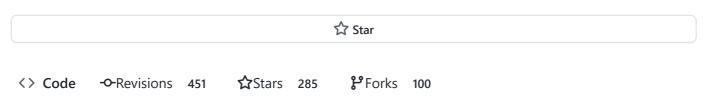
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### ryansechrest / php-style-guide.md

Last active 20 hours ago



PHP style guide with coding standards and best practices.

php-style-guide.md

# PHP Style Guide

All rules and guidelines in this document apply to PHP files unless otherwise noted. References to PHP/HTML files can be interpreted as files that primarily contain HTML, but use PHP for templating purposes.

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

Most sections are broken up into two parts:

- 1. Overview of all rules with a quick example
- 2. Each rule called out with examples of do's and don'ts

#### Icon Legend:

· Space, → Tab, ← Enter/Return

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## 1. Files

This section describes the format and naming convention of PHP files.

#### **File Format**

- 1. Character encoding MUST be set to UTF-8 without BOM
  - Sublime.app → File > Save with Encoding > UTF-8
- 2. Line endings MUST be set to Unix (LF)

O Sublime.app → View → Line Endings → Unix

#### **Filename**

```
1. Letters MUST be all lowercase
```

```
o e.g. autoloader.php
```

2. Words MUST be separated with a hyphen

```
○ e.g. app-config.php
```

#### ▲ Table of Contents

### 2. Skeleton

This section showcases a barebones PHP file with its minimum requirements.

Line by line breakdown:

- Line 1: PHP open tag
- Line 2: Blank line
- Line 3: Your code
- Line 4: Blank line
- Line 5: End-of-file comment
- Line 6: Blank line

```
<?php
// your code
// EOF</pre>
```

#### ▲ Table of Contents

# 3. PHP Tags

This section describes the use of PHP tags in PHP and PHP/HTML files.

1. Open tag MUST be on its own line and MUST be followed by a blank line

```
o i.e. <?php ← ← ...
```

2. Close tag MUST NOT be used in PHP files

```
o i.e. no ?>
```

3. Open/close tag MUST be on one line in PHP/HTML files

```
○ i.e. <?php ... ?>
```

4. Short open tag MUST NOT be used

```
o i.e. <? → <?php
```

5. Short echo tag SHOULD be used in PHP/HTML files

```
\circ i.e. <?php echo \rightarrow <?=
```

#### ▲ Table of Contents

## 1. Open Tag

Open tag MUST be on its own line and MUST be followed by a blank line.

# **X** Incorrect

```
<?php print_welcome_message();</pre>
```

▶ Incorrect because <?php is not on its own line.

```
<?php
print_welcome_message();</pre>
```

▶ Incorrect because <?php is not followed by a blank line.

### **✓** Correct

```
<?php
print_welcome_message();</pre>
```

#### ▲ PHP Tags

## 2. Close Tag

Close tag MUST NOT be used in PHP files.

# X Incorrect

```
<?php
print_welcome_message();
?>
```

▶ Incorrect because ?> was used.

### **✓** Correct

```
<?php
print_welcome_message();</pre>
```

#### ▲ PHP Tags

# 3. Open/Close Tag

Open/close tag MUST be on one line in PHP/HTML files.

# X Incorrect

▶ Incorrect because <?php and ?> are not on one line.

## **✓** Correct

### ▲ PHP Tags

# 4. Short Open Tag

Short open tag MUST NOT be used.

# X Incorrect

```
<?
print_welcome_message();</pre>
```

▶ Incorrect because <? was used instead of <?php.

## **✓** Correct

```
<?php
print_welcome_message();</pre>
```

#### ▲ PHP Tags

## 5. Short Echo Tag

Short echo tag SHOULD be used in PHP/HTML files.

#### ~ Acceptable

▶ Acceptable, but <?= should be used over <?php echo when possible.

### **✓** Preferred

### ▲ PHP Tags

## 4. End of File

This section describes how every PHP file must end.

End-of-file comment:

• MUST be included at the end of a file

```
o i.e. // E0F
```

MUST be on its own line

```
o i.e. ← // E0F
```

MUST be surrounded by blank lines

```
○ i.e. ... ← ← // EOF ←
```

# **X** Incorrect

<?php

```
print_welcome_message();

Incorrect because // EOF is missing.

<?php
print_welcome_message(); // EOF

Incorrect because // EOF is not on its own line.

<?php
print_welcome_message();
// EOF</pre>
```

▶ Incorrect because // EOF is not surrounded by blank lines.

## **✓** Correct

```
<?php
print_welcome_message();
// EOF</pre>
```

#### ▲ Table of Contents

## 5. Namespaces

This section describes how to use one or more namespaces and their naming convention.

 Namespace declaration MUST be the first statement and MUST be followed by a blank line

```
○ i.e. <?php ← ← namespace MyCompany; ← ← ...
```

- 2. Namespace name MUST start with a capital letter and MUST be camelcase
  - e.g. namespace MyCompany;
- 3. Multiple namespaces MUST use the curly brace syntax

```
○ i.e. namespace MyCompany { ... }
```

4. Magic constant SHOULD be used to reference the namespace name

```
o i.e. __NAMESPACE__
```

#### ▲ Table of Contents

## 1. Namespace Declaration

Namespace declaration MUST be the first statement and MUST be followed by a blank line.

# X Incorrect

```
<?php
print_welcome_message();
namespace MyCompany;
// EOF</pre>
```

▶ Incorrect because namespace MyCompany; is not the first statement.

```
<?php
namespace MyCompany;
print_welcome_message();
// EOF</pre>
```

▶ Incorrect because namespace MyCompany; is not followed by a blank line.

## **✓** Correct

```
<?php
namespace MyCompany;
print_welcome_message();
// EOF</pre>
```

#### ▲ Namespaces

## 2. Namespace Name

Namespace name MUST start with a capital letter and MUST be camelcase.



```
<?php
namespace myCompany;
// EOF</pre>
```

▶ Incorrect because myCompany does not start with a capital letter.

```
<?php
namespace MyCOMPANY;
// EOF</pre>
```

▶ Incorrect because MyCOMPANY is not written in camelcase.

