Chairbear
Digital Learning

Symfony Console Application

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Table Of Contents

Introduction

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This book assumes you understand the basics of PHP, however, it does iterate over some of the basic syntax and rules of the language in the prerequisite section. If you are not familiar with PHP, we would recommend reading our PHP Essentials book.

This book documents the basic Symfony Console Application that this guide is paired with. Including some basic PHP functions commonly used to check for palindromes, anagrams and pangrams.

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Prerequisite PHP

PHP stands for hypertext preprocessor, and it is a very popular server side programming language.

```
<!DOCTYPE html>

<html>

<body>

<?php include 'header.php';?>


<h1>PHP Implementation Example</h1>

<p>Some paragraph text.</p>

<?php

$myVariable = "Jem";

echo "My name is " . $myVariable;

ECHO "My name is " . $MYVARIABLE;

EChO "My name is " . $myVariable;

?>


<footer>

<?php echo Date("Y");?>

</footer>

</body>

</html>
```

Case Sensitivity

In PHP keywords, classes, functions, and user-defined functions are not case-sensitive, however variable names are!

In the above example, 'echo', 'ECHO' and 'ECho' are all legal (valid) writings of the echo keyword, however the middle echo statement will output the error message '`Undefined variable: MYVARIABLE`' as the variable name is case-sensitive, and we did not create a variable called 'MYVARIBLE'. The other two echo statements will output : '`My name is Jem`'.

Ending Statements

All PHP statements should end with a semicolon (;).

Comments

Comments are lines in a script that are not executed. They are often used to describe a piece of code, to let other programmers know what a bit of code does, or as a helpful reminder when looking back over code.

```
 // single line comment

 # also a single line comment

 /* A

Multi

Line

Comment

 */
```

To comment out multiple lines of code at once, use `CTRL + /` (control key plus forward slash). This will place double slashes before the selected code lines. To remove it, press `CTRL + /` again.

How To Implement

PHP script is executed on the server, and the plain HTML result is sent back to the browser. You can implement PHP in one of two ways.

Directly

To implement PHP code directly in a HTML file, place the opening and closing PHP scripting tags where you need the code, and write your PHP statements within it.

```
<!DOCTYPE html>

<html>

<body>

<h1>PHP Implementation Example</h1>

<?php

echo "Hello World!";

?>

</body>

</html>
```

This method is recommended for a page that has unique PHP code.

Include & Require

When you want to include the same PHP, HTML, or text on multiple pages of a website, you should use the include method of implementation.

The include (and require) statement takes all the code that exists in the specified file and *includes* (copies) it into the file that uses the include statement.

A great example of usage would be for the header and footer of a website. Insead of writing the header and footer over and over again on every page for the website, simply write the header and footer content in separate .php files, and use the include or require keyword on the webpages to implement them. This also makes updating the header and footer content much easier, as with this method, you'd only have to change the content in one file for it to be changed across the whole site that uses it, verses having to go on every single page and having to update it manually. This could cause problems, as you could miss updating a page.

```
<!DOCTYPE html>

<html>
```

```
<body>

<?php include 'header.php';?> //header



<h1>PHP Implementation Example</h1>

<p>Some paragraph text.</p>



<?php include 'footer.php';?> //footer

</body>

</html>
```

Include and require work in a similar way, the only difference is how they handle errors.

Require will produce a fatal error (E_COMPILE_ERROR) and stop the script, whilst include will only produce a warning (E_WARNING) and the script will continue. Although it only seems like a small difference, this is important when choosing to use require or include. if you want the execution to go on and show users output, even if the include file is missing, use the include statement, else for key files such as those important to security, use the require keyword to prevent compromising the applications integrity.

Installation

Step 1:

CD into the folder you'd like to download the project into and run *git clone*

Step 2:

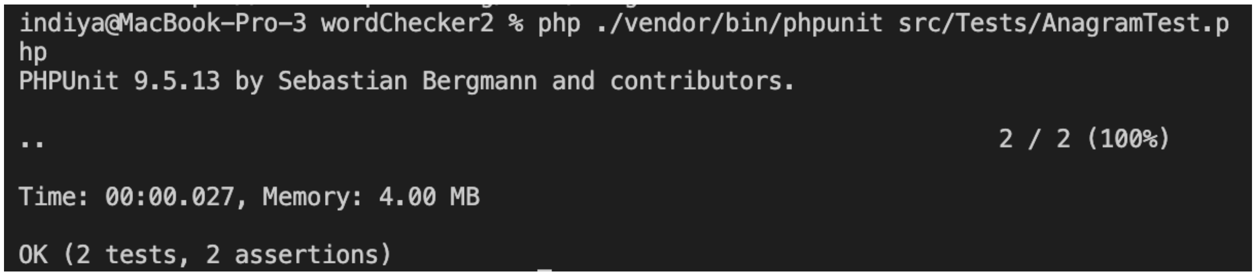
CD into the project folder and run *composer install* to install all dependencies needed for the project.

Running The Application

Run Tests

Tests are run using PHPUnit, which means you can use the following terminal commands.

