comma-separated values for multiple matches

$message = match ($status) {
    200 => 'OK',
    300, 301 => 'Redirect',
    404 => 'Not Found',
    default => 'Unknown',
};

// Bonus: Pattern matching in PHP 8 allows logic inside match!
/*
$result = match (true) {
    $age >= 18 => 'Adult',
    $age < 18  => 'Minor',
};
*/
```



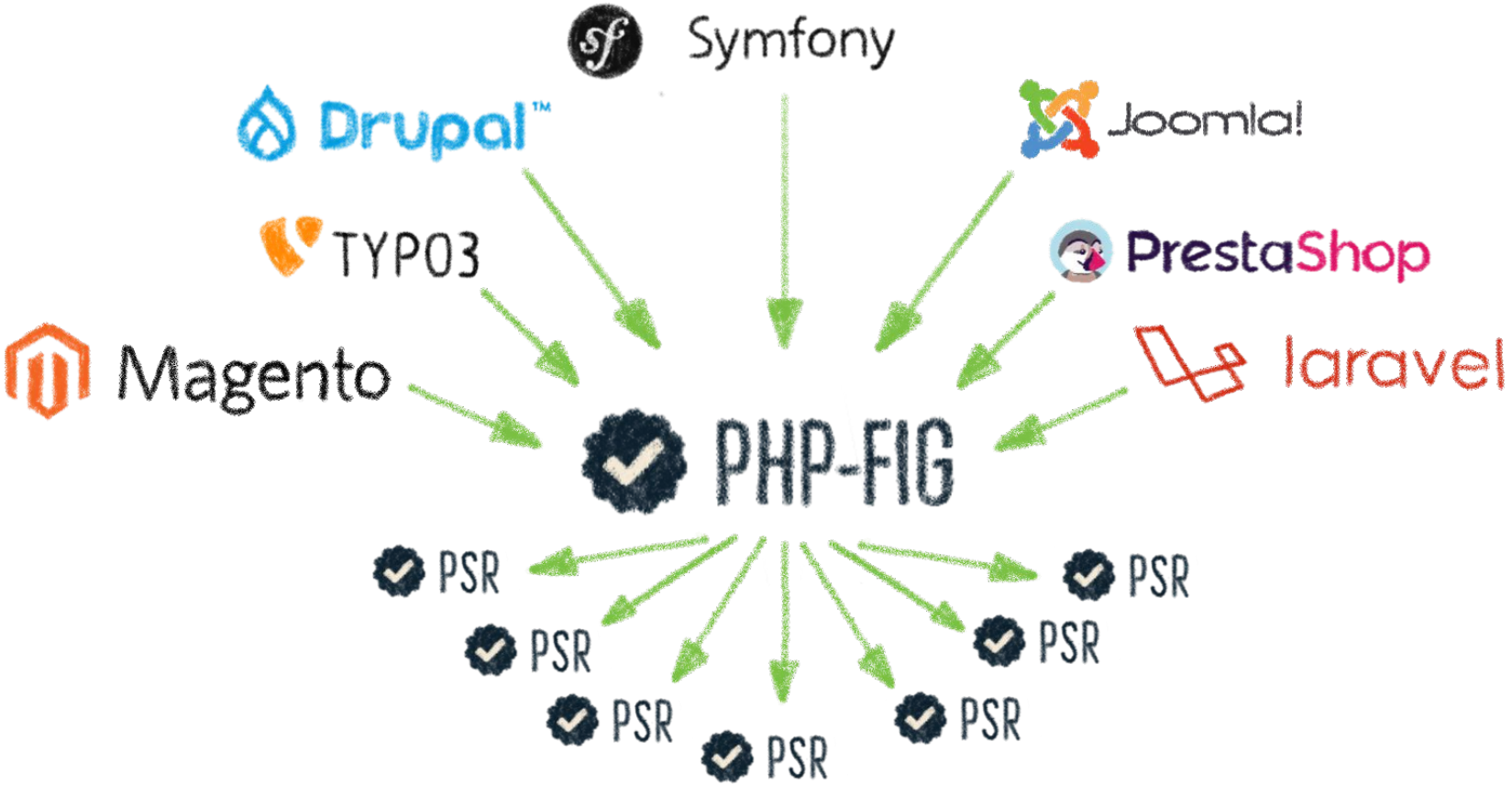
# PHP – The Ecosystem

## Professionalism & Tooling

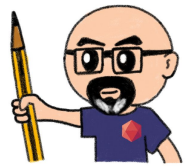


# The PSR Standards (PHP-FIG)






PHP-FIG: Agree on Interfaces, not Implementations
PSRs (PHP Standard Recommendations).



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# PSR: Dependency Inversion

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## The Good Old Days

```php
// Tightly coupled to "Monolog"
use Monolog\Logger;

class UserManager
{
    public function __construct(
        private Logger $logger // <--- HARD DEPENDENCY
    ) {}

    public function create() {
        // Tied to Monolog's specific method names
        $this->logger->addInfo('User created');
    }
}
```

```php
// Decoupled. Relies on PSR-3 Standard.
use Psr\Log\LoggerInterface;

class UserManager
{
    public function __construct(
        private LoggerInterface $logger // <--- INTERFACE ONLY
    ) {}

    public function create() {
        // Guaranteed to exist on ANY PSR-3 compliant logger
        $this->logger->info('User created');
    }
}
```

True Dependency Inversion at a community scale

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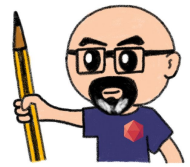

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# Dependency Management: Composer




**Java - Maven `pom.xml`**

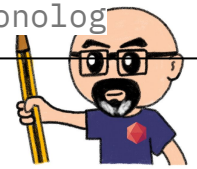
```xml
<dependency>
    <groupId>org.slf4j</groupId>
    <artifactId>slf4j-api</artifactId>
    <version>2.0.7</version>
</dependency>
<!-- And then refresh your IDE... -->
```

**PHP - Composer `composer.json`**

```
{
    "require": {
        "monolog/monolog": "^3.0"
    }
}
// Terminal command: composer require monolog/monolog
```

Dependency Management: Solved since 2012

clever cloud



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# PHPStan: The Compiler Substitute

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PHPStan

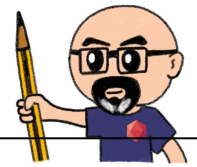
**PHP**

```php
class UserManager
{
    /**
     * @param array<User> $users  <-- PHPStan reads this "Generic" definition
     */
    public function activateAll(array $users): void
    {
        foreach ($users as $user) {
            // Runtime: If $user is NOT a User object, this crashes HERE.
            $user->activate();
        }
    }
}
// The Bug:
$managers = [new User(), new User(), "oops, a string"];
(new UserManager())->activateAll($managers);
```

```
$ vendor/bin/phpstan analyse src --level=9

------------------------------------------------------------------------
1/1 [▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓] 100%