## **✓** Correct

```
<?php
namespace MyCompany;
// EOF</pre>
```

#### ▲ Namespaces

## 3. Multiple Namespaces

Multiple namespaces MUST use the curly brace syntax.

# X Incorrect

```
<?php
namespace MyCompany\Model;
namespace MyCompany\View;
// EOF</pre>
```

▶ Incorrect because there are two namespaces and the curly brace syntax was not used.

```
✓ Correct
```

#### **▲** Namespaces

## 4. Magic Constant

Magic constant SHOULD be used to reference the namespace name.

### ~ Acceptable

▶ Acceptable, but using \_\_NAMESPACE\_\_ instead of MyCompany\View is preferred.

## **✓** Preferred

```
<?php
namespace MyCompany\Model {
     // ModuleOne body
}</pre>
```

#### ▲ Namespaces

# 6. Comments

This section describes how comments should be formatted and used.

1. Single-line comments MUST use two forward slashes

```
○ e.g. // My comment
```

2. Multi-line comments MUST use the block format

```
○ i.e. /** ← * My comment ← */
```

3. Header comments SHOULD use the block format

```
○ i.e. /** ↵ * Name of code section ↩ */
```

4. Divider comments SHOULD use the block format with asterisks in between

```
o i.e. /** 75 asterisks */
```

5. Comments MUST be on their own line

```
o i.e. ← // My comment
```

- 6. Blocks of code SHOULD be explained or summarized
  - e.g. // Compare user accounts from export against expired accounts in system
- 7. Ambiguous numbers MUST be clarified

```
○ e.g. // 1,000 processable records per hour API limit
```

- 8. External variables MUST be clarified
  - e.g. // Database object included in file.php

#### ▲ Table of Contents

## 1. Single-line Comments

Single-line comments MUST use two forward slashes.

# 

```
<?php
/* This is a comment */</pre>
```

// EOF

▶ Incorrect because it uses /\* and \*/ for a single-line comment.

#### **✓** Correct

```
<?php
// This is a comment
// EOF</pre>
```

#### **▲** Comments

### 2. Multi-line Comments

Multi-line comments MUST use the block format.

# 

```
<?php
// This is a
// multi-line
// comment
// EOF</pre>
```

▶ Incorrect because it uses // for a multi-line comment.

## **✓** Correct

```
<?php

/**
  * This is a
  * multi-line
  * comment
  */

// EOF</pre>
```

#### **▲** Comments

#### 3. Header Comments

Header comments SHOULD use the block format.

```
<?php

/**

 * Global application settings
 */

define('SETTING_ONE', '');
define('SETTING_TWO', '');
define('SETTING_THREE', '');

// EOF</pre>
```

#### **▲** Comments

### 4. Divider Comments

Divider comments SHOULD use the block format with 75 asterisks in between.

# X Incorrect

▶ Incorrect because it uses # instead of \* .

```
<?php
/**********/
// EOF
```

▶ Incorrect because it uses 10 instead of 75 \* .



#### **▲** Comments

#### 5. Comments

Comment MUST be on their own line.

## **X** Incorrect

```
<?php
print_welcome_message(); // Prints welcome message
// EOF</pre>
```

▶ Incorrect because // Prints welcome message is not on its own line.

## **✓** Correct

```
<?php
// Prints welcome message
print_welcome_message();
// EOF</pre>
```

#### **▲** Comments

### 6. Blocks of Code

Blocks of code SHOULD be explained or summarized.

#### ~ Acceptable

```
<?php
foreach ($users as $user) {
        if ($expr1) {
                // ...
        } else {
                // ...
        if ($expr2) {
                // ...
        } elseif ($expr3) {
                // ...
        } else {
               // ...
        }
        // ...
}
// EOF
```

▶ Acceptable, but block of code should be explained or summarized.

### **✓** Preferred

```
<?php
/**
 * Get active website bloggers with profile photo for author page.
 * If no photo exists on website, check intranet.
 * If neither location has photo, send user email to upload one.
 */
foreach ($users as $user) {
        if ($expr1) {
                // ...
        } else {
                // ...
        if ($expr2) {
                // ...
        } elseif ($expr3) {
                // ...
        } else {
               // ...
        // ...
}
```

// EOF

#### **▲** Comments

# 7. Ambiguous Numbers

Ambiguous numbers MUST be clarified.

# X Incorrect

▶ Incorrect because 1000 is not clarified.

## **✓** Correct

#### **▲** Comments

### 8. External Variables

External variables MUST be clarified.

# X Incorrect

```
<?php
include_once 'some-file.php';</pre>
```

▶ Incorrect because source of \$users is not clear.

### **✓** Correct

#### **▲** Comments

## 7. Includes

This section describes the format for including and requiring files.

```
1. Include/require once SHOULD be used
```

```
o i.e. include → include_once, require → require_once
```

2. Parenthesis MUST NOT be used

```
○ e.g. include_once('file.php'); → include_once 'file.php';
```

3. Purpose of include MUST be documented with a comment

```
○ e.g. // Provides WordPress environment ← require_once 'wp-load.php';
```

#### ▲ Table of Contents

## 1. Include/Require Once

Include/require once SHOULD be used.

#### ~ Acceptable

```
continuity
include 'some-file.php';
require 'some-other-file.php';

// EOF
```

▶ Acceptable, but \_once should be appended to include and require if possible.

### **✓** Preferred

```
<?php
include_once 'some-file.php';
require_once 'some-other-file.php';
// EOF</pre>
```

#### ▲ Includes

#### 2. Parenthesis

Parenthesis MUST NOT be used.

# X Incorrect

```
<?php
include_once('some-file.php');
require_once('some-other-file.php');
// EOF</pre>
```

▶ Incorrect because include\_once and require\_once are used with parenthesis.

