

THE DEVELOPER'S CONFERENCE

Entregando Bons Resultados com BDD

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Agenda

- Contexto da Aplicação
- Tipos de Testes
- Behavior Driven Development
- Behat
- Mink

Contexto da Aplicação



- Arquitetura
- Infraestrutura
- Documentação
- Fluxo de Desenvolvimento
- Políticas!!



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Tipos de Testes

- Testes Unitários
- Testes de Integração
 - Testes de Fumaça
- Testes Funcionais

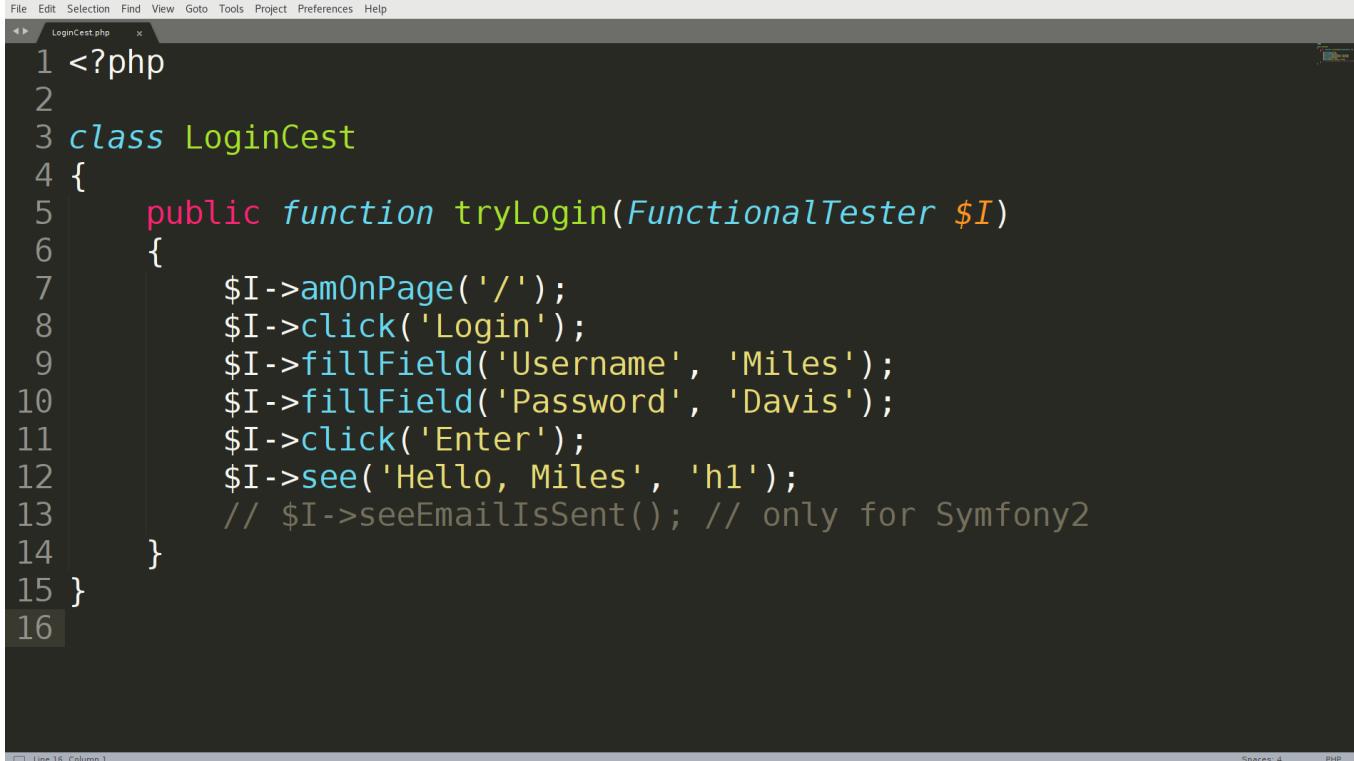
Testes Unitários



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```
File Edit Selection Find View Goto Tools Project Preferences Help
StackTest.php x
1 <?php
2
3 use PHPUnit\Framework\TestCase;
4
5 class StackTest extends TestCase
6 {
7     public function testPushAndPop()
8     {
9         $stack = [];
10        $this->assertEquals(0, count($stack));
11        array_push($stack, 'foo');
12        $this->assertEquals('foo', $stack[count($stack)-1]);
13        $this->assertEquals(1, count($stack));
14        $this->assertEquals('foo', array_pop($stack));
15        $this->assertEquals(0, count($stack));
16    }
17 }
18
Line 18, Column 1
Spaces: 4
PHP
```

Testes de Integração



A screenshot of a code editor window titled "LoginCest.php". The window has a dark theme and displays the following PHP code:

```
File Edit Selection Find View Goto Tools Project Preferences Help
LoginCest.php x
1 <?php
2
3 class LoginCest
4 {
5     public function tryLogin(FunctionalTester $I)
6     {
7         $I->amOnPage('/');
8         $I->click('Login');
9         $I->fillField('Username', 'Miles');
10        $I->fillField('Password', 'Davis');
11        $I->click('Enter');
12        $I->see('Hello, Miles', 'h1');
13        // $I->seeEmailIsSent(); // only for Symfony2
14    }
15 }
16
```

The status bar at the bottom shows "Line 16, Column 1" and "Spaces: 4".

Testes de Fumaça



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```
File Edit Selection Find View Goto Tools Project Preferences Help
LoginCest.php x
1 <?php
2
3 class LoginCest
4 {
5     public function tryHomepage(FunctionalTester $I)
6     {
7         $I->amOnPage('/');
8         $I->see('Meu Título', 'h1');
9     }
10 }
11

Line 11, Column 1
Spaces: 4
PHP
```