Command	Description
php ./vendor/bin/phpunit src/Tests	To run all test files
php ./vendor/bin/phpunit src/Tests/[name]	To run an individual test file such php ./vendor/bin/phpunit src/Tests/AnagramTest.php

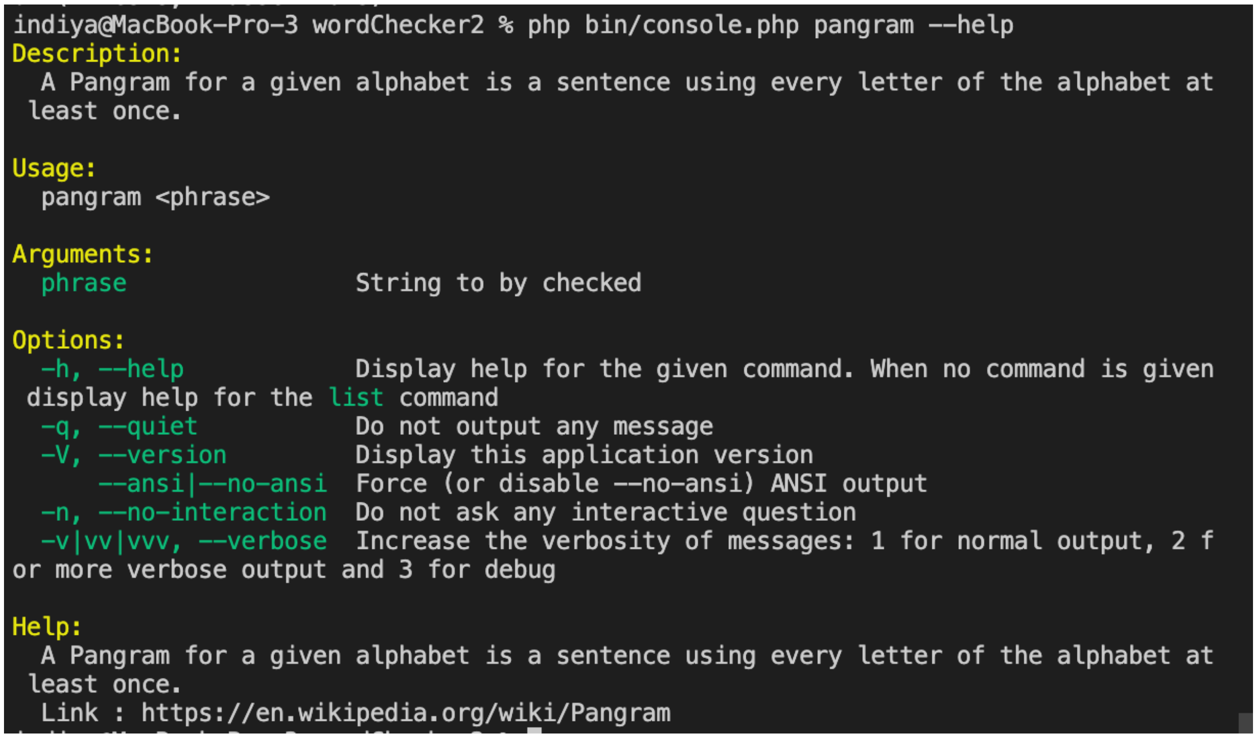


```
indiya@MacBook-Pro-3 wordChecker2 % php ./vendor/bin/phpunit src/Tests/AnagramTest.p
hp
PHPUnit 9.5.13 by Sebastian Bergmann and contributors.

..                                                                  2 / 2 (100%)

Time: 00:00.027, Memory: 4.00 MB

OK (2 tests, 2 assertions)
```

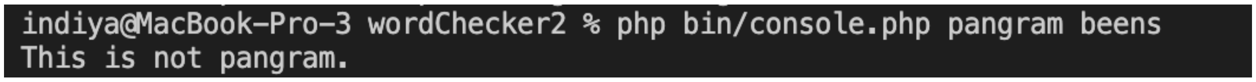
Run Console Applications

Console applications can be run with the following terminal commands.

Command	Description
php bin/console.php [name] <arguments>	To run the specific console app
php bin/console.php [name] --help	To get information about the console app



```
indiya@MacBook-Pro-3 wordChecker2 % php bin/console.php pangram --help
Description:
  A Pangram for a given alphabet is a sentence using every letter of the alphabet at
 least once.

Usage:
  pangram <phrase>

Arguments:
  phrase                String to by checked

Options:
  -h, --help            Display help for the given command. When no command is given
 display help for the list command
  -q, --quiet           Do not output any message
  -V, --version         Display this application version
      --ansi|--no-ansi  Force (or disable --no-ansi) ANSI output
  -n, --no-interaction  Do not ask any interactive question
  -v|vv|vvv, --verbose  Increase the verbosity of messages: 1 for normal output, 2 f
or more verbose output and 3 for debug

Help:
  A Pangram for a given alphabet is a sentence using every letter of the alphabet at
 least once.
  Link : https://en.wikipedia.org/wiki/Pangram
```



```
indiya@MacBook-Pro-3 wordChecker2 % php bin/console.php pangram beens
This is not pangram.
```