## ✓ Correct

```
<?php
include_once 'some-file.php';
require_once 'some-other-file.php';</pre>
```

// EOF

#### ▲ Includes

## 3. Purpose of Include

Purpose of include MUST be documented with a comment.

# **X** Incorrect

```
<?php
require_once 'some-file.php';
// EOF</pre>
```

▶ Incorrect because there is no comment as to what some-file.php does or provides.

### **✓** Correct

```
<?php
// Provides XYZ framework
require_once 'some-file.php';
// EOF</pre>
```

#### **▲** Includes

# 8. Formatting

This section outline various, general formatting rules related to whitespace and text.

- 1. Line length MUST NOT exceed 80 characters, unless it is text
  - o i.e. |---- 80+ chars ----| → refactor expression and/or break list values
- 2. Line indentation MUST be accomplished using tabs

```
\circ i.e. function func() { \leftrightarrow \rightarrow ... \leftrightarrow }
```

3. Blank lines SHOULD be added between logical blocks of code

```
∘ i.e. ... ↵ ↵ ...
```

4. Text alignment MUST be accomplished using spaces

```
\circ i.e. \$var \cdot \cdot = ...;
```

5. **Trailing whitespace** MUST NOT be present after statements or serial comma break or on blank lines

```
o i.e. no ... ⋅ ⋅ ₊ ⋅ ₊ ...
```

6. Keywords MUST be all lowercase

```
• e.g. false, true, null, etc.
```

- 7. Variables MUST be all lowercase and words MUST be separated by an underscore
  - e.g. \$welcome\_message
- 8. Global variables MUST be declared one variable per line and MUST be indented after the first

```
o e.q. global $var1, ← → $var2;
```

- 9. Constants MUST be all uppercase and words MUST be separated by an underscoree.g. WELCOME\_MESSAGE
- 10. Statements MUST be placed on their own line and MUST end with a semicolon

```
o e.q. welcome_message();
```

11. Operators MUST be surrounded by a space

```
e.g. $total = 15 + 7; , $var .= '';
```

12. Unary operators MUST be attached to their variable or integer

```
○ e.g. $index++, --$index
```

13. Concatenation period MUST be surrounded by a space

```
○ e.g. echo 'Read:' . $welcome_message;
```

14. Single quotes MUST be used

```
○ e.g. echo 'Hello, World!';
```

15. **Double quotes** SHOULD NOT be used

```
○ e.g. echo "Read: $welcome_message"; → echo 'Read: ' . $welcome_message;
```

#### ▲ Table of Contents

## 1. Line Length

Line length MUST NOT exceed 80 characters, unless it is text.

## **X** Incorrect

▶ Incorrect because expression exceeds 80 characters and should be refactored.

```
<?php

$my_movies = array('Slumdog Millionaire', 'Silver Linings Playbook', 'The Lives c

// EOF</pre>
```

▶ Incorrect because arguments exceed 80 characters and should be placed on their own line.

#### ~ Acceptable

```
<?php

$text = 'Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec posuere r

// EOF</pre>
```

▶ Acceptable because line length was exceeded due to text, not code.

### **✓** Correct

```
<?php
$my_movies = array(
        'Slumdog Millionaire',
        'Silver Linings Playbook',
        'The Lives of Others',
        'The Shawshank Redemption'
);
$has_all_movies = true;
foreach($my_movies as $my_movie) {
        if(!in_array($my_movie, $movies)) {
                $has_all_movies = false;
        }
}
if($has_all_movies) {
        // if body
}
```

### **▲** Formatting

### 2. Line Indentation

Line indentation MUST be accomplished using tabs.

## **X** Incorrect

```
<?php
function print_welcome_message() {
    echo WELCOME_MESSAGE;
}
// EOF</pre>
```

▶ Incorrect because spaces are used to indent echo welcome\_message; instead of a tab.

## **✓** Correct

```
<?php
function print_welcome_message() {
        echo WELCOME_MESSAGE;
}
// EOF</pre>
```

### **▲** Formatting

### 3. Blank Lines

Blank lines SHOULD be added between logical blocks of code.

#### ~ Acceptable

```
<?php
$my_movies = array(
        'Slumdog Millionaire',
        'Silver Linings Playbook',
        'The Lives of Others',
        'The Shawshank Redemption'
);
$has_all_movies = true;
foreach($my_movies as $my_movie) {
        if(!in_array($my_movie, $movies)) {
                $has_all_movies = false;
        }
if($has_all_movies) {
        // if body
}
// EOF
```

▶ Acceptable, but can make scanning code more difficult.

### **✓** Preferred

```
<?php
$my_movies = array(
        'Slumdog Millionaire',
        'Silver Linings Playbook',
        'The Lives of Others',
        'The Shawshank Redemption'
);
$has_all_movies = true;
foreach($my_movies as $my_movie) {
        if(!in_array($my_movie, $movies)) {
                $has_all_movies = false;
        }
}
if($has_all_movies) {
        // if body
}
// EOF
```

### ▲ Formatting

### 4. Text Alignment

Text alignment MUST be accomplished using spaces.

# X Incorrect

▶ Incorrect because tabs are used instead of spaces to vertically align => .

▶ Incorrect because spaces are used instead of tabs to indent array keys.

## **✓** Correct

// EOF

### **▲** Formatting

## 5. Trailing Whitespace

Trailing whitespace MUST NOT be present after statements or serial comma break or on blank lines.

# **X** Incorrect

```
<?php

$quotes_exist = false;

print_welcome_message();

// EOF

$ Incorrect because there are two spaces after $quotes_exist = false; .

<?php</pre>
```

 $\+\+$  Incorrect because there is a space after  $\+\+$  ,  $\+$ 

```
<?php
$quotes_exist = false;
print_welcome_message();
// EOF</pre>
```

Incorrect because there are two spaces on the blank line below \$quotes\_exist =
 false; .

### **✓** Correct

### **▲** Formatting

## 6. Keywords

Keywords MUST be all lowercase.

