Those tests ain't gonna write themselves, Behatch

About me



Marijus Kilmanas

- Software Engineer at Inviqa
- Based in Kaunas
- 5+ years with PHP
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What is software quality?

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External quality

the extent to what the software takes into account what matters most for the customer & the maintainability of the source code



@_md

Internal quality

What is software quality?

External quality

software quality?

That the software delivers real value and is built in a sustainable way.

Internal quality



@IanDominey

What is BDD?

```
class BDD extends TDD
{
   ...
}
```

- TDD on steroids
- TDD done right
- TDD 2.0
- TDD + important mind shift = BDD

What is **Behat**?

- Story BDD framework
- User Acceptance Testing framework
- Cucumber for PHP

Why BDD (and Behat)?

Focus on value delivered

 Bridge understanding gap between business and technical people

 Test the business expectation, not the code functionality

Behat feature structure I - Header

Feature: Visitors subscribe to newsletter

In order to attract more visitors via newsletters

As a website owner

I need users to be able to subscribe

Behat feature structure II - Scenario

Scenario: Visitor subscribes to newsletter

Given I am on a homepage

And there is a newsletter box displayed

When I enter email "john@test.com"

And click "Subscribe"

Then I should see "Thank you for subscribing"

And I should receive a confirmation email

All green, all good?

```
aleckz@prometheus:~/test$ bin/behat
Feature: Search
 In order to see a word definition
 As a website user
 I need to be able to search for a word
 Scenario: Searching for a page that does exist
    Given I am on "/wiki/Main Page"
   When I fill in "search" with "Behavior Driven Development"
   And I press "searchButton"
   Then I should see "software development process"
 Scenario: Searching for a page that does NOT exist
   Given I am on "/wiki/Main Page"
   When I fill in "search" with "Glory Driven Development"
   And I press "searchButton"
    Then I should see "Search results"
2 scenarios (2 passed)
8 steps (8 passed)
0m1.631s
```

I – Get step order right

Given → When → Then

I – Get step order right

- Given → When → Then
- Given + And + But
- Then + And + But

I – Get step order right

- Given → When → Then
- Given + And + But
- Then + And + But
- When + And (?)

II – Don't be too abstract

Given signup box When I enter info Then I am registered

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Given signup box When Lenter info Then I am registered

Incomprehensible for developers

III – Don't be too technical

Given I am on "/users/login"
When I follow a link "forgotPwd"
Then there is a "span.header-title" element
And response code is 200

III – Don't be too technical

(Don't use MinkContext terminology)

Given I am an "/users/login"
When I follow a link "rorgotPwd"
Then there is a "span.header-title" element
And response code is 200

Incomprehensible for business

• User → Visitor, registered user, admin?

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- User → Visitor, registered user, admin?
- Header → html head, headline, header area on the page?
- Maintain consistency
 - e.g. gallery, slideshow and lightbox referring to the same thing → BAD
- Maintain domain specific vocabulary
 - e.g. LookBook, LandingPage, SponsorshipEvents

V — Don't Repeat Yourself

Given I am on homepage
And I click "sign-in"
And I enter username "foo"
And I enter password "drowssap"
And I click "Sign-in"
And I see success message
When ...

V — Don't Repeat Yourself

Given I am on homepage
And I click "sign-in"
And I enter username "foo"
And I enter password "drowssap"
And I click "Sign-in"
And I see success message
When ...

Given I am logged in [as "foo"]

or

Background:*

VI - Take time to identify beneficiary and value correctly

The level of technicality depends on it

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- The level of technicality depends on it
- The perspective and available options depend on it

VI - Take time to identify beneficiary and value correctly

- The level of technicality depends on it
- The perspective and available options depend on it
- The only way to deliver what the business actually needs

VII - Use tables wisely

Given these products exist:

ID	SKU	Name	Price	Stock	ParentId	
15	FT025	Jeans Prime	35.00			
17	FM113XL	T-Shirt Rex XL	17.50	0	7	
21	FT025R	Prime Red	35.00	3	15	
22	FT025B	Prime Blue	35.00	2	15	

When an export is run

Then these rows should be in export file:

ID	Name	Price InStock	
FT025	Jeans Prime	35.00 Yes	
FT025R	Jeans Prime Red	35.00 Yes	
FT025B	Jeans Prime Blue	35.00 Yes	
FM113XL	T-Shirt Rex XL	17.50 No	

VII - Use tables wisely

Given these products exist:

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- Does not explain the behaviour
- Not clear which parts are important
- Does not mean you should never use tables
 - Think about html tables and their (ab)use

We provide training in Story BDD and Spec BDD We are continuously hiring the best talents!

Contact mkilmanas@inviqa.com



Questions?



Thank you!



P.S. Behat v3.0rc2 is out – go check it out at https://github.com/Behat/Behat