------ ------------------------------------------------------------------
 Line   src/UserManager.php
------ ------------------------------------------------------------------
 18     Parameter #1 $users of method UserManager::activateAll()
        expects array<User>, array{User, User, string} given.
        Type string is not subtype of User.
------ ------------------------------------------------------------------
[ERROR] Found 1 error
```



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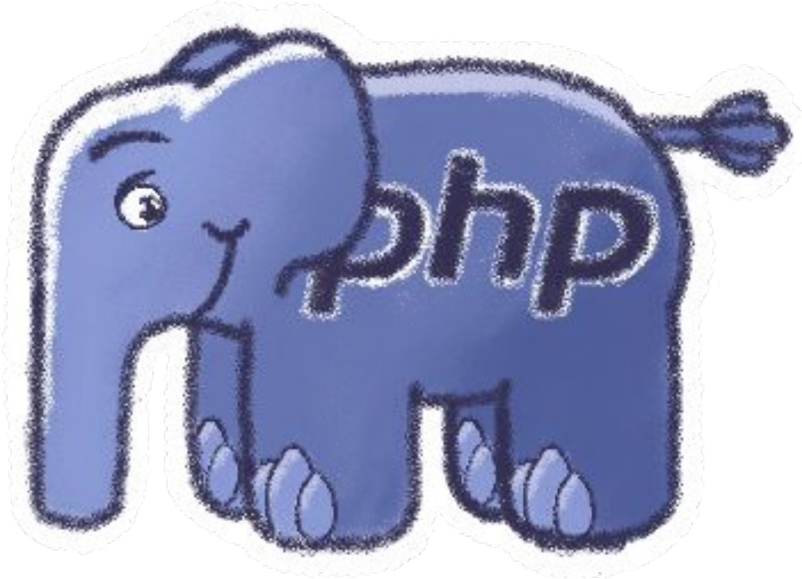
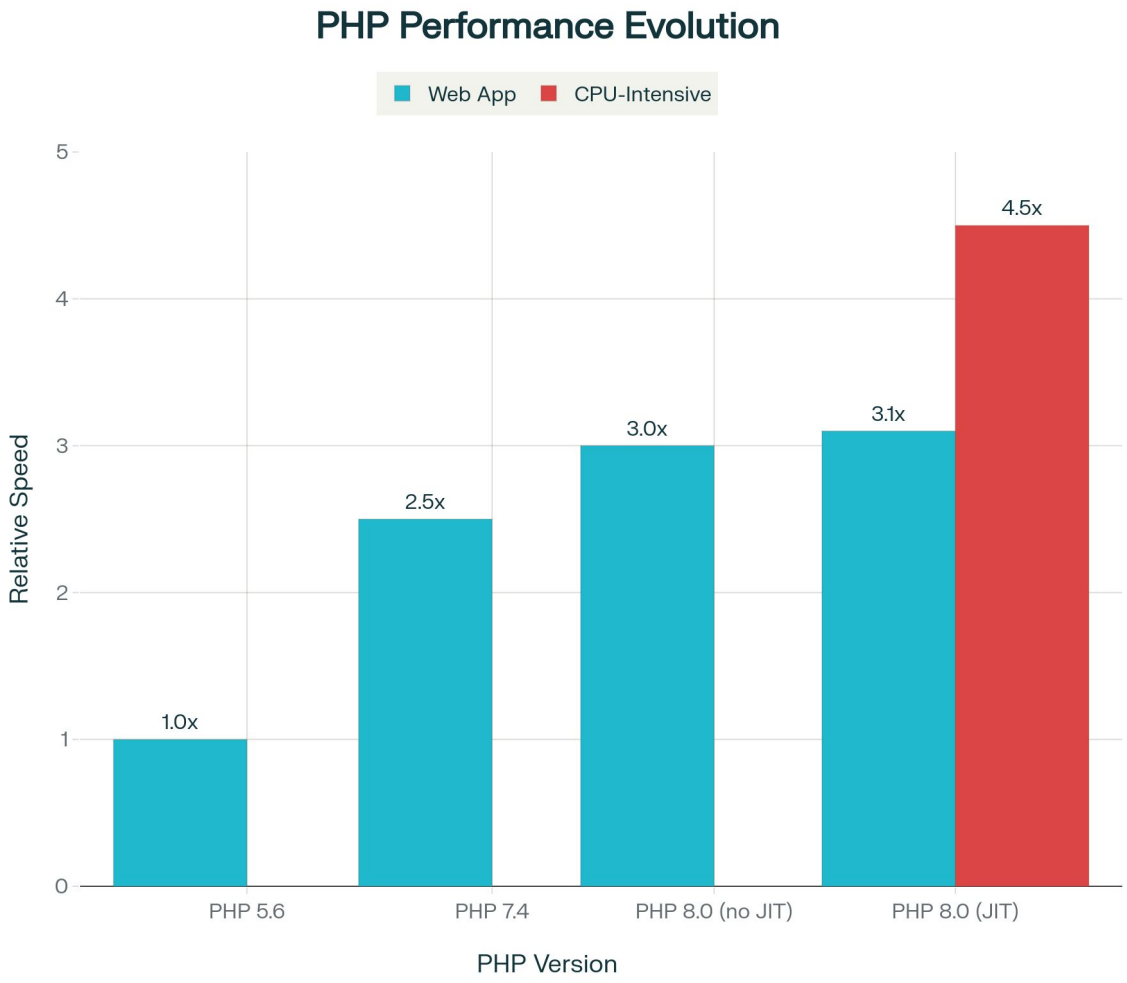
# PHP - Performance & Architecture

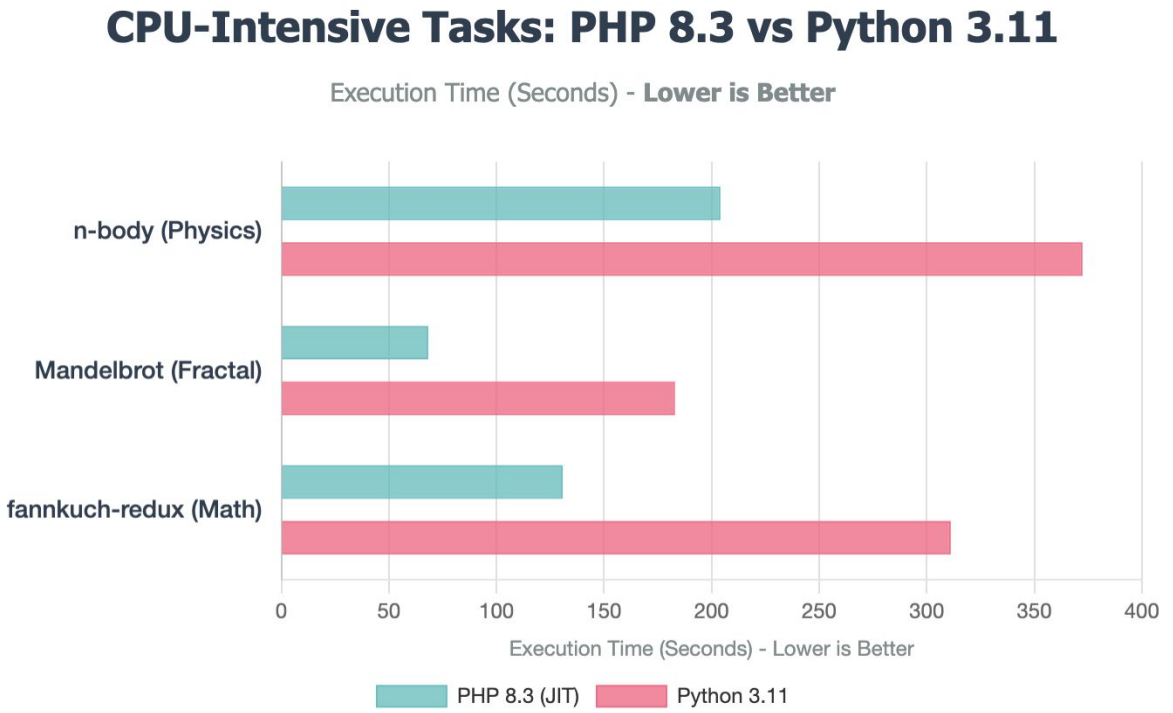


# JIT & Performance






Sources: Kinsta, Tideways, ICDSoft, PHP manual, various public benchmarks




Source: The Computer Language Benchmarks Game (2024 Data)

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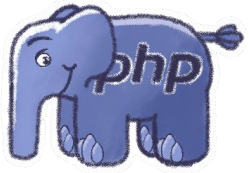
# The Frameworks: Symfony & Laravel



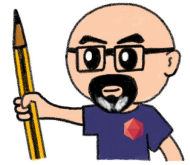



Symfony

laravel

*Symfony is Spring Boot. Laravel is Rails.*

We aren't scripting anymore; we are architecting



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# Symfony: The Enterprise Standard

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**Java - Spring**

