สมเกียรติ ปุ๋ยสูงเนิน
somkiat.cc

Test Driven Development

START HERE

WRITE A TEST

RED

TEST FAILS

CLEAN CODE

WORKABLE CODE HOW TO IMPROVE?

REFACTOR

GREEN

WRITE CODE TO MAKE TEST PASS

CODE PASSES TEST

คิดก่อนทำ

Test Driven Development

START HERE — RED — WRITE A TEST

TEST FAILS

WRITE CODE TO MAKE TEST PASS — GREEN

CODE PASSES TEST

REFACTOR — WORKABLE CODE HOW TO IMPROVE?

CLEAN CODE

https://phpunit.de/
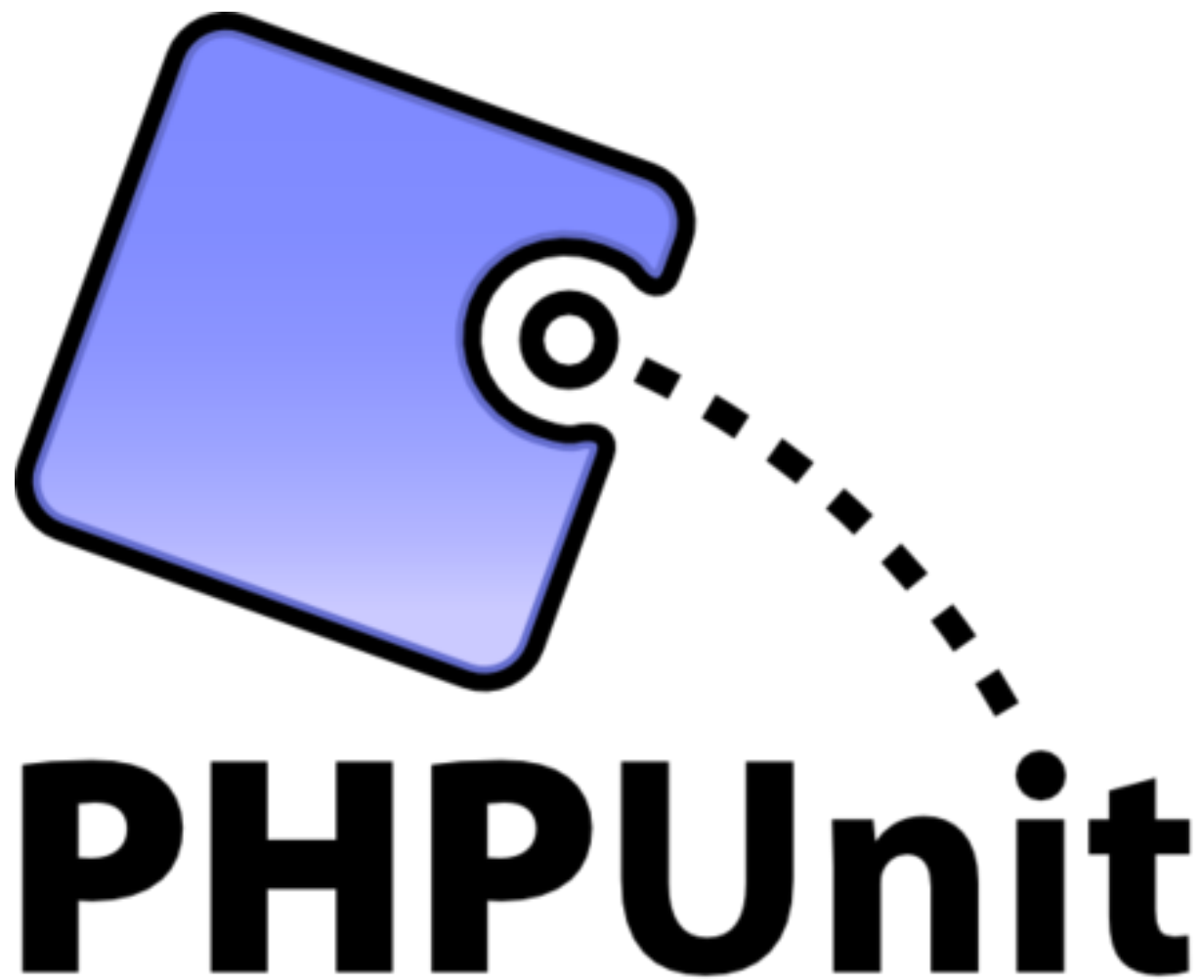
COMPOSER

Dependency Manager for PHP

https://getcomposer.org/

การติดตั้ง

$curl -sS https://getcomposer.org/installer | php

สำหรับ Windows

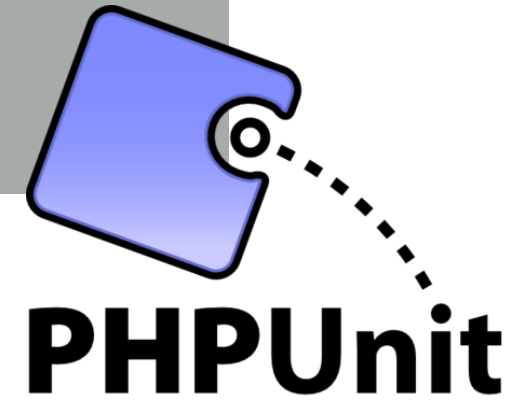https://getcomposer.org/Composer-Setup.exe

