# I Used to Hate PHP. Then I Got Good at It.

Or maybe PHP simply got better?

Sébastien Ballangé Confoo - February 28th 2025





Feedback Form

### Who am I?

Staff Developer at DocuPet

~20 years of experience as a developer, mainly PHP and Symfony











### We're hiring!

https://ca.indeed.com/cmp/Docupet-Inc.-3

### What about you?

# 2004 PHP 5.0

or maybe 4.x?

- Zend Engine 2
- better object model
  - visibility of properties and methods (no more \_ )
  - constructor and destructor
- exception handling
- SimpleXML
- MySQLi
- SQLite

#### 2004 - PHP 4 <-> 5

```
class Foo
     var $_bar = 2;
     var $something;
     function Foo($bar, $something) {
           $this->_bar = $bar;
           $this->something = $something;
     function _doNotUseThis() {
           // ...
     function doSomething() {
           // ...
```

```
class Foo
     private $bar = 2;
     public $something;
     public function __construct($bar, $something) {
           $this->bar = $bar;
           $this->something = $something;
     private function doNotUseThis() {
           // ...
     public function doSomething() {
           // ...
```

- Who needs a router?
  - index.php
  - contact.php
  - 0 ...
- Templates?
  - o include('header.php');
- Magic quotes
- register\_globals



- PDO
- improved dates management
- performance improvements

#### but also:

- CakePHP
- Symfony
- start of work on PHP 6 (Unicode)

- JSON
- DateTime classes
- ZIP
- input filters

#### but also:

- Codelgniter
- Zend Framework

## 2007 - 2008



• First elephpant



#### • Xdebug 2

#### https://derickrethans.nl/xdebug-2-released.html

#### Comments

**Yann Larrivee** 

Wednesday, July 18th 2007, 19:52 UTC

Congratulation Derick for this release. I will try this out shortly, when i return to our office.

By the way, i really like the new picture :)

See you in march! Yann

- Yii
- Doctrine

#### 2007 - 2008, in my world

- Zend Server
- Sourceforge
- mix of custom autoloader custom and require\_once
- proprietary framework based on a C extension

# 2009 PHP 5.3

Modern PHP, kind of

#### 2009 - PHP 5.3 - Elvis!

?:

\$foo = \$bar ?: "hello";

#### **2009 - PHP 5.3 - namespaces**

```
<?php
namespace MyProject\NamespaceA;
class MyClass {
    public function myMethod() {
        echo "This is MyClass in NamespaceA\n";
namespace MyProject\NamespaceB;
use MyProject\NamespaceA\MyClass;
class AnotherClass {
    public function useClassFromNamespaceA() {
        $obj = new MyClass();
        $obj->myMethod();
// Using a fully qualified name
\MyProject\NamespaceA\MyClass::myMethod();
```

### 2009 - PHP 5.3 - anonymous functions

```
class Foo {
      private $message;
      private function doSomething() {
            $example = function () {
                   var_dump($this->message);
             $example();
=> Fatal error: Using $this when not in object context
```

```
class Foo {
      public $message;
      public function doSomething() {
            $that = $this:
            $example = function () use ($that) {
                   var_dump($that->message);
            $example();
```

#### 2009 - PHP 5.3 - goto

```
<?php
goto a;
echo 'Foo';
a:
echo 'Bar';
=> Bar
```

- late static binding
- garbage collector

#### but also

• creation of PHP-FIG (PSR)

### meanwhile, in my world...

- RIP custom extension
- Ruby is the future!

