

*Behat*  
*by example*



***Konstantin***  
***@everzet***  
***Kudryashov***

# ***This talk is not about:***

- ***how to setup Behat, Mink, \*Extension***
- ***how to write your FeatureContext's***

# ***This talk is all about:***

- ***how to fix communications between you and your clients with StoryBDD***
- ***how to build successful products by concentrating on real business values***
- ***how to become a real Behat pro***

***Behavior***

***Driven***

***Development***

***Behavior***

***Driven***

***Development***



initial commit

[Browse code](#)



**everzet** authored 2 years ago

0 parents   commit 1932e46e420fcd9c48d7c67a59b347fb0b3eda3d



# 1st

## commit

# 2010-06-30

initial commit

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**everzet** authored 2 years ago

0 parents commit 1932e46e420fcd9c48d7c67a59b347fb0b3eda3d

github  
SOCIAL CODING

*1st*

*commit*

**2010-06-30**

initial commit

[Browse code](#)



**everzet** authored 2 years ago

0 parents commit 1932e46e420fcd9c48d7c67a59b347fb0b3eda3d

github  
SOCIAL CODING

*30 june* - **2** *y*



# *Some projects*



*already using*

# *Some projects*



*just thinking*

# *Some users*



*are comparing*

# *Some users*



*are comparing*

***I would never have imagined that  
Behat and Mink were going to even  
compare to Cucumber and Capybara,  
but it does!!***



**Brett Scott**  
lead web developer @ **bbc.com**

***Is Behat awesome***

***Functional testing***

***Framework ?***

***You***

***are***



***Wrong!***

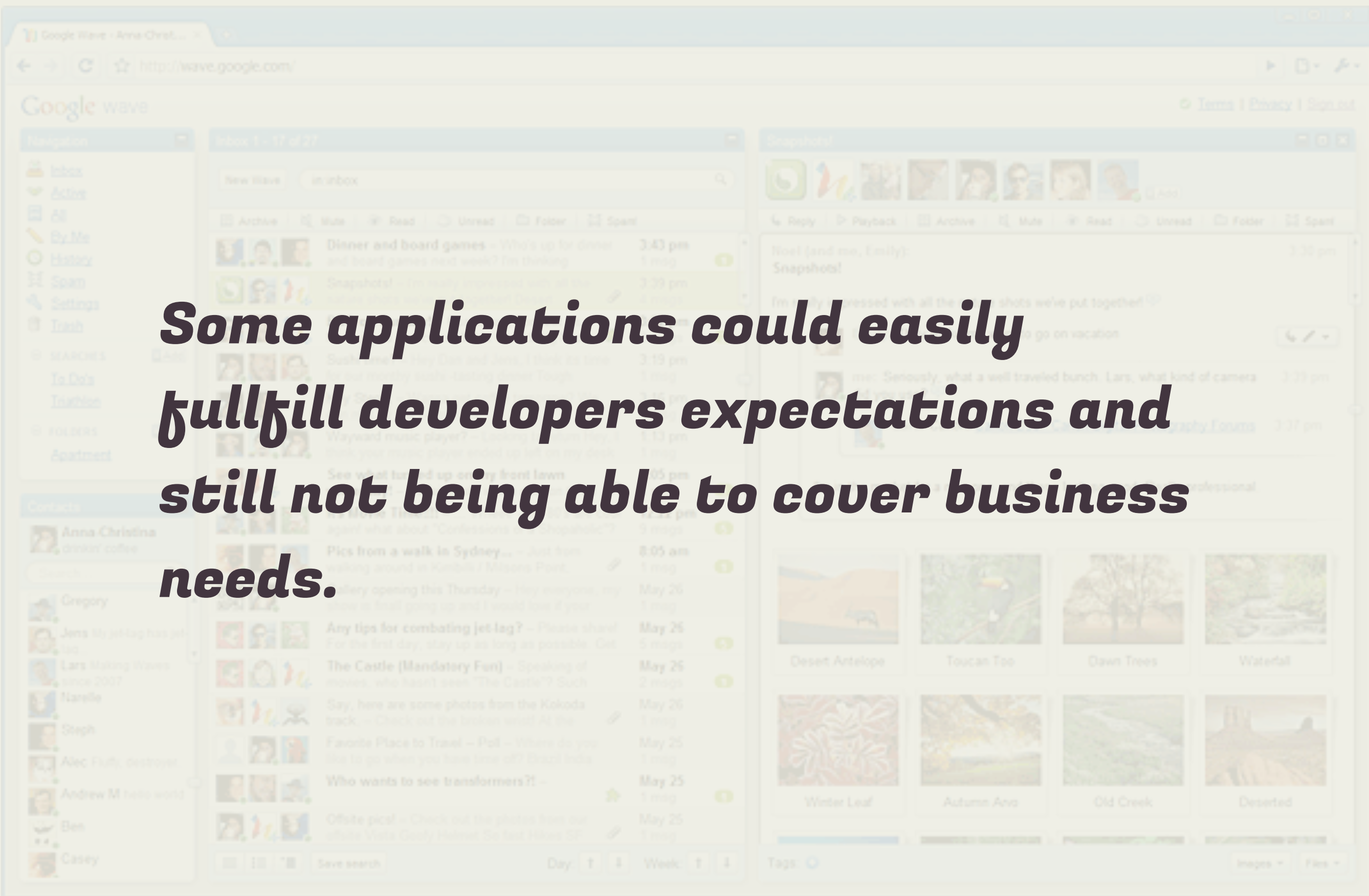
**It is awesome,**  
***but is it Functional testing***  
***Framework ?***

