

Another PHP

By Max Gopey

Another PHP

- Chapter 1. Coding standards
- Chapter 2. OOP
- Chapter 3. Everything Else
- Chapter 4.

Chapter 1

Coding standards

- [PSR](#)
- [Zend](#)
- [PEAR](#)
- [Wordpress](#)
- [Symphony](#)
- [Mediawiki](#)
- [FuelPHP](#)
- [CakePHP](#)
- [CodeIgniter](#)
- [Laravel](#)
- ...
- Are
- you
- guys
- **MAD?**

Chapter 2

OOP

Why do we need objects and classes?

Chapter 3

Everything Else

Chapter 3

Gitlab Composer

[Click me](#)

```
01. $fetch_refs = function($project) use ($fetch_ref, $repos) {
02.     $datas = array();
03.     try {
04.         foreach (array_merge($repos->branches($project['id']),
05.                             $repos->tags($project['id'])) as $ref) {
06.             foreach ($fetch_ref($project, $ref) as $version => $data) {
07.                 $datas[$version] = $data;
08.             }
09.         }
10.     } catch (RuntimeException $e) {
11.         // The repo has no commits — skipping it.
12.     }
13.     return $datas;
14. };
```

Chapter 3

Array Traversing

- array_column
- array_map
- array_search
- array_reduce
- array_filter
- array_walk
- every / some


```
Ø1. $users = [  
Ø2.     ['id' => 123, 'first_name' => 'Max', 'last_name' => 'Gopey'],  
Ø3.     ['id' => 456, 'first_name' => 'Bob', 'last_name' => 'Doe'],  
Ø4.     ['id' => 789, 'first_name' => 'Alice', 'last_name' => 'Doe'],  
Ø5. ];  
Ø6. $lastNames = array_column($users, 'last_name', 'id');  
Ø7. print_r($lastNames);
```

```
Ø1. Array  
Ø2. (  
Ø3.     [123] => Max  
Ø4.     [456] => Bob  
Ø5.     [789] => Alice  
Ø6. )
```

```
Ø1. $users = [  
Ø2.     ['id' => 123, 'first_name' => 'Max', 'last_name' => 'Gopey'],  
Ø3.     ['id' => 456, 'first_name' => 'Bob', 'last_name' => 'Doe'],  
Ø4.     ['id' => 789, 'first_name' => 'Alice', 'last_name' => 'Doe'],  
Ø5. ];  
Ø6. $fullNames = array_map(function($user) {  
Ø7.     return $user['first_name'] . ' ' . $user['last_name'];  
Ø8. }, $users);  
Ø9. print_r($fullNames);
```

```
Ø1. Array  
Ø2. (  
Ø3.     [Ø] => Max Gopey  
Ø4.     [1] => Bob Doe  
Ø5.     [2] => Alice Doe  
Ø6. )
```

```
01. $users = [  
02.     ['id' => 123, 'first_name' => 'Max', 'last_name' => 'Gopey'],  
03.     ['id' => 456, 'first_name' => 'Bob', 'last_name' => 'Doe'],  
04.     ['id' => 789, 'first_name' => 'Alice', 'last_name' => 'Doe'],  
05. ];  
06. $index = array_search('Alice Doe', array_map(function($user) {  
07.     return $user['first_name'] . ' ' . $user['last_name'];  
08. }, $users));  
09. print_r($index);
```

2

```

01. $users = [
02.     ['first_name' => 'Max', 'last_name' => 'Gopey', 'company' => 'CGI'],
03.     ['first_name' => 'Bob', 'last_name' => 'Doe', 'company' => 'Google'],
04.     ['first_name' => 'Alice', 'last_name' => 'Doe', 'company' => 'Google'],
05. ];
06.
07. $byCompany = array_reduce($users, function($result, $user) {
08.     @$result[$user['company']][] = $user['first_name'] . ' ' . $user['last_name'];
09.     return $result;
10. }, []);
11. print_r($byCompany);

```

```

01. Array (
02.     [CGI] => Array (
03.         [0] => Max Gopey
04.     )
05.     [Google] => Array (
06.         [0] => Bob Doe
07.         [1] => Alice Doe
08.     )
09. )

```

```
01. $users = [  
02.     ['first_name' => 'Max', 'last_name' => 'Gopey', 'company' => 'CGI'],  
03.     ['first_name' => 'Bob', 'last_name' => 'Doe', 'company' => 'Google'],  
04.     ['first_name' => 'Alice', 'last_name' => 'Doe', 'company' => 'Google'],  
05. ];  
06.  
07. $CgiUsers = array_filter($users, function($user) {  
08.     return $user['company'] === 'CGI';  
09. });  
10. print_r($CgiUsers);
```

```
01. Array (  
02.     [0] => Array (  
03.         [first_name] => Max  
04.         [last_name] => Gopey  
05.         [company] => CGI  
06.     )  
07. )
```

```

01. $users = [
02.     ['first_name' => 'Max', 'last_name' => 'Gopey', 'company' => 'CGI'],
03.     ['first_name' => 'Bob', 'last_name' => 'Doe', 'company' => 'Google'],
04.     ['first_name' => 'Alice', 'last_name' => 'Doe', 'company' => 'Google'],
05. ];
06. array_walk($users, function(&$user, $index) {
07.     unset($user['last_name'], $user['company']);
08.     $user['first_name'] .= ' ♥';
09. });
10. print_r($users);

