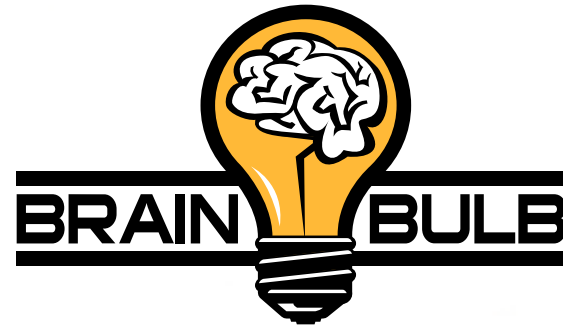


Agile PHP Testing

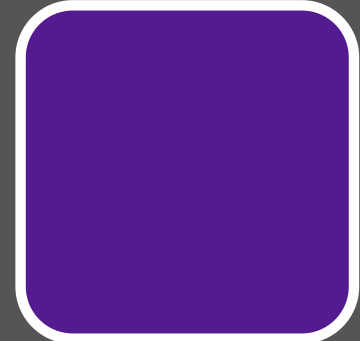
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About This Talk

- All about testing.
- Focuses on simple, practical approaches.
- Best for people who don't currently test.
- Doesn't try to convert you.
- Does try to show you.

About Testing

- All about reliability.
- Also helps give you confidence and freedom.
- Lets you be more productive.
- Probably close to what you're already doing.

Who Tests?

- Do you test?
- Do you let your tests drive the design (TDD)?
- Do you plan to test your next app?

What Is Agile?

- Individuals and interactions > processes and tools
- Working software > comprehensive docs
- Customer collaboration > contract negotiation
- Responding to change > following a plan

What Is Agile?

- Testing > not testing

Show Me the Code!

```
<?php

$auth = new myAuth;

$auth->username = 'chris';
$auth->password = 'mypass';

if ($auth->checkLogin()) {
    /* SUCCESS */
} else {
    /* FAILURE */
}

?>
```

Show Me the Code!

```
<?php

include 'test-more.php';

plan(1);

$auth = new myAuth;

{
    /* Test Valid Credentials */
    $auth->username = 'chris';
    $auth->password = 'mypass';

    ok($auth->checkLogin(), 'test valid credentials');
}

?>
```

test-more.php

- Mimics Test::More, a Perl library.
- As closely as possible in PHP.
- Outputs TAP.
- Test Anything Protocol.

TAP

1..8

ok 1 - get RealName

ok 2 - get UserName

ok 3 - get Email

ok 4 - get Permission

ok 5 - Not Realname Suzie Doe

ok 6 - Not Username sdoe

ok 7 - Not email suz@doe.com

ok 8 - Not Permission 0

TAP History

- Once upon a time (2004)
- In a land far, far away (Portland)

TAP Now

- Catchy Name == Marketing
- C (libtap), JavaScript (TestSimple.js)
- PHP (test-more.php, phpt, PHPUnit, and Simple-Test)

Why TAP?

- Simple and descriptive.
- Lots of great tools already use it.
- Apache-Test
- Ergo, you can "upgrade" your testing later.

test-more.php

- Offers simple functions for testing.
- `ok()` can be used to test anything.
- Other functions are better for some cases.
- `is()`, `isnt()`, `like()`, etc.
- (These match the names in `Test::More`.)

is()

```
<?php  
  
$hash = new myHash;  
  
$hash->input = 'chris';  
  
if ($hash->getHash() == 'fhqwgads') {  
    /* SUCCESS */  
} else {  
    /* FAILURE */  
}  
  
?>
```

is()

```
<?php  
  
include 'test-more.php';  
  
plan(1);  
  
$hash = new myHash;  
  
{  
    /* Test Valid Hash */  
    $hash->input = 'chris';  
    is($hash->getHash(), 'fhqwgads');  
}  
  
?>
```

is() Failure

```
1..1
not ok 1
#       Failed test (test.php at line 12)
#           got: 'fhgwgads'
#           expected: 'fhqwgads'
# Looks like you failed 1 tests of 1.
```

Apache-Test

- What if you need a web environment?
- Put the test file in document root and bang on it with a browser.
 - That sucks.
- Put the test file in document root and bang on it with a custom client that aggregates results.
 - That also sucks.

Apache-Test

- Apache-Test handles this all for you:
 - configure httpd
 - start the server
 - run the tests
 - stop the server
 - issue a report (better than raw TAP)

Apache-Test

- If you use a TAP-compliant library, upgrading to Apache-Test is easy.
- Installing and configuring it is a one-time expense.

Moral of the Story

- Testing is good.
- You're probably already doing it.
- You just need to formalize your practices.
- The goal is to create a test suite.
- Code, test, code, test, code, test, ...

More Information

- test-more.php
<http://shiflett.org/code/test-more.php>
- Power PHP Testing
<http://brainbulb.com/talks/power-php-testing.pdf>
- My Business Web Site
<http://brainbulb.com/>
- My Personal Web Site and Blog
<http://shiflett.org/>



Thanks for Listening!



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