```java
@Service
public class ReportGenerator {
    private final Mailer mailer;

    @Autowired
    public ReportGenerator(Mailer mailer) {
        this.mailer = mailer;
    }
}
```

**PHP - Symfony**

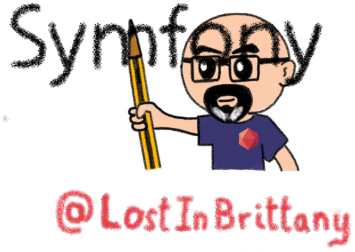
```php
use Symfony\Component\DependencyInjection\Attribute\Autowire;

class ReportGenerator
{
    // Constructor Injection is the standard.
    // The container automatically injects the implementation o
public function __construct(
        private MailerInterface $mailer
    ) {}
}
```

If you know Spring, you know Symfony

- Dependency Injection Container
- Decoupling
- Stability

clever cloud



# Laravel: The "Developer Happiness" Framework



If you love the speed of Express or Rails, Laravel is that, but typed.

It's not just a framework; it's a platform.

- **Eloquent ORM:** (ActiveRecord) Incredibly expressive
- **Queue Workers:** (Laravel Horizon) Redis-backed queues out of the box.
- **Real-time:** (Laravel Reverb) WebSockets without Node.js.
- **Serverless:** (Laravel Vapor) AWS Lambda deployment helper.
- ...

**PHP - Laravel**