```

```

01. Array (
02.     [0] => Array (
03.         [first_name] => Max ♥
04.     )
05.     [1] => Array (
06.         [first_name] => Bob ♥
07.     )
08.     [2] => Array(
09.         [first_name] => Alice ♥
10.     )
11. )

```

```
01. function some($array, $callback) {
02.     foreach ($array as $item) {
03.         if ($callback($item)) {
04.             return true;
05.         }
06.     }
07.     return false;
08. }
09. function every($array, $callback) {
10.     return !some($array, function($item) use ($callback) {
11.         return !$callback($item);
12.     });
13. }
14. var_dump(every([1, 2, 3], function ($item) {return $item > 0;}));
15. var_dump(every([1, -2, 3], function ($item) {return $item > 0;}));
```

```
01. bool(true)
02. bool(false)
```

```
01. function getBobsAndAlicesWithD($users) {
02.     return array_reduce(
03.         array_filter(
04.             array_map(function($user) {
05.                 return $user['last_name'] . ', ' . $user['first_name'];
06.             }, $users),
07.             function($name) {
08.                 return stripos($name, 'd') === 0;
09.             }
10.         ),
11.         function($result, $value) {
12.             $target = stripos($value, 'bob') !== false ? 'bobs' : 'alices';
13.             $result[$target][] = $value;
14.             return $result;
15.         },
16.         ['bobs' => [], 'alices' => []]
17.     );
18. }
```



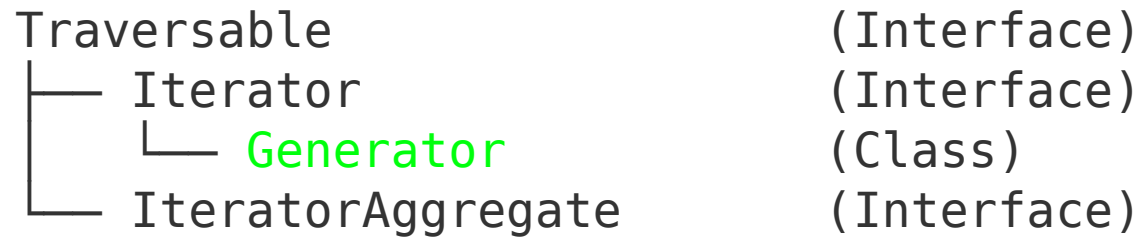
```
01.  $users = [  
02.      ['first_name' => 'Max', 'last_name' => 'Gopey', 'company' => 'CGI'],  
03.      ['first_name' => 'Bob', 'last_name' => 'Doe', 'company' => 'Google'],  
04.      ['first_name' => 'Alice', 'last_name' => 'Doe', 'company' => 'Google'],  
05.  ];  
06.  
07.  print_r(getBobsAndAlicesWithD($users));
```

Array

```
(  
    [bobs] => Array (  
        [0] => Doe, Bob  
    )  
    [alices] => Array (  
        [0] => Doe, Alice  
    )  
)
```

Chapter 3

Generators



```
01. function garbageGenerator() {  
02.     $n = rand(1, 10);  
03.     while ($n-->0) {  
04.         yield md5(rand());  
05.     }  
06. }  
07. $garbage = garbageGenerator();  
08. foreach ($garbage as $trash) {  
09.     echo $trash, PHP_EOL;  
10. }
```

```
6e620c902c7088ace3ebf6c96f5dedd5  
1340dcc6f3e0e39b4c48f480f5a92d52  
c264962d537032be6c3a8a94eda811d4  
0bfa2efb3909c105473a4fcaa71b697b
```

```
01. function readFileLines($path) {  
02.     $handle = fopen($path, 'r');  
03.     while ($line = fgets($handle)) {  
04.         yield $line;  
05.     }  
06.     fclose($handle);  
07. }  
08.  
09. $lines = readFileLines(__FILE__);  
10. foreach($lines as $line) {  
11.     echo $line;  
12. };
```

Symfony\Component\Process\InputStream

[Click me](#)

```

01. function writer(InputStream $stream) {
02.     $stream->write('Message 1');
03.     $stream->write('Message 2');
04.     yield '2 messages written';
05.     $stream->write('Message 3');
06.     $stream->write('Message 4');
07.     yield '2 messages written';
08.     $stream->write('Message 5');
09.     $stream->write('Message 6');
10.     yield '2 messages written';
11. }
12.
13. function reader(InputStream $stream) {
14.     foreach ($stream as $line) {
15.         if (strlen($line)) {
16.             yield $line;
17.         } else {
18.             $stream->close();
19.         }
20.     }
21. }