### 2010 - 2011



- PSR-o (Autoloader)
- PhpStorm 1
- PHP 6 is abandoned
- Slim
- Doctrine 2
- FPM

- Composer 🎉 🎉
- Symfony 2
- Laravel
- Guzzle
- Monolog

#### 2011 - back to the future

- New job @ Manwin, in PHP 4 (2)
- New new job @ Manwin, in Symfony
  - Dependency injection
  - Twig
  - o Doctrine 😳
  - Redis
  - Varnish

# 2012 PHP 5.4

#### 2012 - PHP 5.4 - []

```
// Old syntax
$myArray = array('apple', 'banana', 'orange');
// Short array syntax (PHP 5.4+)
$myArray = ['apple', 'banana', 'orange'];
// Associative array with short syntax
$person = ['name' => 'Alice', 'age' => 30];
```

#### 2012 - PHP 5.4 - traits

```
<?php
trait Logger {
    public function log($message) {
        echo "Logging: $message\n";
class MyClass {
    use Logger;
    public function myMethod() {
        $this->log('This is a message from MyClass');
```

```
<?php
$obj = new MyClass();
$obj->myMethod();

// => Logging: This is a message from MyClass
```

- \$this in closures
- built-in server
- register\_globals, magic quotes and safe mode are finally gone

#### but also:

- Zend Framework 2
- PSR-1 and PSR-2 (code style)

# 2013 PHP 5.5

#### **2013 - PHP 5.5 - generators**

```
<?php
function fibonacciGenerator($limit) {
    a = 0;
    b = 1;
    for ($i = 0; $i < $limit; $i++) {
        yield $a;
        c = a + b;
        a = b;
        b = c;
foreach (fibonacciGenerator(10) as $num) {
    echo $num . ' ';
// 0 1 1 2 3 5 8 13 21 34
```

#### **2013 - PHP 5.5 - finally**

```
<?php
function divideNumbers($dividend, $divisor) {
    try {
        if ($divisor === 0) {
            throw new Exception("Division by zero");
        return $dividend / $divisor;
    } catch (Exception $e) {
        echo "An error occurred: {$e->getMessage()}\n";
    } finally {
        echo "This block will always execute.\n";
```

```
<?php
$result = divideNumbers(10, 2);
echo "Result: $result\n";
>
This block will always execute.
Result: 5
$result = divideNumbers(10, 0);
echo "Result: $result\n";
An error occurred: Division by zero
This block will always execute.
```

#### 2013 - PHP 5.5 - misc

- ::class
  - o \MyProject\MyClass::class
  - but not \$myInstance::class until PHP 8.0
- opcode caching with Zend OPcache
- password\_hash() & password\_verify()

#### 2013 - new legacy

- New job @ DataCandy
  - o Zend Framework 1 😭
  - No Composer
  - o PHP 5.2
  - Automated tests (PhpUnit, SoapUl, ...)
  - Transactional system
  - Lots of APIs

# 2014 PHP 5.6

. . .

### 2014 - PHP 5.6 - variadic functions

```
<?php
function sum(...$numbers) {
    total = 0;
    foreach ($numbers as $number) {
        $total += $number;
    return $total;
sec{result} = sum(1, 2, 3, 4, 5);
echo $result; // Output: 15
```

### 2014 - PHP 5.6 - arguments unpacking

```
<?php
function greet($greeting, $name, $surname) {
    echo "$greeting, $name $surname!\n";
$details = ['Hi', 'Confoo', 'Attendees'];
greet(...$details); // Output: Hi, Confoo Attendees!
```

### 2014 - PHP 5.6 - using \*\* for exponents

```
<?php
$a = 5;
$b = 2;
$result = $a ** $b;
echo $result; // 25</pre>
```

### 2014 - PHP 5.6

#### but also:

- PSR-4 remplaces PSR-0
- Hack / HHVM by Facebook

## 2015 PHP 7.0

declare(strict\_types=1);

#### 2015 - PHP 7.0 - arguments and return types

```
<?php
class Calculator {
    public function add(int $a, int $b): int {
        return $a + $b;
$calculator = new Calculator();
$result = $calculator->add(5, 3);
echo $result; // Output: 8
```