```php
<?php
// Find all active users and email them... in 3 lines.
User::query()
    ->where('active', true)
    ->get()
    ->each(fn(User $user) =>
        Mail::to($user)->send(new WelcomeEmail()));
```

laravel

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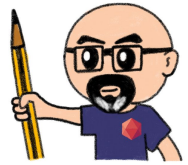
# New Runtimes: Async & Long-Running Processes



SWOOLE


RoadRunner

PHP used to die after every request. Not anymore.



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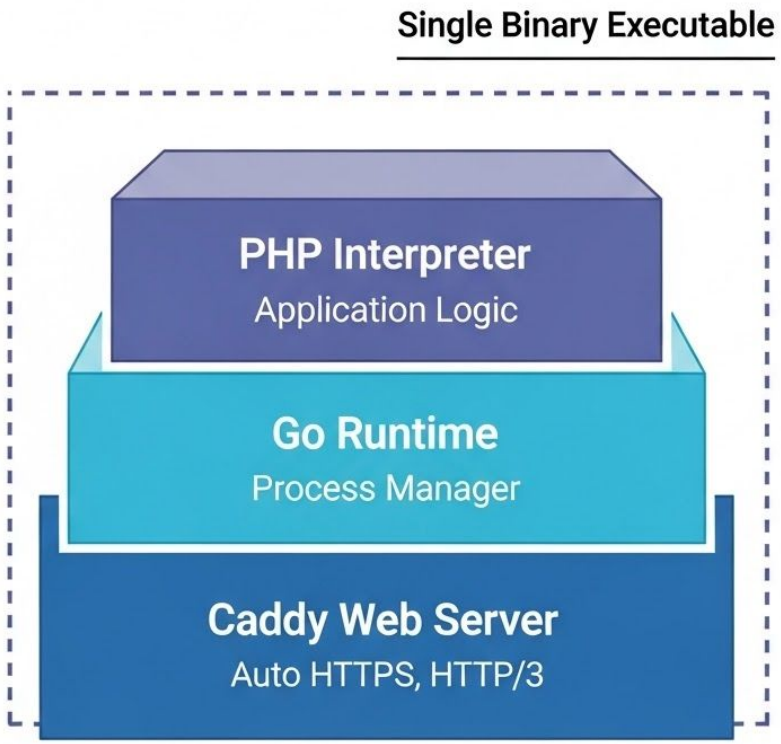
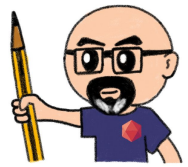
# The Game Changer: FrankenPHP






A **modern application server** written in **Go**, built on top of **Caddy**, that embeds the **PHP interpreter** and most popular **extensions**

- Worker Mode
- Early Hints (HTTP 103)
- Real-Time Mercure hub