## **X** Incorrect

```
<?php

$is_true = FALSE;
$is_false = TRUE:
$movie_quote = NULL;
// EOF</pre>
```

▶ Incorrect because FALSE, TRUE and NULL are not all lowercase.



```
<?php

$is_true = false;
$is_false = true:
$movie_quote = null;
// EOF</pre>
```

### **▲** Formatting

#### 7. Variables

Variables MUST be all lowercase and words MUST be separated by an underscore.

# X Incorrect

```
<?php

$welcome_Message = '';
$Welcome_Message = '';
$WELCOME_MESSAGE = '';
// EOF</pre>
```

 $\$  Incorrect because \$welcome\_Message , \$Welcome\_Message and \$WELCOME\_MESSAGE are not all lowercase.

```
<?php
$welcomemessage = '';
// EOF</pre>
```

▶ Incorrect because welcome and message are not separated with an underscore.

## **✓** Correct

```
<?php
$welcome_message = '';</pre>
```

// EOF

#### **▲** Formatting

### 8. Global Variables

Global variables MUST be declared one variable per line and MUST be indented after the first.

## **X** Incorrect

```
<?php
global $app_config, $cache, $db_connection;
// EOF</pre>
```

▶ Incorrect because \$app\_config , \$cache and \$db\_connection are together on one line.

```
<?php
global $app_config,
$cache,
$db_connection;
// EOF</pre>
```

▶ Incorrect because \$db\_connection and \$cache are not indentend once.

## **✓** Correct

### **▲** Formatting

#### 9. Constants

Constants MUST be all uppercase and words MUST be separated by an underscore.

## **X** Incorrect

```
<?php

define('welcome_Message', '');
define('Welcome_Message', '');
define('welcome_message', '');
// EOF</pre>
```

▶ Incorrect because welcome\_Message, Welcome\_Message and welcome\_message are not all uppercase.

```
<?php
define('WELCOMEMESSAGE', '');
// EOF</pre>
```

▶ Incorrect because welcome and message are not separated with an underscore.

## **✓** Correct

```
<?php
define('WELCOME_MESSAGE', '');
// EOF</pre>
```

#### **▲** Formatting

#### 10. Statements

Statements MUST be placed on their own line and MUST end with a semicolon.



<?php

```
$quotes_exist = false; print_welcome_message();
// EOF
```

Incorrect because \$quotes\_exist = false; and print\_welcome\_message(); are on
 one line.

▶ Incorrect because print\_welcome\_message() is missing a semicolon.

### **✓** Correct

### **▲** Formatting

## 11. Operators

Operators MUST be surrounded a space.

# X Incorrect

```
<?php

$total=3+14;
$string='Hello, World! ';
$string.='Today is a good day!';

// EOF</pre>
```

▶ Incorrect because there is no space surrounding the = , + or .= sign.

### **✓** Correct

```
<?php

$total = 3 + 14;
$string = 'Hello, World! ';
$string .= 'Today is a good day!';

// EOF</pre>
```

### **▲** Formatting

## 12. Unary Operators

Unary operators MUST be attached to their variable or integer.

# X Incorrect

```
<?php
$index ++;
-- $index;
// EOF</pre>
```

▶ Incorrect because there is a space before ++ and after -- .

## **✓** Correct

```
<?php
$index++;
--$index;
// EOF</pre>
```

### **▲** Formatting

### 13. Concatenation Period

Concatenation period MUST be surrounded by a space.

```
X Incorrect
```

```
<?php
echo 'Hello, World! Today is '.$date.'!';
// EOF</pre>
```

 $\+$  Incorrect because there is no space surrounding  $\+$  . .

## **✓** Correct

```
<?php
echo 'Hello, World! Today is ' . $date . '!';
// EOF</pre>
```

### **▲** Formatting

# 14. Single Quotes

Single quotes MUST be used.

# X Incorrect

```
<?php
echo "Hello, World!";
// EOF</pre>
```

▶ Incorrect because "Hello, World!" is not written with single quotes.

## **✓** Correct

```
<?php
echo 'Hello, World!';
// EOF</pre>
```

#### **▲** Formatting

### 15. Double Quotes

Double quotes SHOULD NOT be used.

~ Acceptable

```
<?php
echo "Hello, World! Today is $date!";
// EOF</pre>
```

▶ Acceptable, but burries the \$date variable, which is why single quotes are preferred.

```
<?php
echo "Hello, World! He's watching movies and she's reading books.";
// EOF</pre>
```

4 Acceptable when long pieces of text have apostrophies that would need to be escaped.

## ✓ Preferred

```
<?php
echo 'Hello, World! Today is ' . $date . '!';
echo 'Hello, World! He\'s watching movies and she\'s reading books.';
// EOF</pre>
```

## ▲ Formatting

## 9. Functions

This section describes the format for function names, calls, arguments and declarations.

- 1. Function name MUST be all lowercase and words MUST be separated by an underscore
  - e.g. function welcome\_message() {
- 2. Function prefix MUST start with verb
  - e.g. get\_ , add\_ , update\_ , delete\_ , convert\_ , etc.
- 3. Function call MUST NOT have a space between function name and open parenthesis
  - o e.g. func();
- 4. Function arguments
  - MUST NOT have a space before the comma
  - MUST have a space after the comma
  - MAY use line breaks for long arguments
  - MUST then place each argument on its own line
  - MUST then indent each argument once
  - MUST be ordered from required to optional first
  - MUST be ordered from high to low importance second
  - MUST use descriptive defaults
  - MUST use type hinting
  - e.g. func(\$arg1, \$arg2 = 'asc', \$arg3 = 100);
- 5. **Function declaration** MUST be documented using phpDocumentor tag style and SHOULD include
  - Short description
  - Optional long description, if needed
  - @access: private or protected (assumed public)
  - o @author: Author name
  - o @global: Global variables function uses, if applicable
  - o @param: Parameters with data type, variable name, and description
  - o @return: Return data type, if applicable
- 6. Function return
  - MUST occur as early as possible
  - MUST be initialized prior at top
  - MUST be preceded by blank line, except inside control statement
  - o i.e. if (!\$expr) { return false; }

#### ▲ Table of Contents

#### 1. Function Name

Function name MUST be all lowercase and words MUST be separated by an underscore.



```
<?php
get_Welcome_Message();
Get_Welcome_Message();
GET_WELCOME_MESSAGE();
// EOF</pre>
```

▶ Incorrect because the function names are not all lowercase.

```
<?php
getwelcomemessage();
// EOF</pre>
```

▶ Incorrect because get , welcome and message are not separated with an underscore.