### 2015 - PHP 7.0 - anonymous classes

```
<?php
interface Logger {
    public function log(string $message);
$logger = new class implements Logger {
    public function log(string $message) {
        echo "Logging: $message\n";
$logger->log("Hello, world!");
```

### 2015 - PHP 7.0 - spaceship operator <=>

```
<?php
$a = 10:
\dot{S}b = 5:
$comparison = $a <=> $b;
if ($comparison > 0) {
    echo "$a is greater than $b";
} elseif ($comparison < 0) {</pre>
    echo "$a is less than $b";
} else {
    echo "$a is equal to $b";
// 10 is greater than 5
```

#### **2015 - PHP 7.0 - null coalescing ??**

```
<?php
$name = $inexistant ?? 'Guest';
echo "Hi, $name!";

// Hi, Guest!</pre>
```

#### 2015 - PHP 7.0

#### but also:

- Error and Throwable
- assert()
- end for mysql\_\*()
- PHP 4 constructors deprecated

# 2016 PHP 7.1

#### 2016 - PHP 7.1 - void

```
<?php
interface Logger {
    public function log(string $message): void;
$logger = new class implements Logger {
    public function log(string $message): void {
        echo "Logging: $message\n";
```

### 2016 - PHP 7.1 - nullable type

```
<?php
class Logger {
    public function log(?string $message): void {
        $message = $message ?? "-";
        echo "Logging: $message\n";
$logger->log(null); // Logging: -
```

#### 2016 - PHP 7.1 - constants visibility

```
<?php
class MyClass {
    const PUBLIC_CONSTANT = 'This is a public constant';
    protected const PROTECTED_CONSTANT = 'This is a protected constant';
    private const PRIVATE_CONSTANT = 'This is a private constant';
    public function showConstants() {
        echo self::PUBLIC_CONSTANT . "\n";
        echo self::PROTECTED_CONSTANT . "\n";
        echo self::PRIVATE_CONSTANT . "\n";
$obj = new MyClass();
echo $obj::PUBLIC_CONSTANT . "\n"; // Accessing public constant directly
// Accessing constants from within the class
$obj->showConstants();
```

#### 2016 - PHP 7.1 - catch multiple exceptions

```
<?php
function divideNumbers($dividend, $divisor) {
    try {
        if ($divisor === 0) {
            throw new DivisionByZeroError("Division by zero error.");
        return $dividend / $divisor:
    } catch (DivisionByZeroError | TypeError $e) {
        echo "An error occurred: " . $e->getMessage() . "\n";
divideNumbers(10, 0); // An error occurred: Division by zero error.
divideNumbers(10, "hello"); // An error occurred: Unsupported operand types: int / string
```

#### 2016 - PHP 7.1

array unpacking using [] ( ⇔ list())

#### But also:

- Composer 1.0.0
- Zend Framework 3
- PHPStan

## 2017 PHP 7.2

Crypto stuff

### 2017 - PHP 7.2

- crypto: argon2 for password\_hash(), libsodium and removal of mcrypt
- type object
- end of HHVM for PHP

#### 2017 - ZF1 won't die!

- Add Symfony components, one at a time
  - Console
  - DependencyInjection
  - Twig
  - Monolog
  - Doctrine
  - 0 ...
- Foundation for a complete migration later
  - We'll do it after X is done...

# 2018 PHP 7.3

#### 2018 - PHP 7.3 - Heredoc and Nowdoc

```
<?php
$name = "Alice";
$message = <<<HEREDOC</pre>
    Hello, $name!
    This is a multi-line string
using heredoc syntax.
    HEREDOC:
echo $message;
Hello, Alice!
This is a multi-line string using
heredoc syntax.
```

```
<?php
$message = <<<'NOWDOC'</pre>
This is a multi-line string using
nowdoc syntax.
Variable interpolation is not
allowed here.
NOWDOC;
echo $message;
```

