

# Testing Oxid Shops

## Oxid Commons

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Co-founder of

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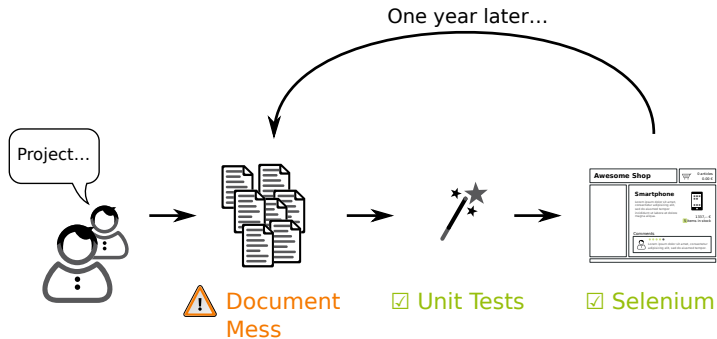
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# Developing A Shop

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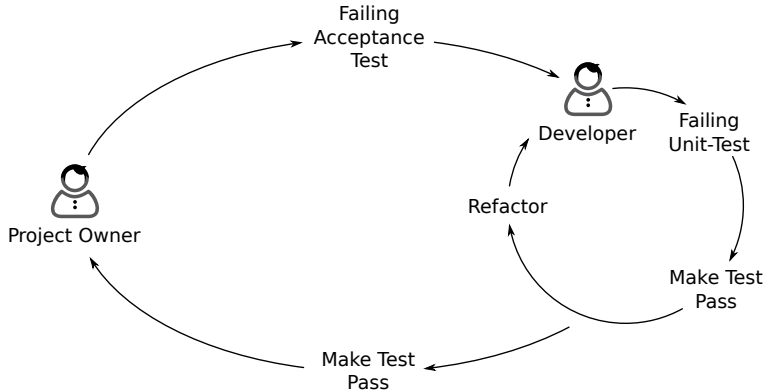
# Behavior Driven Development (BDD)

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- ▶ Make specification executable
- ▶ Combines:
  - ▶ Test Driven Development
  - ▶ Business focus
- ▶ Uses common language for
  - ▶ Business people
  - ▶ Analysts
  - ▶ Developers
  - ▶ Testers

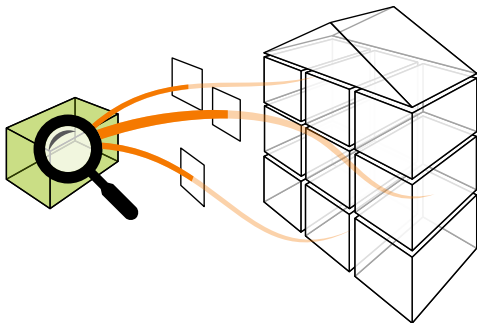
# Development Cycle

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# Unit Testing

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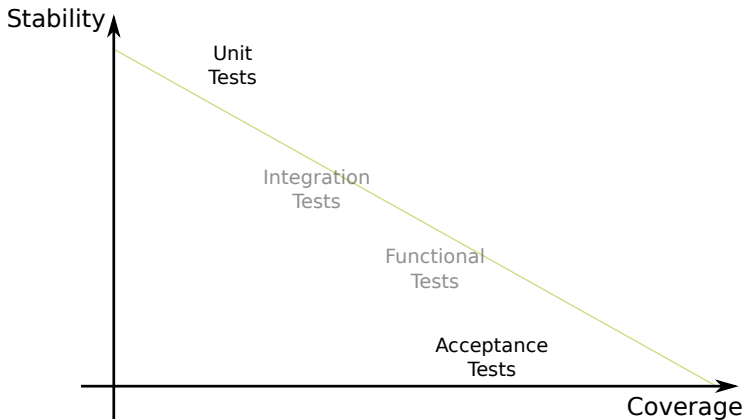
# Unit tests?

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- ▶ Losing importance
- ▶ Still valid for
  - ▶ Libraries
  - ▶ Complex business logic
  - ▶ High impact code

# Instability vs. Coverage

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# Outline

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Behat

Mink

Behat Overview

# Behat

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- ▶ BDD test framework for PHP
- ▶ Inspired by Ruby's Cucumber
- ▶ Work with Gherkin language framework
- ▶ <http://behat.org>

# Gherkin

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- ▶ Domain Specific Language (DSL) framework
- ▶ Goal: Business readable
- ▶ Create custom DSL on Gherkin
- ▶ Tie test code to DSL sentences

# Initial Gherkin example

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1       **Scenario:** I get my steak