## **✓** Correct

```
<?php
get_welcome_message();
// EOF</pre>
```

#### **▲** Functions

# 2. Function Prefix

Function prefix MUST start with verb.

# X Incorrect

```
<?php
active_users();
network_location($location1, $location2);
widget_form($id);</pre>
```

// EOF

▶ Incorrect because functions are not prefixed with a verb.

### **✓** Correct

```
<?php
get_active_users();
move_network_location($location1, $location2);
delete_widget_form($id);
// EOF</pre>
```

#### **▲** Functions

## 3. Function Call

Function call MUST NOT have a space between function name and open parenthesis.

# X Incorrect

```
<?php
print_welcome_message ();
// EOF</pre>
```

# **✓** Correct

```
<?php
print_welcome_message();
// EOF</pre>
```

#### **▲** Functions

# 4. Function Arguments

### Function arguments:

- MUST NOT have a space before the comma
- MUST have a space after the comma
- MAY use line breaks for long arguments
- MUST then place each argument on its own line
- MUST then indent each argument once
- MUST be ordered from required to optional first
- MUST be ordered from high to low importance second
- MUST use descriptive defaults
- MUST use type hinting

# X Incorrect

```
<?php
  my_function($arg1 , $arg2 , $arg3);
  // EOF
▶ Incorrect because there is a space before , .
  <?php
  my_function($arg1,$arg2,$arg3);
  // EOF
▶ Incorrect because there is no space after , .
  <?php
  my_other_function($arg1_with_a_really_long_name,
          $arg2_also_has_a_long_name,
          $arg3
  );
  // EOF
```

4 Incorrect because \$arg1\_with\_a\_really\_long\_name is not on its own line.

```
<?php

my_other_function(
$arg1_with_a_really_long_name,
$arg2_also_has_a_long_name,
$arg3
);

// EOF</pre>
```

▶ Incorrect because arguments are not indented once.

▶ Incorrect because \$type, \$order and \$limit are not in order of required to optional.

▶ Incorrect because \$limit , \$order and \$type are not in order of importance.

▶ Incorrect because true is not a descriptive default for \$order.

▶ Incorrect because \$users and \$office are missing their data type.

### **✓** Correct

#### **▲** Functions

### 5. Function Declaration

Function declaration MUST be documented using phpDocumentor tag style and SHOULD include:

- Short description
- Optional long description, if needed
- @access: private or protected (assumed public)
- @author: Author name
- @global: Global variables function uses, if applicable

- @param: Parameters with data type, variable name, and description
- @return: Return data type, if applicable

# X Incorrect

▶ Incorrect because my\_function is not documented.

## **✓** Correct

```
<?php
/**
 * Get photo from blog author
 * Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut id volutpat
 * orci. Etiam pharetra eget turpis non ultrices. Pellentesque vitae risus
 * sagittis, vehicula massa eget, tincidunt ligula.
 * @access private
 * @author Firstname Lastname
 * @global object $post
 * @param int $id Author ID
 * @param string $type Type of photo
 * @param int $width Photo width in px
 * @param int $height Photo height in px
 * @return object Photo
function my_function($id, $type, $width, $height) {
        // ...
        return $Photo;
}
// EOF
```

#### **▲** Functions

## 6. Function Return

#### Function return:

- MUST occur as early as possible
- MUST be initialized prior at top
- MUST be preceded by blank line, except inside control statement

# X Incorrect

▶ Incorrect because get\_object does not return as early as possible.

▶ Incorrect because \$movies is not initialized at top.

// EOF

▶ Incorrect because return \$movies is not preceded by blank line.

### **✓** Correct

```
<?php
function get_object() {
        $var = false;
        if (!$expr1) {
                return $var;
        }
        if (!$expr2) {
                return $var;
        }
        // ...
        return $var;
}
// EOF
<?php
function get_movies() {
        $movies = array();
        // ...
        return $movies;
}
// EOF
```

#### **▲** Functions

# 10. Control Structures

This section defines the layout and usage of control structures. Note that this section is separated into rules that are applicable to all structures, followed by specific rules for individual structures.

• **Keyword** MUST be followed by a space

```
○ e.g. if (, switch (, do {, for (
```

- Opening parenthesis MUST NOT be followed by a space
  - e.g. (\$expr, (\$i
- Closing parenthesis MUST NOT be preceded by a space
  - e.g. \$expr) , \$i++) , \$value)
- Opening brace MUST be preceded by a space and MUST be followed by a new line
  - e.g. \$expr) { , \$i++) {
- **Structure body** MUST be indented once and MUST be enclosed with curly braces (no shorthand)
  - o e.g. if (\$expr) { ← → ... ← }
- Closing brace MUST start on the next line
  - o i.e. ... ← }
- Nesting MUST NOT exceed three levels
  - e.g. no if (\$expr1) { if (\$expr2) { if (\$expr3) { if (\$expr4) { ...
    }}}}

In addition to the rules above, some control structures have additional requirements:

#### 1. If, Elseif, Else

- o elseif MUST be used instead of else if
- elseif and else MUST be between } and { on one line

#### 2. Switch, Case

- Case statement MUST be indented once
  - i.e.  $\rightarrow$  case 1:
- Case body MUST be indented twice
  - i.e.  $\rightarrow$  func();
- Break keyword MUST be indented twice
  - i.e.  $\rightarrow$  break;
- Case logic MUST be separated by one blank line
  - i.e. case 1: ... break; ← ← case 2: ... break;
- 3. While, Do While
- 4. For, Foreach
- 5. Try, Catch
  - catch MUST be between } and { on one line

### ▲ Table of Contents

## 1. If, Elseif, Else

- elseif MUST be used instead of else if
- elseif and else MUST be between } and { on one line

```
X Incorrect
```

▶ Incorrect because else if was used instead of elseif.