### 2018 - PHP 7.3 - trailing commas in function calls

```
<?php
divideNumbers(10, 2,);

divideNumbers(
    10,
    2,
);</pre>
```

# 2019 PHP 7.4

### 2019 - PHP 7.4 - typed properties

```
<?php
class Person {
    public string $name;
    public int $age;
    public function __construct(string $name, int $age) {
        $this->name = $name;
        $this->age = $age;
$person = new Person("Alice", 30);
echo $person->name; // Output: Alice
echo $person->age; // Output: 30
```

#### **2019 - PHP 7.4 - arrow functions**

```
<?php
numbers = [3, 1, 4, 1, 5, 9, 2, 6, 5, 3, 5];
usort(\$numbers, fn(\$a, \$b) \Rightarrow \$a \iff \$b);
print_r($numbers);
```

```
Array
     [3] => 3
     [5] => 4
     6] => 5
```

#### 2019 - PHP 7.4 - args unpacking in arrays

```
<?php
$parts = ['apple', 'pear'];
$fruits = ['banana', 'orange', ...$parts, 'watermelon'];
// ['banana', 'orange', 'apple', 'pear', 'watermelon'];</pre>
```

### 2019 - PHP 7.4 - Null coalescing assignment

```
<?php
$array['key'] ??= computeDefault();

// more or less equivalent to:

if (!isset($array['key'])) {
    $array['key'] = computeDefault();
}</pre>
```

#### 2019 - PHP 7.4 - Numeric Literal Separator

```
<?php
6.674_083e-11; // float
299_792_458; // decimal
0xCAFE_F00D; // hexadecimal
0b0101_1111; // binary</pre>
```

#### 2019 - PHP 7.4

- Weak references
- preloading opcache.preload=preload.php
- \_\_serialize() and \_\_unserialize()

#### But also:

- Zend Framework => Laminas
- PSR-12

## 2020 PHP 8.0



#### 2020 - PHP 8.0 - named arguments

```
<?php
myFunction(paramName: $value);
array_foobar(array: $value);
array_fill(0, count: 100, value: 50);
array_fill(value: 50, count: 100, start_index: 0);
```

#### 2020 - PHP 8.0 - promoted properties

```
<?php
class Person {
    public function __construct(
        public string $name,
        private int $age,
$person = new Person("Alice", 30);
echo $person->name; // Output: Alice
echo $person->age; // Uncaught Error: Cannot access private property Person::$age
```

#### **2020 - PHP 8.0 - attributes**

```
<?php
#[Attribute]
class RequiresAuthentication {
   public function __construct(public bool $isAdmin = false) {}
class ProtectedPage {
   #[RequiresAuthentication(true)]
   public function adminOnly() {
        echo "This is an admin-only page.\n";
   #[RequiresAuthentication]
   public function publicPage() {
        echo "This is a public page.\n";
```

#### **2020 - PHP 8.0 - union types**

```
<?php
class Calculator {
    public function add(int|float $a, int|float $b): int|float {
        return a + b;
$calculator = new Calculator();
$result = $calculator->add(5, 3);
echo $result; // Output: 8
$result = $calculator->add(5, 2.5);
echo $result; // Output: 7.5
```

#### 2020 - PHP 8.0 - match

```
<?php
$fruit = 'apple';
$result = match ($fruit) {
    'apple' => 'This is an apple.',
    'banana' => 'This is a banana.',
    'orange' => 'This is an orange.',
    default => 'Unknown fruit.'
echo $result; // Output: This is an apple.
```

### 2020 - PHP 8.0 - nullsafe operator ?->

```
<?php
$result = $repository?->getUser(5)?->name;
```

### 2020 - PHP 8.0 - Non-capturing catches

```
<?php
function divideNumbers($dividend, $divisor) {
    try {
        if ($divisor === 0) {
            throw new Exception("Division by zero");
        return $dividend / $divisor;
    } catch (Exception) {
        echo "An error occurred.\n";
```