Testes Funcionais



```
File Edit Selection Find View Goto Tools Project Preferences Help
LoginCest.php x
1 <?php
2
3 class LoginCest
4{
5     public function tryLogin(FunctionalTester $I)
6    {
7        $I->amOnPage('/login');
8        $I->fillField('username', 'davert');
9        $I->fillField('password', 'qwerty');
10       $I->click('LOGIN');
11       $I->see('Welcome, Davert!');
12    }
13 }
14

Line 14, Column 1
Spaces: 4
PHP
```

BDD



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- O que são bons resultados?
- TDD vs. BDD
- Stories
- Features
- Scenarios

Stories



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Title (one line describing the story)

Narrative:

As a [role]

I want [feature]

So that [benefit]

Acceptance Criteria: (presented as Scenarios)

Scenario 1: Title

Given [context]

 And [some more context]...

When [event]

Then [outcome]

 And [another outcome]...

Scenario 2: ...

Feature\$



- Definir
- Priorizar
- Detalhar
- Implementar



Scenarios

- Given: estado inicial
- When: ação tomada
- Then: resultado esperado

Gherkin



```
listing_command.feature
1 Feature: Listing command
2   In order to change the structure of the folder I am currently in
3   As a UNIX user
4   I need to be able see the currently available files and folders there
5
6   Scenario: Listing two files in a directory
7     Given I am in a directory "test"
8     And I have a file named "foo"
9     And I have a file named "bar"
10    When I run "ls"
11    Then I should get:
12      """
13      bar
14      foo
15      """
16
```

Behat - Instalação



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```
$ php composer.phar require --dev behat/behat
```



```
$ vendor/bin/behat -V
```



```
$ vendor/bin/behat --init
```

Behat - Context



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```
// features/bootstrap/FeatureContext.php

use Behat\Behat\Context\SnippetAcceptingContext;
use Behat\Gherkin\Node\PyStringNode;
use Behat\Gherkin\Node\TableNode;

class FeatureContext implements SnippetAcceptingContext
{
    /**
     * Initializes context.
     */
    public function __construct()
    {
    }
}
```



- Driver
 - Goutte
 - Selenium
- Session
- Page / DocumentElement
- Element / NodeElement

Mink - Instalação



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```
{  
    "require": {  
        "behat/behat": "~2.5",  
        "behat/mink-extension": "~1.3",  
        "behat/mink-goutte-driver": "~1.2",  
        "behat/mink-selenium2-driver": "~1.2"  
    },  
    "config": {  
        "bin-dir": "bin/"  
    }  
}
```

Mink - Instalação



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```
# behat.yml
default:
    extensions:
        Behat\MinkExtension\Extension:
            base_url: http://en.wikipedia.org
            goutte: ~
            selenium2: ~
```

Mink - Usando JavaScript



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@javascript

Scenario: Searching for a page with autocomplete

Given I am on "/wiki/Main_Page"

When I fill in "search" with "Behavior Driv"

And I wait for the suggestion box to appear

Then I should see "Behavior-driven development"

Mink - Usando JavaScript



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```
@javascript
Scenario: Searching for a page with autocompletion
  Given I am on "/wiki/Main_Page"
  When I fill in "search" with "Behavior Driv"
  And I wait for the suggestion box to appear
  Then I should see "Behavior Driven Development"
```

```
3 scenarios (2 passed, 1 undefined)
12 steps (10 passed, 1 skipped, 1 undefined)
0m23.198s
```

You can implement step definitions for undefined steps with these snippets:

```
/**
 * @Given /^I wait for the suggestion box to appear$/
 */
public function iWaitForTheSuggestionBoxToAppear()
{
    throw new Pending();
}
```

Mink - MinkContext



```
<?php

use Behat\Behat\Context\ClosedContextInterface,
    Behat\Behat\Context\TranslatedContextInterface,
    Behat\Behat\Context\BehatContext,
    Behat\Behat\Exception\PendingException;
use Behat\Gherkin\Node\PyStringNode,
    Behat\Gherkin\Node\TableNode;

use Behat\MinkExtension\Context\MinkContext;

/**
 * Features context.
 */
class FeatureContext extends MinkContext
{}
```

Adiel Cristo

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<https://phpba.com.br>



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Links



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<https://behat.org>

<https://behat.org/en/latest>

<https://github.com/Behat/MinkExtension>

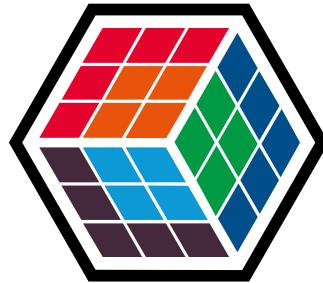
<https://behat-api-extension.readthedocs.io>

<https://www.seleniumhq.org>

<https://dannorth.net/whats-in-a-story>

<https://testingbot.com/support/getting-started/behat-mink.html>

<https://codeception.com>



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