▶ Incorrect because elseif and else are not between } and { on one line.

▶ Incorrect because structure body is not wrapped in curly braces.



```
<?php
if ($expr1) {
        // if body
} elseif ($expr2) {
        // elseif body
} else {
        // else body
}
if ($expr1) {
        $result1 = true;
} else {
        $result1 = false;
}
if ($expr2) {
        $result2 = true;
}
// EOF
```

#### **▲** Control Structures

## 2. Switch, Case

- Case statement MUST be indented once
- Case body MUST be indented twice
- Break keyword MUST be indented twice
- Case logic MUST be separated by one blank line

# **X** Incorrect

```
<?php
switch ($expr) {
  case 0:
        echo 'First case, with a break';
        break;

case 1:
        echo 'Second case, which falls through';
        // no break

case 2:
  case 3:
  case 4:
        echo 'Third case, return instead of break';</pre>
```

```
return;
  default:
          echo 'Default case';
          break;
  }
  // EOF
Incorrect because case 0 thru default are not indented once.
  <?php
  switch ($expr) {
          case 0:
          echo 'First case, with a break';
          break;
          case 1:
          echo 'Second case, which falls through';
          // no break
          case 2:
          case 3:
          case 4:
          echo 'Third case, return instead of break';
          return;
          default:
          echo 'Default case';
          break;
  }
  // EOF
Incorrect because echo, break and return are not indented twice.
  <?php
  switch ($expr) {
          case 0:
                  echo 'First case, with a break';
                  break;
          case 1:
                  echo 'Second case, which falls through';
                  // no break
          case 2:
          case 3:
          case 4:
```

Incorrect because case 0, case 1 thru case 4, and default are not separated by one blank line.

### **✓** Correct

```
<?php
switch ($expr) {
        case 0:
                echo 'First case, with a break';
                break;
        case 1:
                echo 'Second case, which falls through';
                // no break
        case 2:
        case 3:
        case 4:
                echo 'Third case, return instead of break';
                return;
        default:
                echo 'Default case';
                break;
}
// EOF
```

#### **▲** Control Structures

## 3. While, Do While

```
✓ Correct
```

```
<?php
while ($expr) {</pre>
```

```
// structure body
}
do {
     // structure body;
} while ($expr);
// EOF
```

#### **▲** Control Structures

# 4. For, Foreach

## **✓** Correct

#### **▲** Control Structures

# 5. Try, Catch

# X Incorrect

// EOF

▶ Incorrect because catch is not between } and { on one line.

### Correct

#### ▲ Control Structures

## 11. Classes

This section describes class files, names, definitions, properties, methods and instantiation.

- 1. Class file MUST only contain one definition and MUST be prefixed with class-
  - $\circ$  i.e. class User  $\rightarrow$  class-user.php , class Office  $\rightarrow$  class-office.php
- 2. Class namespace MUST be defined and MUST include vendor name
  - e.g. namespace MyCompany\Model; , namespace MyCompany\View; , namespace MyCompany\Controller;
- 3. Class name MUST start with a capital letter and MUST be camelcase
  - o e.g. MyCompany
- 4. Class documentation MUST be present and MUST use phpDocumentor tag style
  - i.e. @author, @global, @package
- 5. Class definition MUST place curly braces on their own line
  - o i.e. class User ← { ← ... ← }
- 6. Class properties
  - MUST follow variable standards
  - MUST specify visibility
  - MUST NOT be prefixed with an underscore if private or protected
  - e.g. \$var1; , private \$var2; , protected \$var3;

#### 7. Class methods

- MUST follow function standards
- MUST specify visibility
- o MUST NOT be prefixed with an underscore if private or protected
- e.g. func1(), private func2(), protected func3()

#### 8. Class instance

- MUST start with capital letter
- MUST be camelcase
- MUST include parenthesis
- o e.g. \$user = new User(); , \$0fficeProgram = new OfficeProgram();

#### ▲ Table of Contents

#### 1. Class File

Class file MUST only contain one definition and MUST be prefixed with class-.

# X Incorrect

```
Filename: class-user.php

    <?php

    namespace MyCompany\Model;

class User
{
         // ...
}

class Office
{
         // ...
}

// EOF</pre>
```

Incorrect because User and Office are defined in one file.

```
Filename: user.php

<?php

namespace MyCompany\Model;
```

 $\+\+\+$  Incorrect because filename is not prefixed with  $\,$  class- .

## **✓** Correct

```
Filename: class-user.php

<?php

namespace MyCompany\Model;

class User
{
         // ...
}

// EOF</pre>
```

```
<?php
namespace MyCompany\Model;</pre>
```

Filename: class-office.php

```
class Office {
// ...
}
```

#### **▲** Classes

# 2. Class Namespace

Class namespace MUST be defined and MUST include vendor name.



▶ Incorrect because there is no namespace defined.

```
<?php
namespace Model;
class User
{
         // ...
}
// EOF</pre>
```

▶ Incorrect because vendor name is missing in the namespace name.

# **✓** Correct

```
<?php
namespace MyCompany\Model;
class User
{
         // ...
}
// EOF</pre>
```

#### **▲** Classes

## 3. Class Name

Class name MUST start with a capital letter and MUST be camelcase.



▶ Incorrect because officeProgram does not start with a capital letter.

▶ Incorrect because Officeprogram is not camelcase.