#### But also:

- Just-In-Time compilation (JIT).
- static as a return type
- interface Stringable (if method \_\_toString() exists)
- trailing commas in functions definition
- type mixed
- str\_contains(), str\_starts\_with() and str\_ends\_with()
- class Socket
- PHP 4 constructors are gone

#### 2020 - not much

- First time as a Confoo speaker
  - "From Legacy to Symfony" (more like "From Legacy to Legacy & Symfony")
- Technical Lead @ DataCandy (now Paystone)
- New passion: adding features to a bot to annoy my coworkers

#### 2021 - PHP 8.1 - enums

```
<?php
enum Color {
    case Red;
    case Green;
    case Blue;
}
$favouriteColour = Color::Blue;
echo $favouriteColour->name; // Blue
```

```
<?php
enum Color: string {
    case Red = 'Rouge';
    case Green = 'Vert';
   case Blue = 'Bleu';
$favouriteColour = Color::Blue;
echo $favouriteColour->name; // Blue
echo $favouriteColour->value; // Bleu
```

### 2021 - PHP 8.1 - Fibers

https://wiki.php.net/rfc/fibers

https://stitcher.io/blog/fibers-with-a-grain-of-salt

### 2021 - PHP 8.1 - readonly properties

```
<?php
class Person {
    public function __construct(
        public readonly string $name,
        private int $age,
    ) {}
$person = new Person("Robert", 30);
echo $person->name; // Output: Robert
$person->name = 'Bob';
// Uncaught Error: Cannot modify readonly property Person::$name
```

### 2021 - PHP 8.1 - Pure intersection types (Foo&Bar)

```
<?php
interface LoggerInterface {
    public function log(string $message): void;
interface Configurable {
    public function configure(): void;
class AdvancedLogger implements LoggerInterface,
Configurable {
    // ... implementation ...
```

```
<?php
class MyService {
    public function processData(
        LoggerInterface&Configurable Slogger.
   ): void {
        $logger->log("Processing data...");
        $logger->configure();
$logger = new AdvancedLogger();
$service = new MyService();
$service->processData($logger);
```

### 2021 - PHP 8.1 - First-class callable syntax

```
<?php
$length = strlen(...);
echo $length('foo'); // 3

$callback = $this->myMethod(...);
$callback($request);
```

- never return type
- final class constants
- array\_is\_list()

### 2021 - PHP 8.2 - readonly classes

```
<?php

readonly class Person {
   public function __construct(
      public string $name,
      private int $age,
   ) {}
}</pre>
```

### 2021 - PHP 8.2 - true, false and null types

```
<?php
interface Person {
    public function isAsleep(): bool;
    public function isAwake(): bool;
class Vampire implements Person {
    public function isAsleep(): false { return false; }
    public function isAwake(): true { return !$this->isAsleep(); }
$vampire = new Vampire();
var_dump($vampire->isAsleep(), $vampire->isAwake());
bool(false)
bool(true)
```

- #[\SensitiveParameter]
- constants in traits



### 2023 - PHP 8.3 - typed class constants

```
<?php

class Config {
   public const string API_KEY = 'your_api_key';
   public const string BASE_URL =
   'https://api.example.com';
   public const int MAX_RETRIES = 3;
}</pre>
```

- Anonymous classes can be readonly
- #[\Override]
- json\_validate()
- str\_increment() / str\_decrement()
- get\_class() / get\_parent\_class() without arguments are deprecated

"What's new in PHP 8.4" by Derick Rethans

https://confoo.ca/en/2025/session/what-s-new-in-php-8-4

- Property hooks
- Asymmetric visibility
- new without parentheses
- Lazy objects
- #[\Deprecated]
- array\_all() / array\_any() / array\_find()
- HTML5 parser in \Dom\HTMLDocument
- Implicitly nullable parameter deprecated

# Thank You



Feedback Form

Slides: https://github.com/confooca/2025