

PHP QA TOOLS

PHP Code Quality



Sergej Kurakin

Why?

- New project
- Clean modern code base
- Many developers
- New challenge

What?

- PSR Code Style
- Minimize Copy/Paste
- Reduce Code Complexity
- Tests...

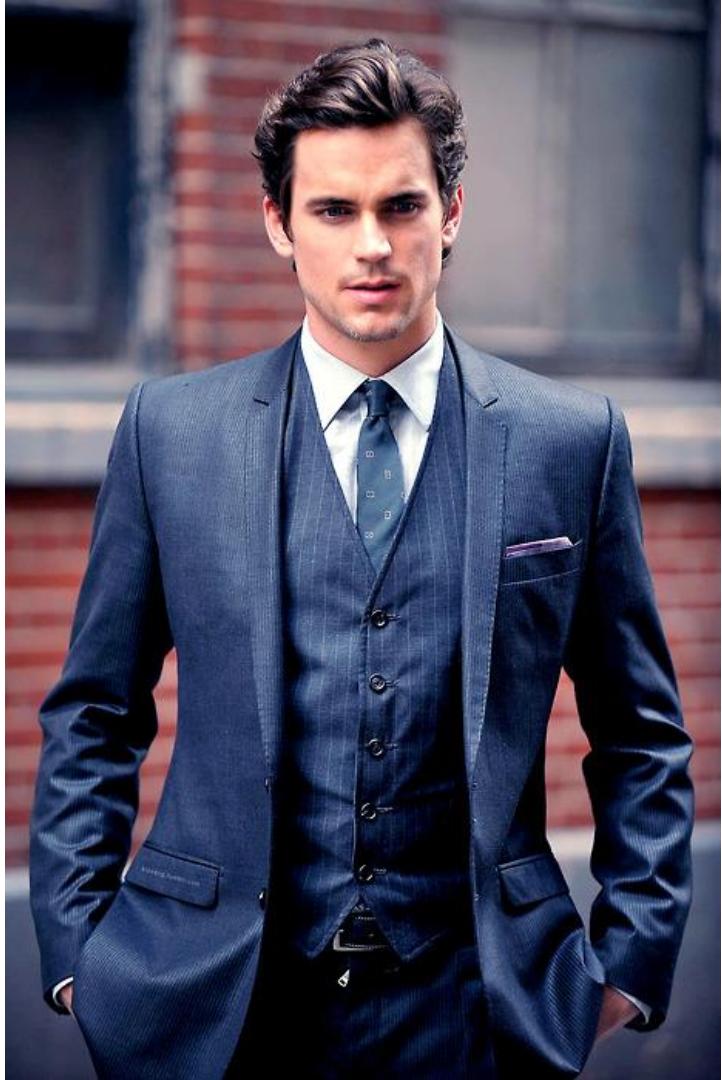
T_PAAMAYIM_NEKUDOTAYIM

PHP Lint - syntax check

- Checks PHP code for syntax errors
- Built-in into PHP binary

```
$ php -l path/to/file.php
```

Code Style





PHP Code Sniffer

- Detects coding standard violations
- https://github.com/squizlabs/PHP_CodeSniffer
- Composer/PEAR

Interesting side project: http://squizlabs.github.io/PHP_CodeSniffer/analysis/

PHP Code Sniffer: Run

```
$ phpcs path/to/file.php
```

```
$ phpcs path/to/dir
```

```
$ phpcs -h
```

```
$ phpcs -i
```

PHP Code Sniffer: Keys

--sniffs=<sniffs>

--encoding=<encoding>

--extensions=<extensions>

--ignore=<patterns>

--standard=<standard>

PHP Code Sniffer: Standards

- PEAR
- PHPCS
- PSR1
- PSR2
- Squiz
- Zend

PHP Code Sniffer: Reports

- full
- xml
- checkstyle
- csv
- json
- emacs
- source
- summary
- svnblame
- gitblame
- hgblame
- notifysend

Copy & Paste

COPY PASTE



Programmer...

COPYPASTE

COPYPASTE EVERYWHERE

makeameme.org

PHP Copy/Paste Detector

- CPD - Copy/Paste (code) Detector
- <https://github.com/sebastianbergmann/phpcpd>
- Composer/PHAR

PHP Copy/Paste Detector: Run

```
$ phpcpd path/to/file.php path/to/other/file.php
```

```
$ phpcpd path/to/dir
```

```
$phpcpd -h
```

PHP Copy/Paste Detector: Keys

--names=<names>

--names-exclude=<names-exclude>

--exclude=<exclude>

--log-pmd

--min-lines=<5>

--min-tokens=<70>

Mess



PHP Mess Detector

- Source Code Analyzer
- <http://phpmd.org/>
- Composer

PHP Mess Detector: Run

```
$ phpmd path/to/dir text cleancode,  
codesize,controversial,design,naming,  
unusedcode
```

```
$ phpmd path/to/dir text  
path/to/ruleset.xml
```

PHP Mess Detector: Reports

- xml
- text
- html

PHP Mess Detector: Rulesets

- cleancode
- codesize
- controversial
- design
- naming
- unusedcode

Unused Code



PHP Dead Code Detector

- Unused/Dead Code Detector
- <https://github.com/sebastianbergmann/phpcd>
- Composer/PHAR

PHP Dead Code Detector

```
$ phpdcd path/to/file.php
```

```
$ phpdcd path/to/dir
```

```
$phpdcd -h
```

Code
Statistics

A photograph of Leonardo DiCaprio in a black tuxedo and bow tie, smiling and holding a martini glass towards the camera. He is standing in front of a dark background with blurred lights and confetti falling.

**IN
STATS
WE
TRUST**

phploc

- Size and Analytics
- <https://github.com/sebastianbergmann/phploc>
- Composer/PHAR

phploc: Run

```
$ phploc path/to/dir
```

```
$ phploc -h
```

phploc: Keys

--names

--names-exclude

--git-repository

--log-csv=<path/to/file.csv>

--log-xml=<path/to/file.xml>



PHP Depend

- Software Metrics
- <http://pdepend.org/>
- <http://pdepend.org/documentation/software-metrics/index.html>
- Composer/PHAR/PEAR

PHP Depend: Run

```
$ pdepend \
--summary-xml=/tmp/summary.xml \
--jdepend-chart=/tmp/jdepend.svg \
--overview-pyramid=/tmp/pyramid.svg \
path/to/dir
```

Tests...

TESTING IS FOR WIMPS



REAL MEN TEST IN PRODUCTION

Testing Frameworks

- PHPUnit - <http://phpunit.de/>
- Behat - <http://behat.org/>
- Spec - <http://www.phpspec.net/>
- [JFGI](#)

Weapon of choice

Other stuff

PhpStorm

Preferences > PHP >

Code Sniffer

Mess Detector

Preferences > Inspections

Code > Inspect Code

php-cs-fixer

- Fixes coding standards
- <http://cs.sensiolabs.org/>
- Composer/PHAR
- PSR1 and PSR2 only

```
$ php-cs-fixer fix path/to/dir --  
level=all
```

You can find more at <http://phpqatools.org/>

Big big thanks to Sebastian Bergmann for the work over PHP QA tools collection.

Questions?



Sergej Kurakin

Email: sergej.kurakin@nfq.lt

Twitter: [@zaza_lt](https://twitter.com/@zaza_lt)

Special thanks to authors of all pictures used in this presentation.