เริ่มใช้งาน

$composer -V

เริ่มใช้งาน

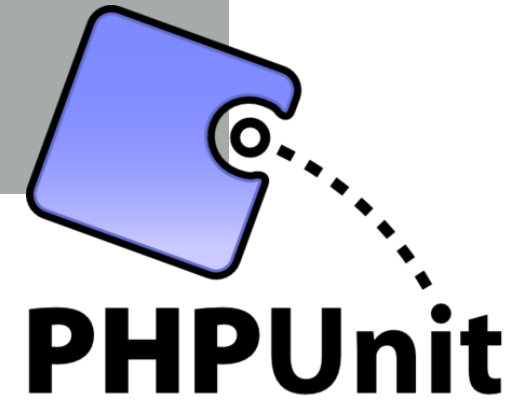**PHPUnit**

สร้างไฟล์ composer.json

```
{
    "require-dev": {
        "phpunit/phpunit": "4.8.*"
    }
}
```
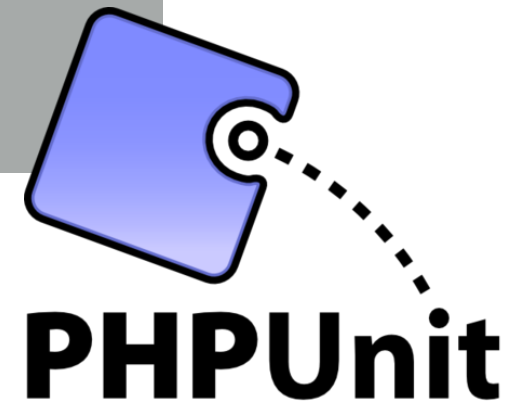
เริ่มใช้งาน

$composer install

เริ่มใช้งาน

$./vendor/bin/phpunit

เริ่มเขียน test กันเถอะ

PHPUnit

โครงสร้างของ project

1. **tests**
2. **src**

คิดก่อนทำ

START HERE — RED — WRITE A TEST

CLEAN CODE — TEST FAILS

WORKABLE CODE HOW TO IMPROVE? — REFACTOR — GREEN — WRITE CODE TO MAKE TEST PASS

CODE PASSES TEST

Test Driven Development

เริ่มเขียน test กันเถอะ

PHPUnit

```php
<?php
class HelloTest extends PHPUnit_Framework_TestCase {
    public function testXXX() {
        $expectedResult = "Hello, somkiat";
        $hello = new Hello();

        $actualResult = $hello->sayHi("somkiat");

        $this->assertEquals($expectedResult, $actualResult);
    }
}
?>
```
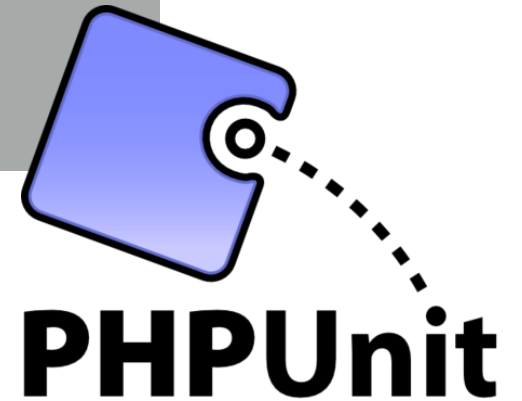
Assertion

assertTrue($x)   assertFalse($x)
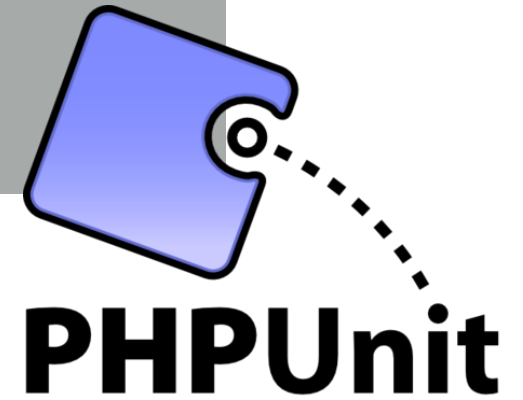
assertNull($x)   assertNotNull($x)

assertEquals($x, $y)   assertNotEquals($x, $y)