- Static Binary

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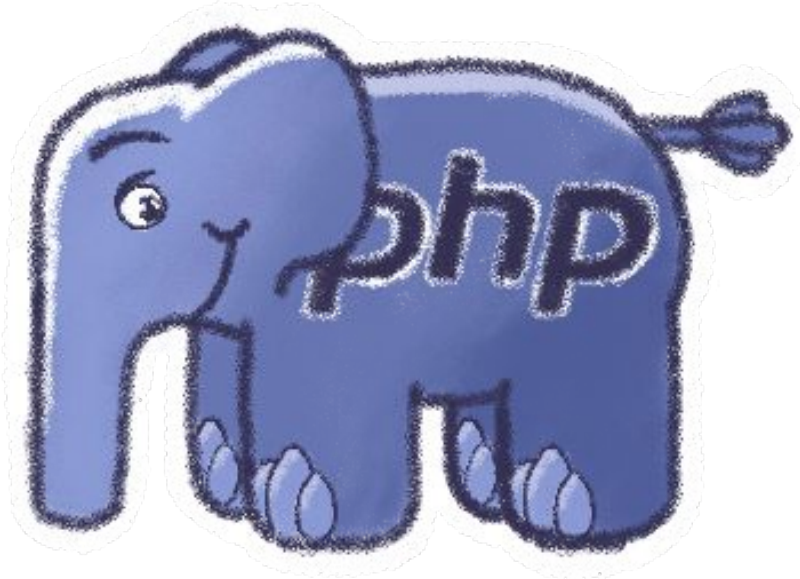
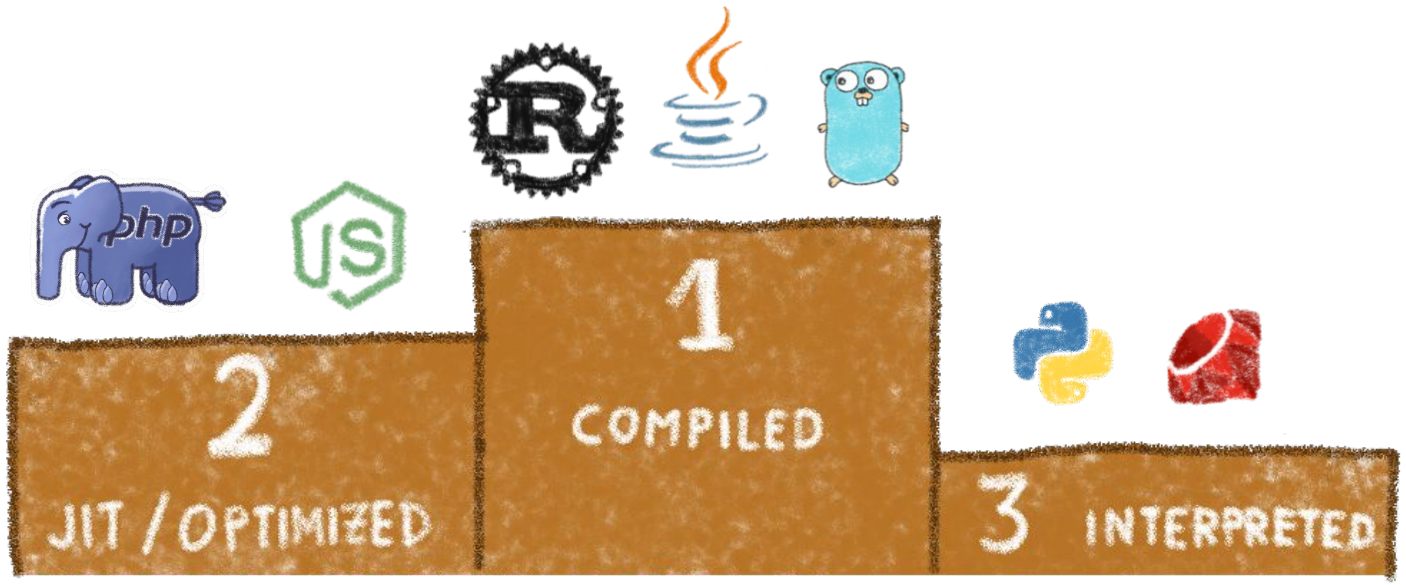
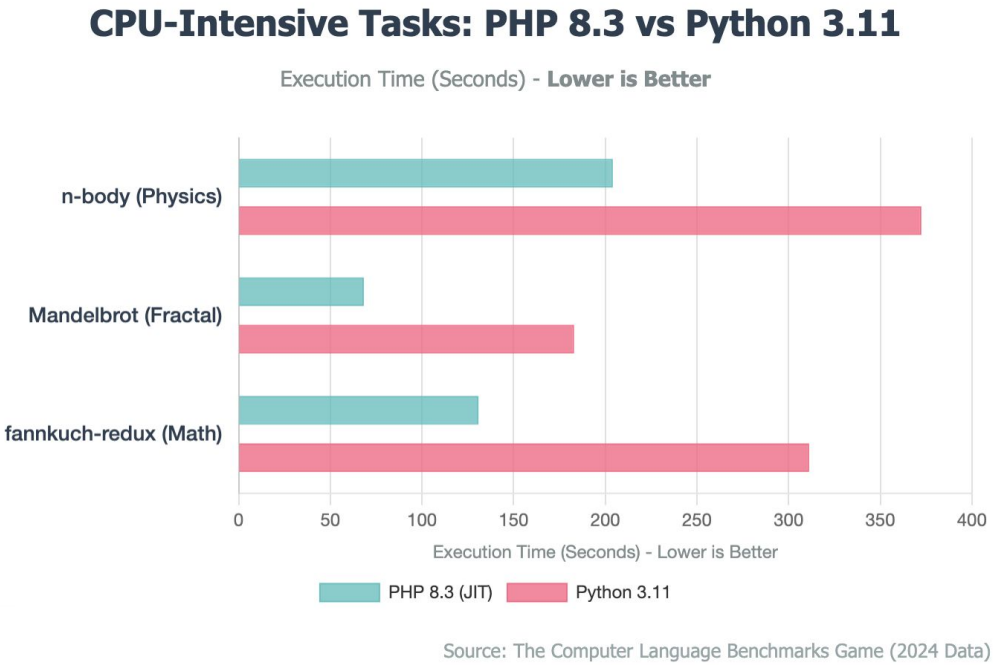
# PHP – Myths, Misconceptions, and Reality Checks



# "PHP is slow"



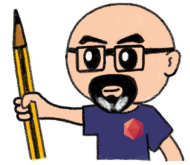



Source: The Computer Language Benchmarks Game (2024 Data)

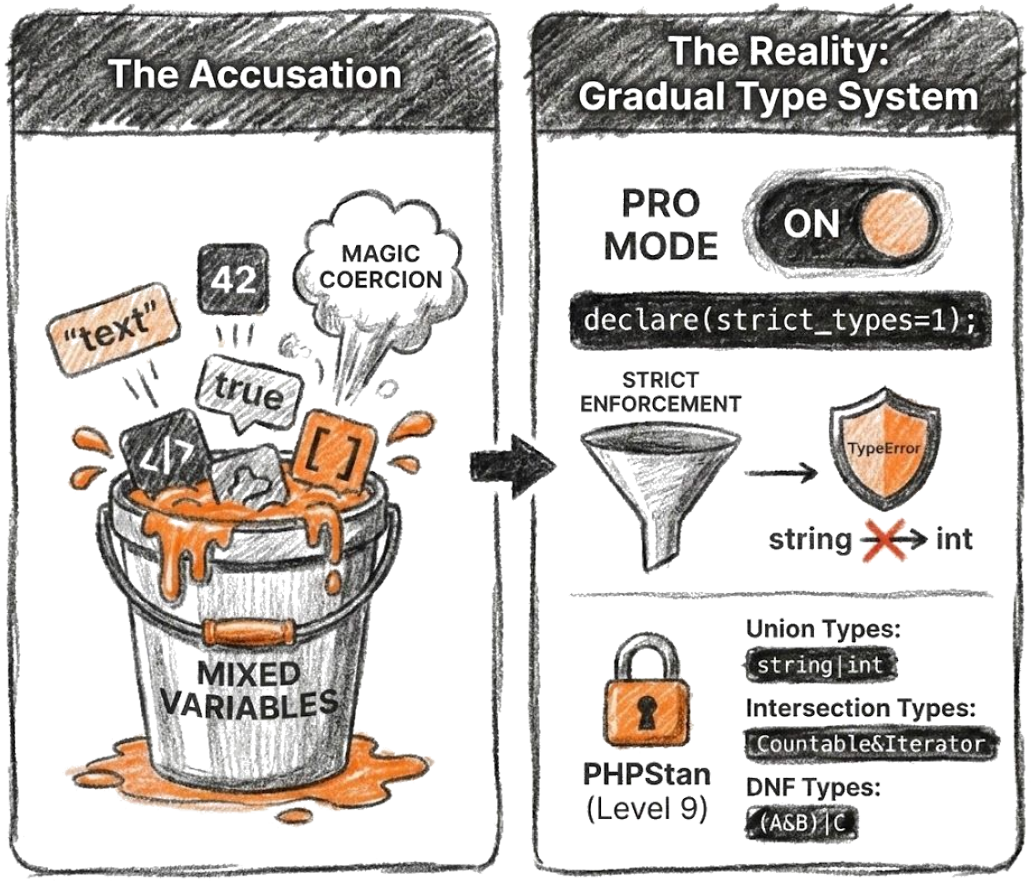
Myth busted!



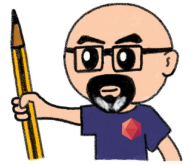


# "PHP has no types"






Myth busted!



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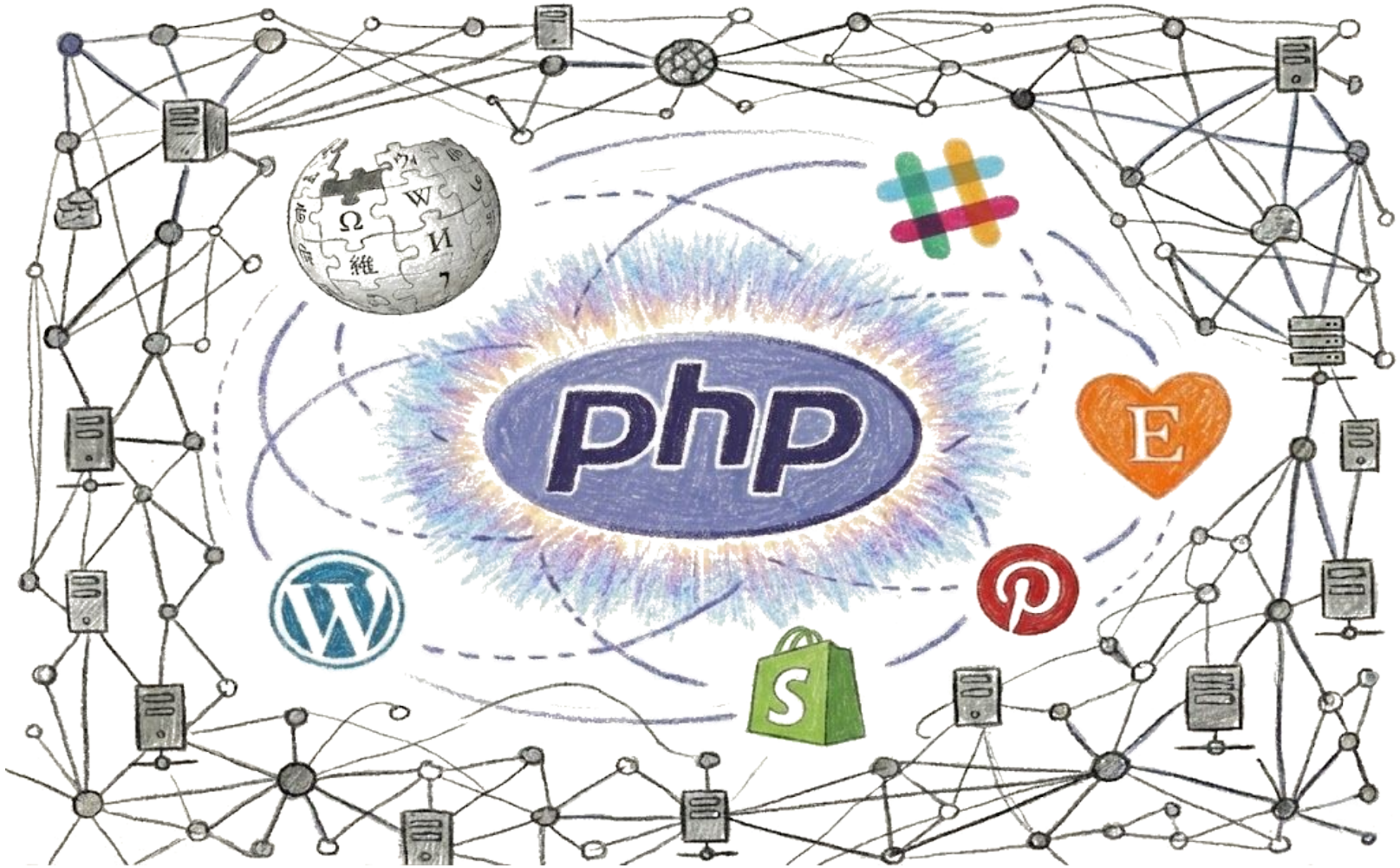
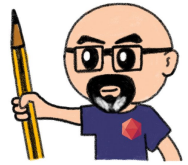
# "PHP apps don't scale"






Myth busted!



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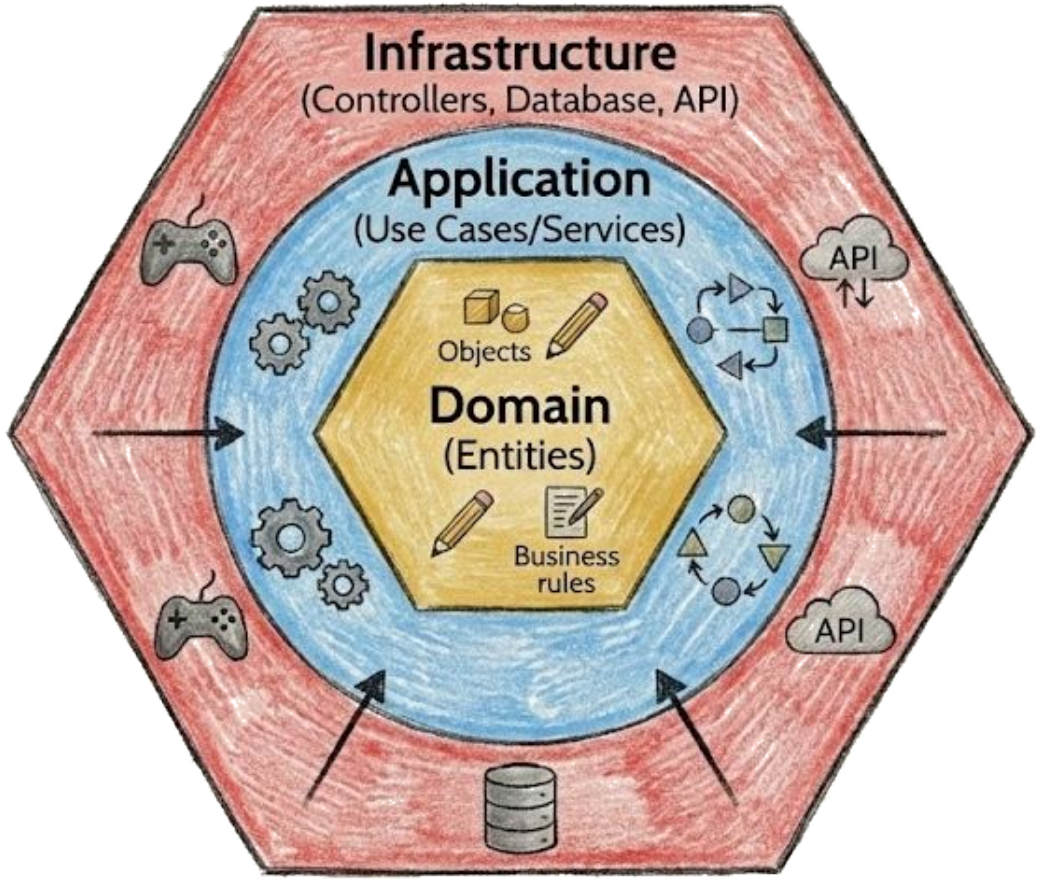