```

```

01. $stream = new InputStream();
02. $queue[] = writer($stream);
03. $queue[] = reader($stream);
04.
05. while (true) {
06.     $continue = array_reduce(
07.         $queue,
08.         function($result, Iterator $queueItem) {
09.             if ($valid = $queueItem->valid()) {
10.                 echo $queueItem->current(), "\n";
11.                 $queueItem->next();
12.             }
13.             return $result || $valid;
14.         },
15.         false);
16.     if (!$continue) {
17.         break;
18.     }
19. }

```

```

2 messages written
Message 1
2 messages written
Message 2
2 messages written
Message 3
Message 4
Message 5
Message 6

```

Chapter 3

Functional programming

```

01. function getBobsAndAlicesWithD($users) {
02.     return array_reduce(
03.         array_filter(
04.             array_map(function($user) {
05.                 return $user['last_name'] . ', ' . $user['first_name'];
06.             }, $users),
07.             function($name) {
08.                 return stripos($name, 'd') === 0;
09.             }
10.         ),
11.         function($result, $value) {
12.             $target = stripos($value, 'bob') !== false ? 'bobs' : 'alices';
13.             $result[$target][] = $value;
14.             return $result;
15.         },
16.         ['bobs' => [], 'alices' => []]
17.     );
18. }

```


Chapter 3

Non-standard PHP library (NSPL)

[Click me](#)

```
01.  $startsWith = function ($string, $substing) {
02.      return stripos($string, $substing) === 0;
03.  };
04.  $contains = function($string, $substing) {
05.      return stripos($string, $substing) !== false;
06.  };
07.  $getFullName = function ($firstName, $lastName) {
08.      return $lastName . ', ' . $firstName;
09.  };
10.
11.  $startsWithD = f\rpartial($startsWith, 'd');
12.  $isBob = f\rpartial($contains, 'bob');
13.
14.  $getFullNameFromUser = function ($user) use ($getFullName) {
15.      return $getFullName($user['first_name'], $user['last_name']);
16.  };
17.  $getStackKey = function($name) use ($isBob) {
18.      return $isBob($name) ? 'bobs' : 'alices';
19.  };
20.  $putToCorrectStack = function($stacks, $value) use ($getStackKey) {
21.      $stacks[$getStackKey($value)][ ] = $value;
22.      return $stacks;
23.  };
```

```
01. $getBobsAndAlicesWithD = function ($users)
02.     use ($startsWithD, $getFullNameFromUser, $putToCorrectStack) {
03.     return f\pipe(
04.         $users,
05.         f\partial(a\map, $getFullNameFromUser),
06.         f\partial(a\filter, $startsWithD),
07.         f\ppartial(a\reduce, [
08.             0 => $putToCorrectStack,
09.             2 => ['bobs' => [], 'alices' => []]
10.         ])
11.     );
12. };
13.
14. print_r($getBobsAndAlicesWithD($users));
```

Chapter 3

Obvious logical operations

```
01.  if (anyOf([1, 3, 5])->is(5)) {
02.      // do something
03.  }
04.  if (anyOf([$name, $surname])->matches('/^\w+$/')) {
05.      // do something
06.  }
07.  if (allOf([1, 3, 5])->areNot(6)) {
08.      // do something
09.  }
10.  if (either($condition1)->or($condition2)) {
11.      // do something
12.  }
13.  if (neither($x)->nor($y)) {
14.      // do something
15.  }
16.  if (the($x)->isNeither(5)->nor(10)) {
17.      // do something
18.  }
19.  if (the($x)->isGreaterThan(5)->butLessThan(10)) {
20.      // do something
21.  }
```

Chapter 3

Obvious regexp

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85															

```

01.  $regExp = $builder
02.      ->startOfInput()
03.      ->exactly(4)->digits()
04.      ->then("_")
05.      ->exactly(2)->digits()
06.      ->then("_")
07.      ->min(3)->max(10)->letters()
08.      ->then(".")
09.      ->anyOf(array("png", "jpg", "gif"))
10.      ->endOfInput()
11.      ->getRegExp();
12.
13.  //true
14.  $regExp->matches("2020_10_hund.jpg");
15.  $regExp->matches("2030_11_katze.png");
16.  $regExp->matches("4000_99_maus.gif");
17.
18.  //false
19.  $regExp->matches("123_00_nein.gif");
20.  $regExp->matches("4000_0_nein.pdf");
21.  $regExp->matches("201505_nein.jpg");

```

Useful links

Generators and Coroutines

- [Хабр: Coroutines в PHP и работа с неблокирующими функциями](#)
- [Github: Asynchronous coroutines for PHP 7.](#)
- [A Curious Course on Coroutines and Concurrency](#)
- [Symfony/Component/Process/InputStream.php](#)

Functional programming

- [Github: Non-standard PHP library \(NSPL\) - compact functional programming oriented code](#)

Human-readable regular expressions

- [Github: RegexpBuilderPHP](#)
- [Github: PHPVerbalExpressions](#)

Kittens

- [Youtube: The funniest kitten in the world](#)