Run test

$./vendor/bin/phpunit tests

FAIL

สร้าง Production code

```php
1  <?php
2  class Hello {
3    ....
4  }
5  ?>
```

Run test

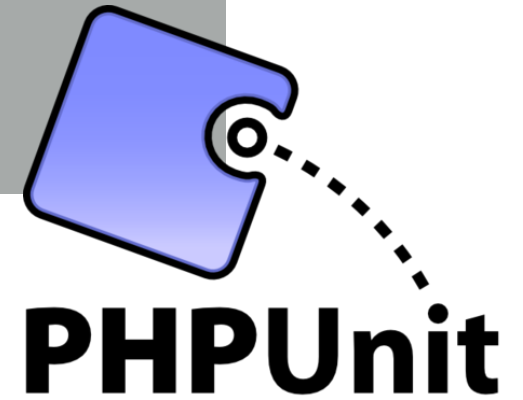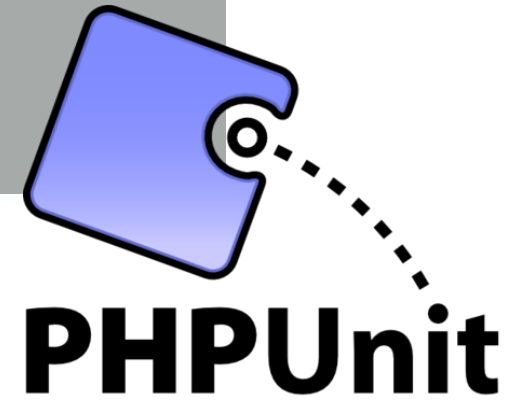$./vendor/bin/phpunit tests

FAIL

สร้าง Production code

```php
<?php
class Hello {
    function sayHi($name) {
        return "";
    }
}
?>
```
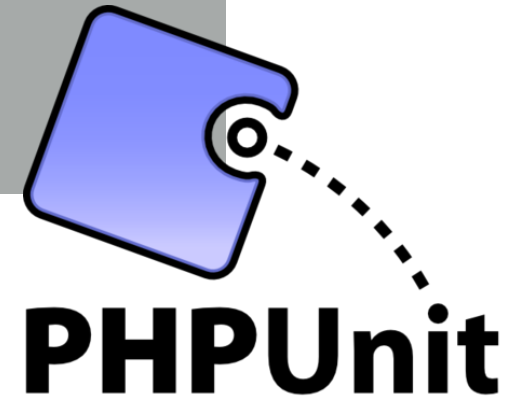
Run test

$./vendor/bin/phpunit tests

FAIL

สร้าง Production code

```php
1  <?php
2  class Hello {
3      function sayHi($name) {
4          return "Hello, " . $name;
5      }
6  }
7  ?>
```
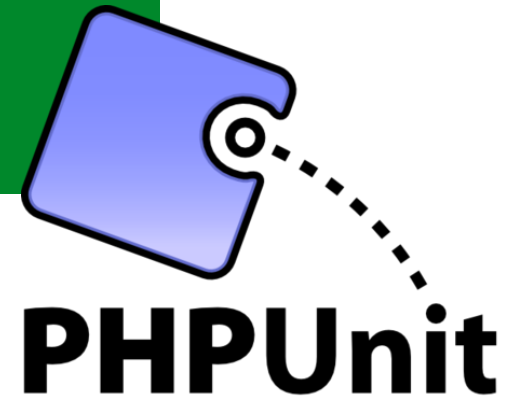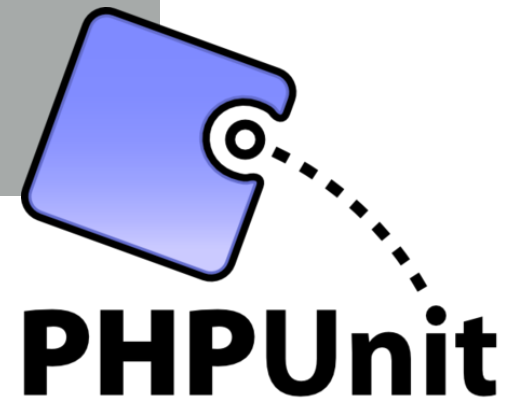
Run test

$./vendor/bin/phpunit tests

PASS

Run test with color

$./vendor/bin/phpunit tests --colors

PASS

ใช้งาน phpunit.xml

$./vendor/bin/phpunit

Auto-loading

```php
<?php
require("src/Hello.php");

class HelloTest extends PHPUnit_Framework_TestCase {
    public function testXXX() {
        $expectedResult = "Hello, somkiat";
        $hello = new Hello();

        $actualResult = $hello->sayHi("somkiat");

        $this->assertEquals($expectedResult, $actualResult);
    }
}
?>
```