# **✓** Correct

```
<?php
namespace MyCompany\Model;
class OfficeProgram
{
         // ...
}
// EOF</pre>
```

#### **▲** Classes

## 4. Class Documentation

Class documentation MUST be present and MUST use phpDocumentor tag style.

```
X Incorrect
```

▶ Incorrect because user is missing documentation.

▶ Incorrect because User is missing phpDocumentor tags.

## **✓** Correct

```
<?php

namespace MyCompany\View;

/**
 * User View
 *
 * @author Firstname Lastname
 * @global object $post
 * @package MyCompany\API
 */
class User
{
    // ...
</pre>
```

```
}
// EOF
```

#### **▲** Classes

#### 5. Class Definition

Class definition MUST place curly braces on their own line.

# X Incorrect

▶ Incorrect because { is not on its own line.

# **✓** Correct

```
<?php
namespace MyCompany\Model;
class User
{
         // ...
}
// EOF</pre>
```

#### **▲** Classes

# 6. Class Properties

Class properties:

MUST follow variable standards

- MUST specify visibility
- MUST NOT be prefixed with an underscore if private or protected

# X Incorrect

▶ Incorrect because visibility is not specified for \$var1 , \$var2 and \$var3 .

```
<?php
namespace MyCompany\Model;
class User
{
    public $var1;
    protected $_var2;
    private $_var3;
}
// EOF</pre>
```

▶ Incorrect because protected and private properties are prefixed with \_ .

# **✓** Correct

```
<?php
namespace MyCompany\Model;</pre>
```

```
class User
{
     public $var1;
     protected $var2;
     private $var3;
}
// EOF
```

#### **▲** Classes

### 7. Class Methods

Class methods:

- MUST follow function standards
- MUST specify visibility
- MUST NOT be prefixed with an underscore if private or protected

# X Incorrect

```
<?php
namespace MyCompany\Model;
class User
        // ...
        // Public
        function get_var1() {
                return $this->var1;
        }
        // Protected
        function get_var2() {
                return $this->var2;
        }
        // Private
        function get_var3() {
                return $this->var3;
        }
}
// EOF
```

```
get_var3() .
 <?php
 namespace MyCompany\Model;
 class User
       // ...
       public function get_var1() {
             return $this->var1;
       }
       protected function _get_var2() {
             return $this->var2;
       }
       private function _get_var3() {
             return $this->var3;
       }
 }
 // EOF
```

 $\$  Incorrect because protected and private methods are prefixed with  $\_$  .

## **✓** Correct

```
<?php

namespace MyCompany\Model;

class User
{
    // ...

    public function get_var1() {
        return $this->var1;
    }

    protected function get_var2() {
        return $this->var2;
    }

    private function get_var3() {
        return $this->var3;
    }
}
```

```
}
// EOF
```

#### **▲** Classes

#### 8. Class Instance

Class instance:

- MUST follow variable standards
- MUST include parenthesis

# **X** Incorrect

```
<?php

$office_program = new OfficeProgram;
// EOF</pre>
```

▶ Incorrect because new OfficeProgram is missing parenthesis.

## **✓** Correct

```
<?php

$office_program = new OfficeProgram();
// EOF</pre>
```

#### **▲** Classes

# 12. Best Practices

- 1. Variable initialization SHOULD occur prior to use and SHOULD occur early
  - e.g. \$var1 = ''; , \$var2 = 0;
- 2. Initialization/declaration order
  - o MUST lead with globals, follow with constants, conclude with local variables
  - MUST lead with properties and follow with methods in classes

- MUST lead with public , follow with protected , conclude with private methods in classes
- SHOULD be alphabetical within their type

```
o i.e. global $var1; , define('VAR2', ''); , $var3 = 0;
```

3. Globals SHOULD NOT be used

```
○ i.e. no global $var;
```

4. Explicit expressions SHOULD be used

```
○ e.g. if ($expr === false), while ($expr !== true)
```

- 5. **E\_STRICT** reporting MUST NOT trigger errors
  - o i.e. do not use deprecated functions, etc.

#### ▲ Table of Contents

### 1. Variable Initialization

Variable initialization SHOULD occur prior to use and SHOULD occur early.

~ Acceptable

```
<?php
$movies = get_movies();
// EOF</pre>
```

▶ Acceptable, but \$movies should be initialized prior to use.

▶ Acceptable, but \$movies should be initialized earlier.

## ✓ Preferred

#### **▲** Best Practices

## 2. Initialization/Declaration Order

Initialization/declaration order:

- MUST lead with globals, follow with constants, conclude with local variables
- MUST lead with properties and follow with methods in classes
- MUST lead with public, follow with protected, conclude with private methods in classes
- SHOULD be alphabetical within their type

# **Incorrect**

```
<?php

define('ENVIRONMENT', 'PRODUCTION');

$id = 0;

global $app_config;

// EOF</pre>
```

▶ Incorrect because \$app\_config is not first, ENVIRONMENT not second, and \$id not third.

```
<?php
namespace MyCompany\Model;
class Office</pre>
```

```
public function get_name() {
                  // ...
          }
          private $name;
  }
  // EOF

    Incorrect because get_name() is declared before $name.

  <?php
  namespace MyCompany\Model;
  class Office
          private $id;
          private $name;
          private $status;
          private function get_name() {
                  // ...
          }
          public function get_id() {
                  // ...
          }
          protected function get_status() {
                  // ...
          }
  }
  // EOF
↳ Incorrect because get_id() is not first, get_status() not second, and get_name()
not third.
~ Acceptable
  <?php
  global $db_connection,
          $app_config,
```

\$cache;

```
define('MODE', 1);
define('ENVIRONMENT', 'PRODUCTION');

$id = 0;
$firstname = '';
$lastname = '';
// EOF
```

▶ Acceptable, but the globals and constants should be in alphabetical order.

▶ Acceptable, but get\_actors should be declared before get\_movies .