2           **Given** There are 6 "Steak" on stock

3           **When** I order a "Steak"

4           **And** I wait for the waiter

5           **Then** I get a "Steak"

6  
7       **Scenario:** Steak is out of stock :(

8           **Given** There are 0 "Steak" on stock

9           **When** I order a "Steak"

10          **Then** The waiter tells me there are no "Steak" left

# Gherkin keywords

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- ▶ **Given**
  - ▶ Precondition
  - ▶ Test setup
- ▶ **When**
  - ▶ Behavior trigger
  - ▶ Test stimulus
- ▶ **Then**
  - ▶ Expected behavior
  - ▶ Describe observable result

# Gherkin keywords (sugar)

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- ▶ **And**
  - ▶ Concatenate steps
  - ▶ Keeps last step keyword
- ▶ **But**
  - ▶ Negative concatenation
  - ▶ Rarely used

# Demo

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## Demo

# Outline

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Behat

**Mink**

Behat Overview



- ▶ Web acceptance test framework
- ▶ Abstracts browser emulations / controllers
  - ▶ Goutte
  - ▶ Zombie.js
  - ▶ Selenium / Selenium 2
  - ▶ Sahi
- ▶ <http://mink.behat.org>

# Behat Mink Example

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1 **Feature:** Browse Wikipedia

2  
3 **Scenario:** Search front page

4 **Given** I am on "/"

5 **When** I fill in "searchInput" with "Kore"

6 **And** I press "searchButton"

7 **Then** I should see "Kore may refer to:"

8  
9 **Scenario:** Follow redirect link

10 **Given** I am on "/"

11 **When** I fill in "searchInput" with "Kore"

12 **And** I press "searchButton"

13 **And** I follow "Kore (energy drink)"

14 **Then** the response status code should be 200

# Mink Behat-extension

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- ▶ Mink integration for Behat
- ▶ Pre-build sentences to browse pages
- ▶ Extensible with custom sentences
- ▶ `http://extensions.behat.org/mink`

# Behat Mink Example

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1 **Feature:** Browse Wikipedia

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13 **And** I follow "Kore (energy drink)"

14 **Then** the response status code should be 200

# Behat Mink BDD Example

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1 **Feature:** Browse Wikipedia  
2  
3 **Scenario:** Search front page  
4 **Given** I am on the frontpage  
5 **When** I search for "Kore"  
6 **Then** I should see "Kore may refer to:"  
7  
8 **Scenario:** Follow redirect link  
9 **Given** I am on the frontpage  
10 **When** I search for "Kore"  
11 **And** I follow "Kore (energy drink)"  
12 **Then** the page should exist

# Custom Mink Sentences

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```
11  /**
12   * @Given /^ I am on the frontpage$/
13   */
14  public function iAmOnTheFrontpage()
15  {
16      return array(
17          new Step\Given( ' I am on ' / " ' ),
18      );
19  }
```

# Custom Mink Sentences

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```
21  /**
22   * @When /^I search for "[^"]*"$/
23   */
24  public function iSearchFor($searchTerm)
25  {
26      return array(
27          new Step\When('I fill in "searchInput" with "' . $searchTerm . '"'),
28          new Step\When('I press "searchButton"'),
29      );
30  }
```

# Outline

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Behat

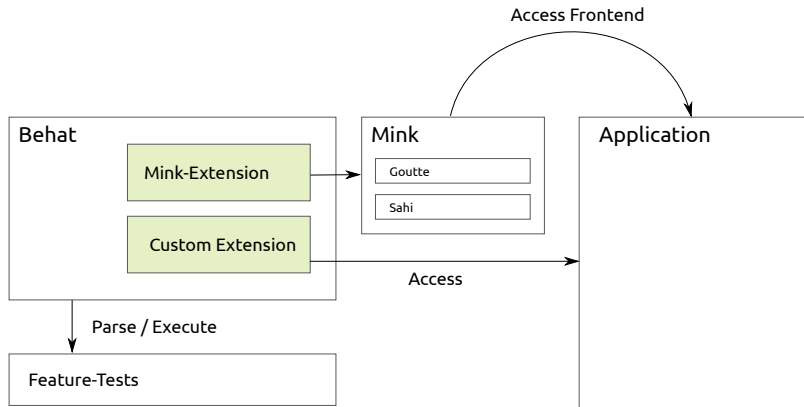
Mink

**Behat Overview**



# Behat tool stack

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# Conclusion

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- ▶ New communication tool
- ▶ Executable specification
- ▶ Executable documentation
  - ▶ Always valid
  - ▶ Never outdated
- ▶ Unit-Tests for maximum stability



THANK YOU

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