# "PHP code is spaghetti"



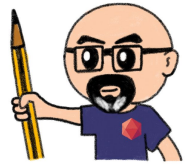



Modern PHP uses **Strict MVC** or **Clean Architecture**

If you write 1000 lines of code in a single file in Java, it's spaghetti. If you do it in PHP, it's spaghetti.

**Bad code is language-agnostic**

Myth busted!



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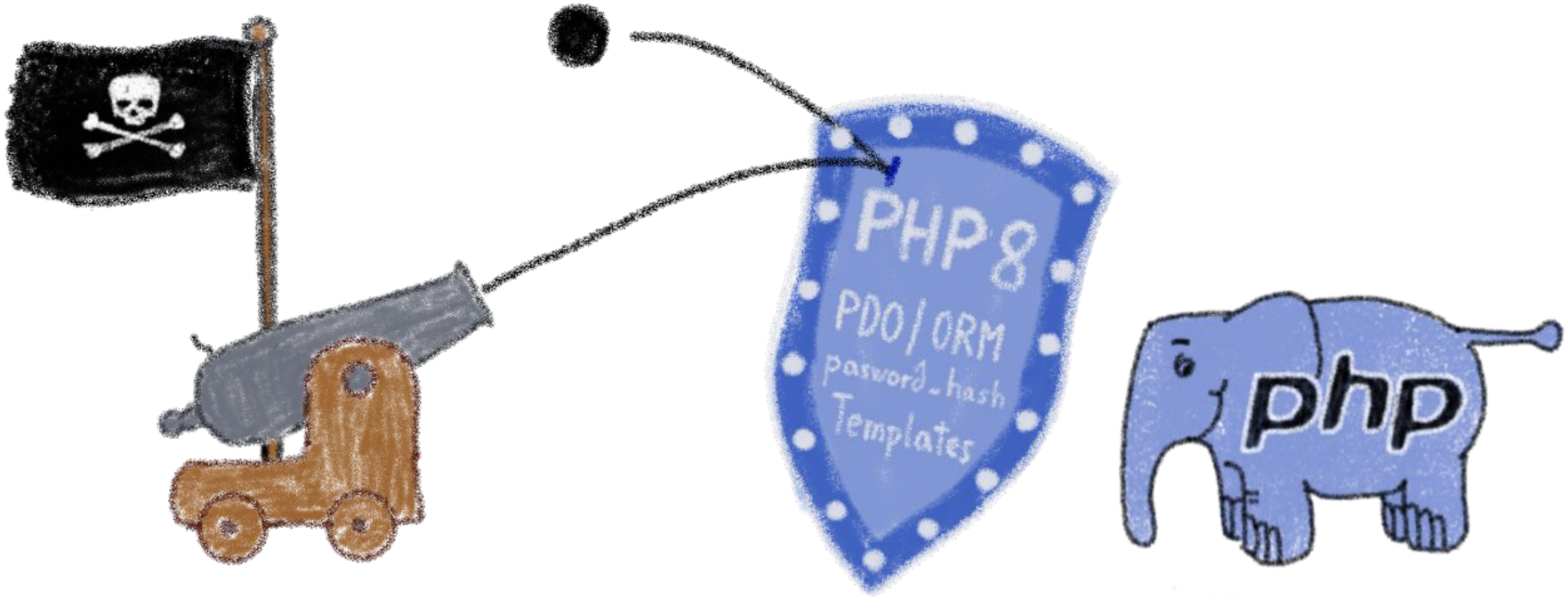
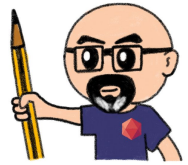
# "PHP is insecure"



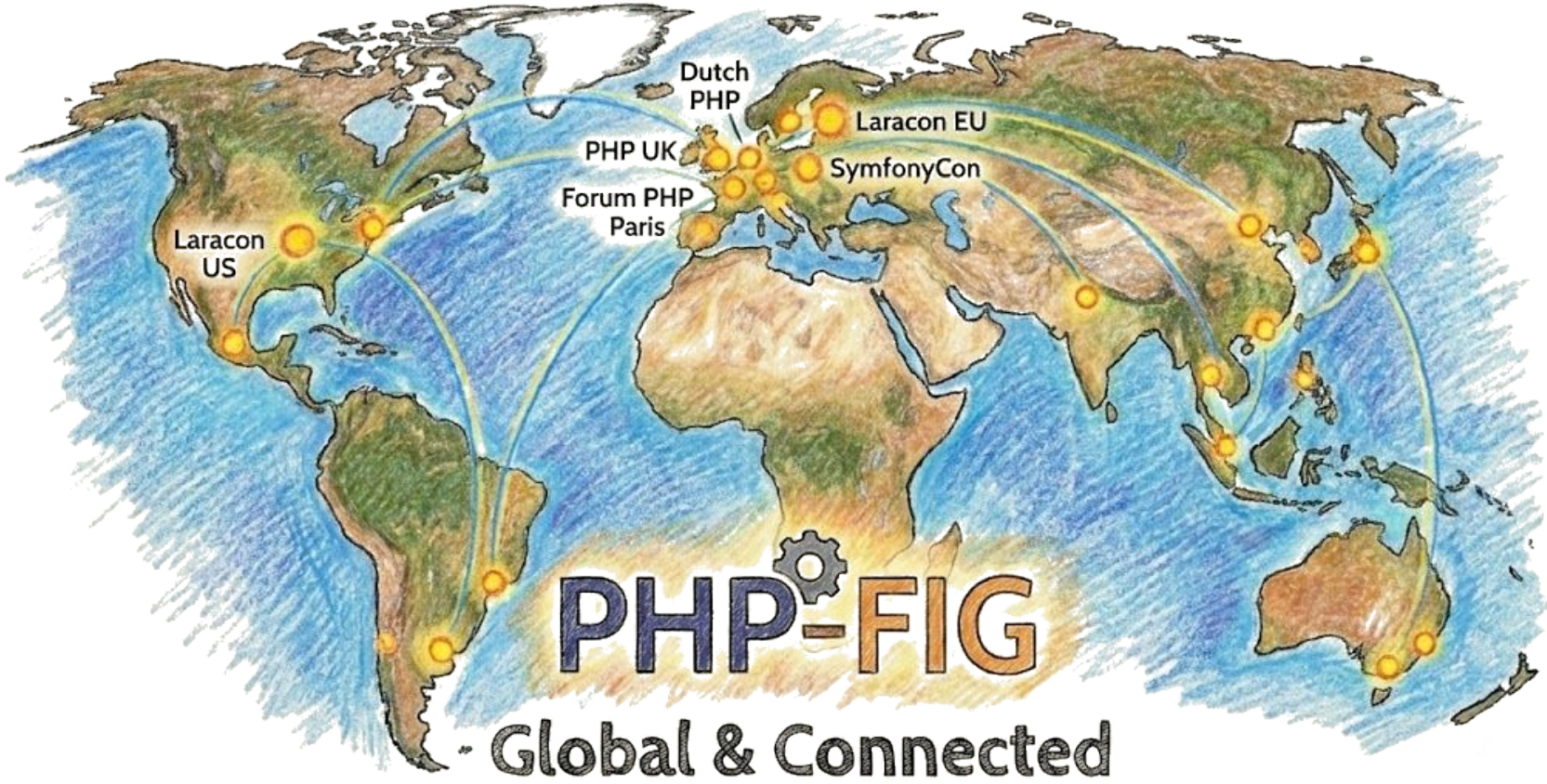



Myth busted!

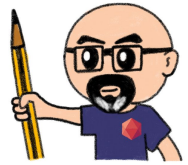


# "PHP developers are isolated"






Myth busted!



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# WordPress Question: "Why Does It Still Look Old?

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WordPress

laravel

Symfony

Drupal™

TYPO3

Magento

PrestaShop