Auto-loading

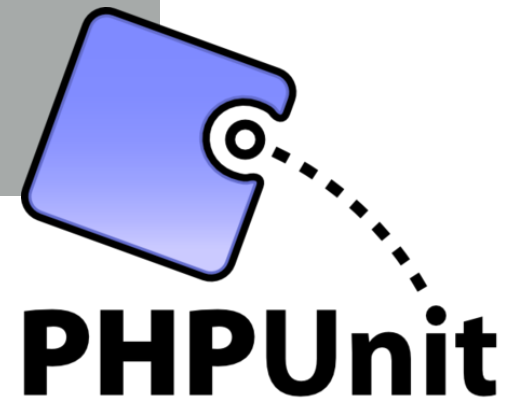**แก้ไขไฟล์ composer.json**

```json
{
    "require-dev": {
        "phpunit/phpunit": "4.8.*"
    },
    "autoload": {
        "classmap": ["src/"]
    }
}
```
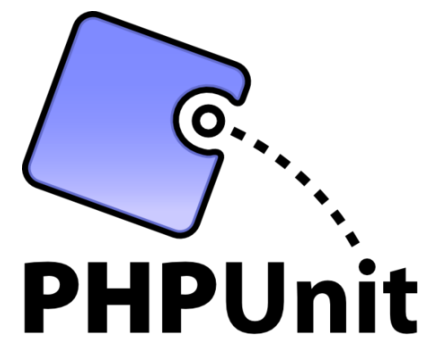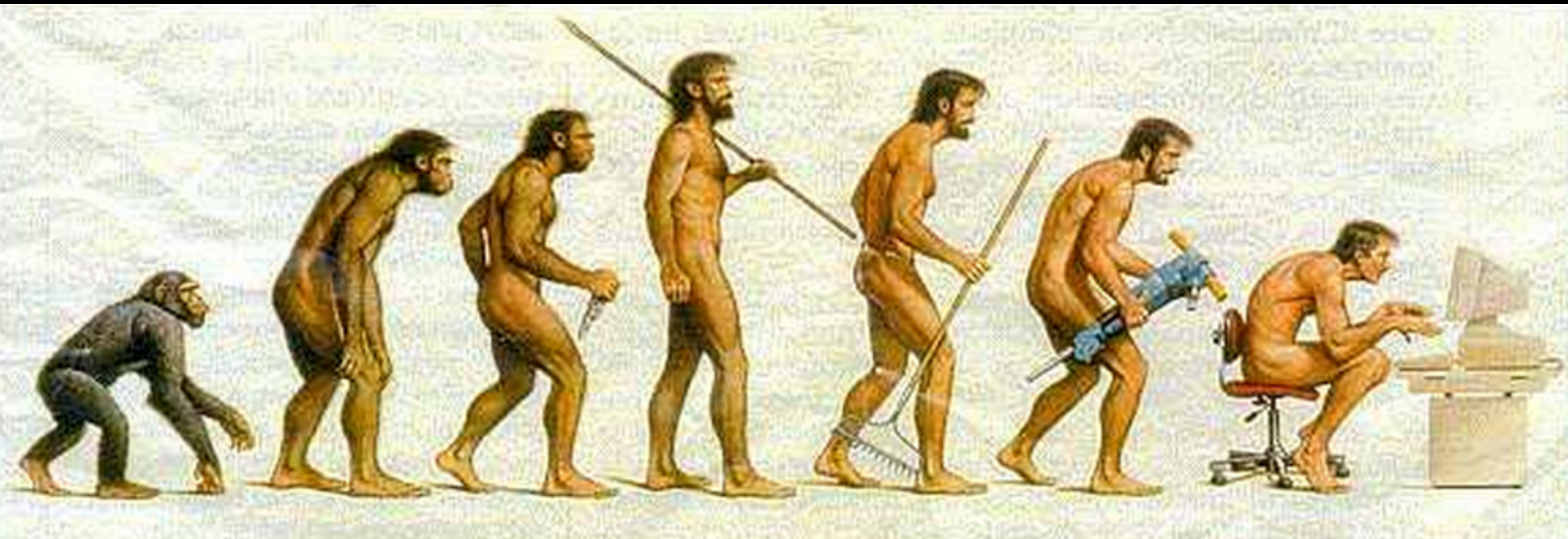
เริ่มใช้งาน

$composer update

Run test again

$./vendor/bin/phpunit

PASS

Siam Chamnankit Co., Ltd., Odd-e (Thailand) Co., Ltd. and Alliance

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