### **✓** Correct

```
namespace MyCompany\Model;
class Office
        private $id;
        private $name;
        private $status;
        public function get_id() {
                // ...
        }
        protected function get_status() {
                // ...
        }
        private function get_name() {
                // ...
        }
}
// EOF
```

## **✓** Preferred

#### **▲** Best Practices

## 3. Globals

Globals SHOULD NOT be used.

### ~ Acceptable

<?php

```
$pdo = new PDO('mysql:host=localhost;dbname=test', $user, $pass);

function get_user($id) {
        global $pdo;
        // ...
}

// EOF
```

▶ Acceptable, but global variables should be avoided.

## **✓** Preferred

#### **▲** Best Practices

# 4. Explicit Expressions

Explicit expressions SHOULD be used.

### ~ Acceptable

▶ Acceptable, but === could be used here instead.

### **✓** Preferred

#### **▲** Best Practices

## 5. E\_STRICT Reporting

E\_STRICT reporting MUST NOT trigger errors.

# X Incorrect

```
<?php
$firstname = call_user_method('get_firstname', $User);
// EOF</pre>
```

▶ Incorrect because call\_user\_method (deprecated) will cause E\_STRICT warning.

## **✓** Correct

```
<?php

$firstname = call_user_func(array($User, 'get_firstname'));
// EOF</pre>
```

#### **▲** Best Practices

#### ▲ Table of Contents

Inspired in part by style guides from:

Codelgniter, Drupal, Horde, Pear, PSR-1, PSR-2, Symfony, and WordPress.

iyawa-revo commented on Aug 16, 2018

Thank a lot for this great work

andrewkimbowa commented on Aug 28, 2018 • edited ▼

Thank you very much for this work.

shamimmoeen commented on Sep 1, 2018



joemaller commented on Sep 24, 2018 • edited ▼

Thank you for this. One note: Semicolons are redundant in short-echo tags since closing php tags ?> imply a semicolon. ref

ItsJustATypo commented on Jan 26, 2019 • edited ▼

This guide is helpful. I think there's a typo in section 8/Formatting, rule 10/Statements, The rule states:

10. Statements

Statements MUST be placed on their own line and MUST end with a semicolon.

and gives this as an example as being **INCORRECT** because it's missing a semicolon:

```
<div>
<h1><?= print_welcome_message() ?></h1>
</div>
ly Incorrect because print_welcome_message() is missing a semicolon.
```

but the example given as **CORRECT** is also missing a semicolon:

```
<h1><?= print_welcome_message() ?></h1>
```

Following the rule, it should be:

```
<h1><?= print_welcome_message(); ?></h1>
```

hwmatthewa commented on Dec 14, 2019 • edited ▼

Function name MUST be all lowercase and words MUST be separated by an underscore e.g. function welcome\_message() {

This directly contradicts PSR1:

'Method names MUST be declared in camelCase.' https://www.php-fig.org/psr/psr-1/#1-overview

Edit: This is not actually true. Methods and functions are different. Methods are on classes, and as such, have separate naming conventions.

#### ypicot commented on May 4, 2020

Great work, with usefull examples.

One small correction: acording to PSR-12, "Code MUST use an indent of 4 spaces for each indent level, and MUST NOT use tabs for indenting."

https://www.php-fig.org/psr/psr-12/#24-indenting

#### arcanisgk commented on Jun 20, 2020

Great work, with usefull examples.

One small correction: acording to PSR-12, "Code MUST use an indent of 4 spaces for each indent level, and MUST NOT use tabs for indenting."

https://www.php-fig.org/psr/psr-12/#24-indenting

hey, then what do we do; we follow the psr-12; or we omit it; and continue to use references from different standards;

#### It would be convenient to add the reference at the bottom of each Guideline:

REF-> Use Reference from PSR-1.

REF-> Use Reference from Sinfony Recommendation.

REF-> Use Reference from Wordpress Recommendation.

#### Instead of putting it at the end:

Inspired in part by style guides from:

Codelgniter, Drupal, Horde, Pear, PSR-1, PSR-2, Symfony, and WordPress.

#### notnian commented on Jun 26, 2020



What a nice guide 😃 👍

But tell me why using // EOF comment at the end of the file is a great thing?

#### lutfiddin-ux commented on Jan 14, 2021

that was a great help, thanks a lot

kuroyza commented on May 8, 2021

Thank you so much for sharing this great guide 👍 👍



arcanisgk commented on May 8, 2021

I think this should already have an update. As good as it is, it was last updated in 2014 (it's already been 7 years wow) ...

ryansechrest commented on May 8, 2021

Oh yeah, this is very old, and I've changed my mind on a few things since I wrote this.



kurahaupo commented on Jun 13, 2021 • edited ▼

#### @hwmatthewa

(function names must be lower snake case)

This directly contradicts PSR1:

'Method names MUST be declared in camelCase.' https://www.php-fig.org/psr/psr-1/#1-overview

Style guides don't all have to be the same; if they were, there would be no point, "the one true way" would simply be part of the language specification.

The purpose of a style guide is to make the code easier to read for its intended audience. For people who are accustomed to say, Java, camelCase makes perfect sense, but to people accustomed to say, traditional C, it looks ugly-crazy-awful.

It makes more sense to have the same guideline for choosing names used across all the languages in a project; that's the reason you find some C projects written using camelCase (when traditionally it's snake\_case), and some PHP projects using snake\_case (when PSR says to use camelCase).

The important thing is that a project has a style guide, and that the code follows it.

kurahaupo commented on Jun 13, 2021 • edited ▼

@notnian because PSR says so, but I'm blowed if I know why it does either.

Maybe they're worried about files being truncated? Seems like a weird way to 'fix' that though.

If you really want a syntactic closure at the end of each file, put a {} block around the whole file, and simply say "don't put anything after the last closing "}".

hwmatthewa commented on Jun 14, 2021

**@kurahaupo** When I initially wrote that comment two years ago, I misunderstood that they were referring to functions outside of classes and ones defined on classes - methods. With that context, my comment is irrelevant.

sontranduc commented on Apr 15, 2022

People still use camelcase for variables