Chose backward compatibility

Chose modernization

Legacy Deployment ≠ Language Limitation

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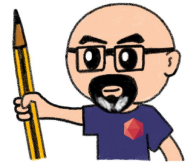

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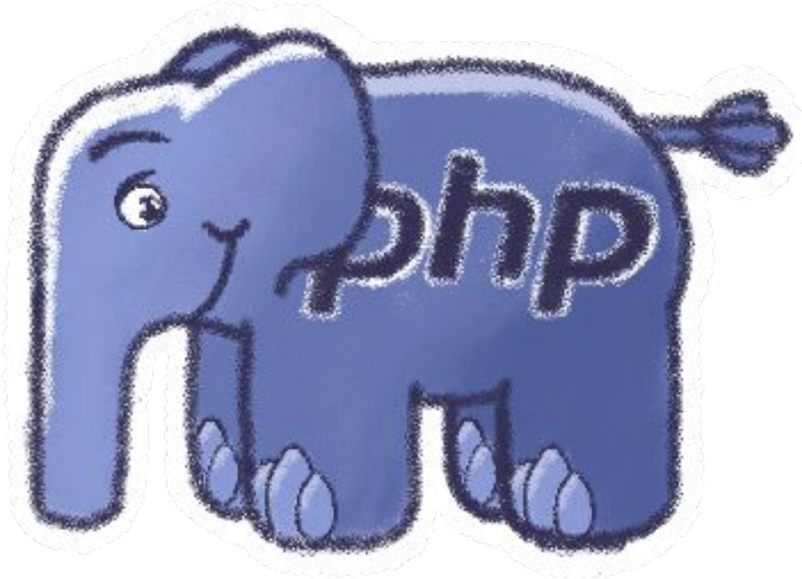
# PHP – The Polyglot Conclusion



# Reality Check: When PHP Isn't the Answer



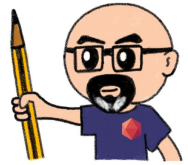
## Use PHP

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

## Consider Alternatives

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

Honest Assessment: Choose the Right Tool



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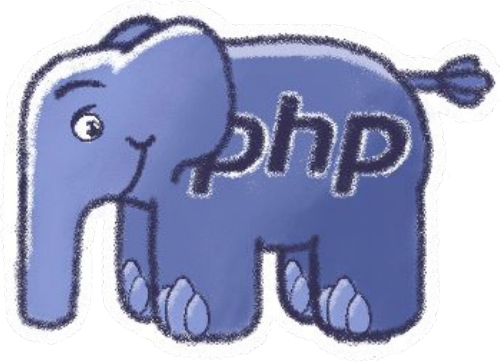
# PHP isn't the language you remember

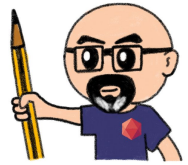




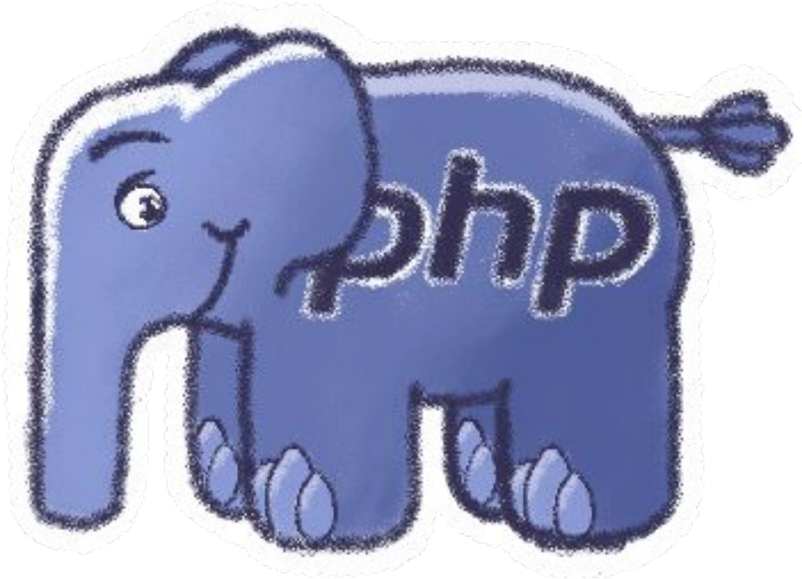

