



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



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

Tipos de Testes

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



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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



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```
File Edit Selection Find View Goto Tools Project Preferences Help
LoginCest.php
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
```

Line 16, Column 1 Spaces: 4 PHP

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



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```
File Edit Selection Find View Goto Tools Project Preferences Help
LoginCest.php
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



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



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Scenarios

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



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Gherkin



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```
listing_command.feature x
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()
    {
    }
}
```

Mink



- 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)
```

```
@m23.198s
```

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



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<?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://github.com/arcristo>

<https://twitter.com/adielcristo>

<https://www.adielcristo.com>

<https://phpba.com.br>



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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