It's a pragmatic, high-performance tool that respects your time.

**Don't hate it, add it to your toolbox**



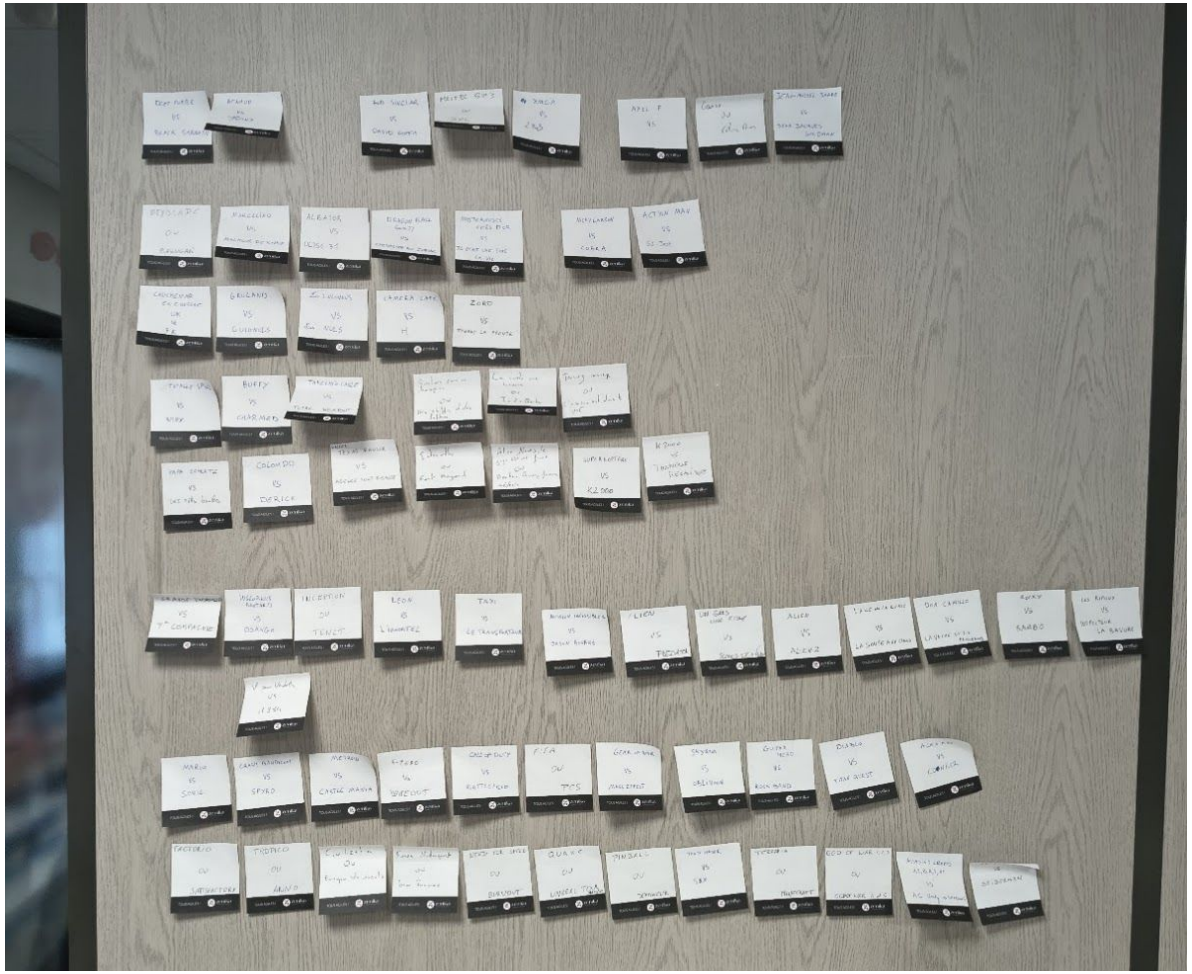


# PHP – Live Demo / Code Walkthrough



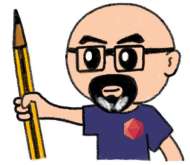
# Meetup driven development





A challenge proposed by Zenika Clermont-Ferrand





# Show me the code!

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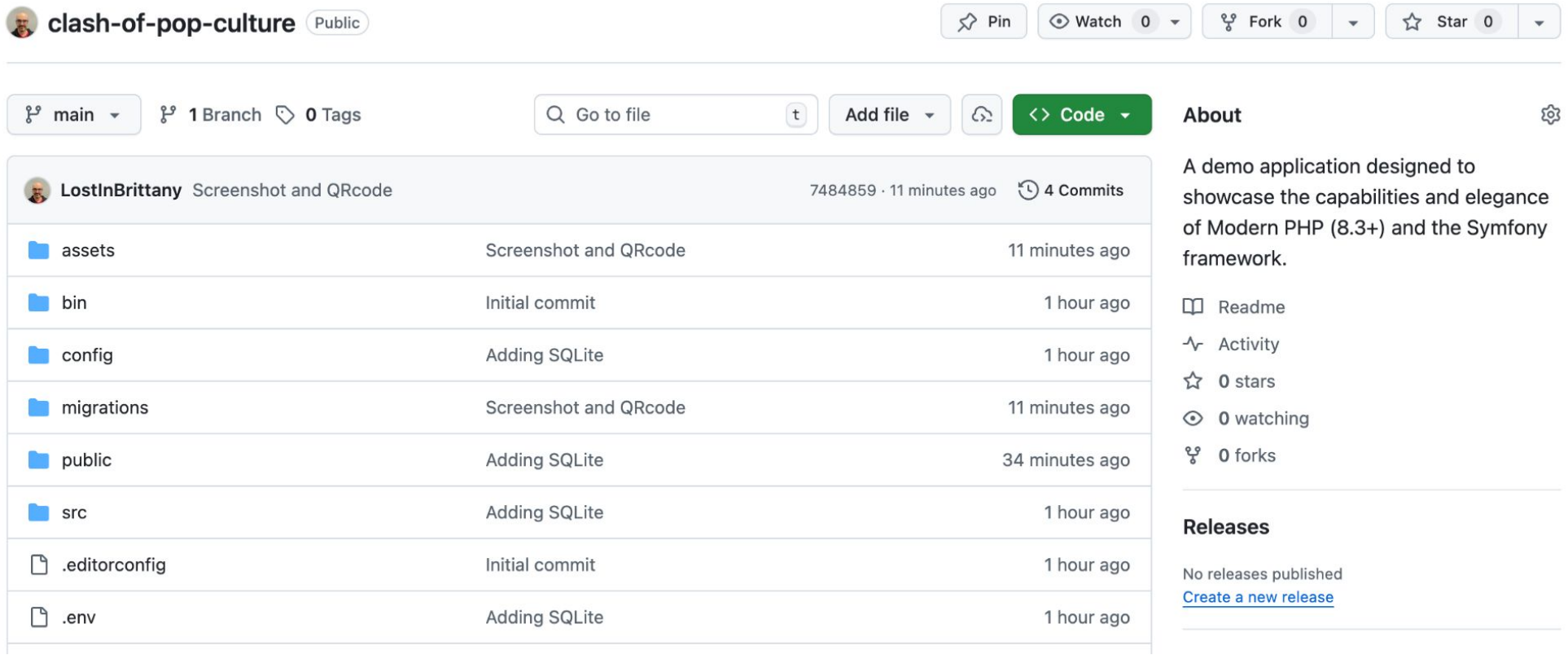
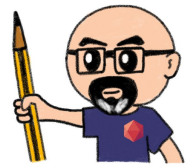



https://github.com/LostInBrittany/clash-of-pop-culture

clever cloud



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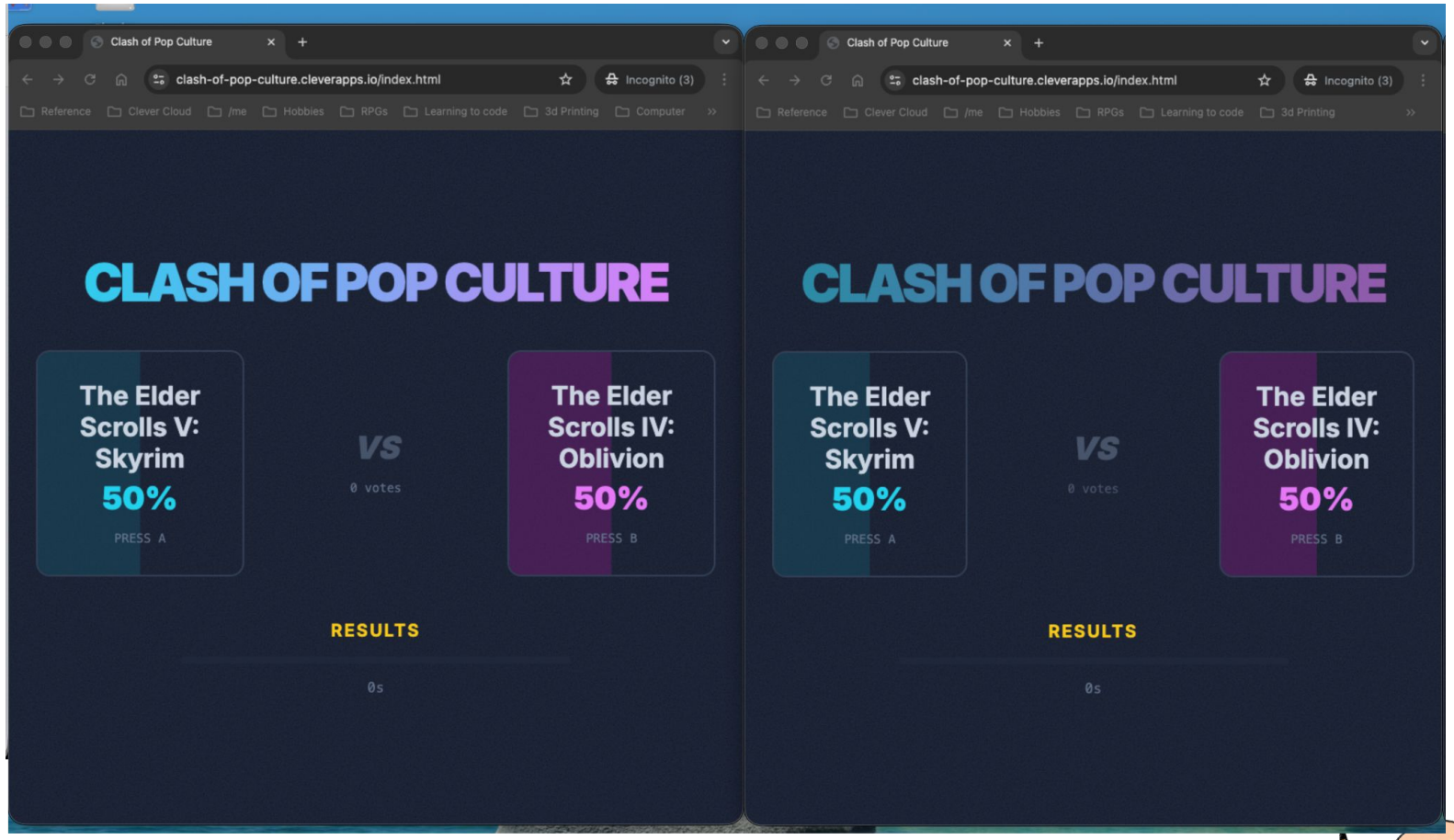
# Clash of Pop Culture






https://clash-of-pop-culture.cleverapps.io/index.html

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# That's all, folks!

## Thank you all!