*It is awesome,  
but **is it Functional testing**  
Framework ?*

***NO,***  
*it's* **NOT**

***We are not testing that application  
functions as we (developers) expect  
it to, but instead we're testing that  
it fulfils clients business needs.***

***Some applications could easily  
fullfill developers expectations and  
still not being able to cover business  
needs.***



**You might think about Behat as a  
tool to teach your clients about  
testing, but in reality it's a tool to  
teach you about client business.**





# ***Exploration of Domain area***





# **3** *levels of domain exploration*

*narrative* **1**

*possible scenarios* **2**

*scenario details* **3**

**Feature: Authorization**

**In order to get access to the shopping history**

**As a frequent buyer**

**I need to be able to authenticate**

**1**

**possible scenarios 2**

**scenario details 3**

## ***Feature: Authorization***

***In order to get access to the shopping history  
As a frequent buyer  
I need to be able to authenticate***

**1**

***Scenario: Successfully authenticating  
with correct credentials***

**2**

***scenario details*** **3**

## **Feature: Authorization**

***In order to get access to the shopping history  
As a frequent buyer  
I need to be able to authenticate***

**Scenario: *Successfully authenticating  
with correct credentials***

**Given** there is a user “everzet” with password “123”  
**And** I am on the login page  
**When** I fill in “username” with “everzet”  
**And** I fill in “password” with “123”  
**And** I press “login”  
**Then** I should see “Hello, everzet”

1

2

3

## **Feature: Authorization**

***In order to get access to the shopping history  
As a frequent buyer  
I need to be able to authenticate***

**Scenario: *Successfully authenticating  
with correct credentials***

**Scenario: *Can not authenticate  
with wrong credentials***

**Scenario: *Blocked user can not  
authenticate, even  
with correct credentials***



**Feature: Authorization**

*In order to get access to the shopping history*

*As a frequent buyer*

*I need to be able to authenticate*



***user***  
***story***

***StoryBDD helps ensuring that  
development team has  
understanding of business on the  
same level that client does***



***StoryBDD helps ensuring that  
development team has  
understanding of business on the  
same level that client does  
And even leveling up client knowledge  
of his business***

***How?***

***by Forcing you  
to answer  
business  
questions***

**1.** *For who?*

- 1.** *For who?*
- 2.** *What?*

- 1.** *For who?*
- 2.** *What?*
- 3.** *How?*

**Why?**

1. For who?  
2. Why?  
3. How?

***‘NuFF***  
***SAID***



***case #1***

***About Registration***

***I want visitors to be able to register  
on my website through simple  
registration form.***



*Your hypothetical client*

***1. Who?***

***1. Who?***

***users?***

# ***1. Who?***

~~*users*~~ ***visitors***

# **1. Who?**

~~users~~ **visitors**

# **2. Why?**

# **1. Who?**

~~users~~ **visitors**

# **2. Why?**

**it's common?**

# 1. Who?

~~users~~ visitors

# 2. Why?

~~it's common~~

buyings history



***Know***  
***your client***  
***clients!***

***in order to maintain my shopping history***

***as a site visitor***

***i need to be able to register on this site***

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor***

***i need to be able to register on this site***

# ***Feature: registration***

***in order to maintain my shopping history*** ← ***benefit***  
***as a site visitor*** ← ***role (benefitiar)***  
***i need to be able to register on this site***

# Feature: registration

**in order** to maintain my shopping history ← benefit  
**as a** site visitor ← role (benefitiar)  
**i need** to be able to register on this site

## Feature: ...

in order to ... ← benefit  
as a ... ← role (benefitiar)  
i need to ...

## Feature: ...

in order to ... ← benefit  
as a ... ← role (benefitiar)  
i need to ...

## Feature: ...

in order to ... ← benefit  
as a ... ← role (benefitiar)  
i need to ...

## Feature: registration

*in order to maintain my shopping history* ← *benefit*  
*as a site visitor* ← *role (benefitiar)*  
*i need to be able to register on this site*

**SELECT f.\***  
**FROM '/features' as f**  
**ORDER BY f.role, f.benefit**  
**LIMIT 10**

PSEUDOAgileQL

*Use*  
*gained*  
*knowledge!*

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor***

***i need to be able to register on this site***



# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor***

***i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor***

***i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

***Scenario: Unable to register  
when visitor misses  
required info***

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor***

***i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

***Scenario: Unable to register  
when visitor misses  
required info***

***Scenario: ...***

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor  
i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

***Scenario: Unable to register  
when visitor misses  
required info***

***Scenario: ...***

***Scenario: ...***

***Scenario: ...***

***Scenario: ...***

***Scenario: ...***

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor  
i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

Given I am on “/register”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then the response code should be 200

And the url should be “/”

# **Feature: registration**

**in order to maintain my shopping history  
as a site visitor**

**i need to be able to register on this site**

**Scenario: Successful registration  
when visitor provides  
all the required info**

Given I am on “/register”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then the response code should be 200

And the url should be “/”

# **Feature: registration**

**in order to maintain my shopping history  
as a site visitor ?  
i need to be able to register on this site**

**Scenario: Successful registration  
when visitor provides  
all the required info**

Given I am on “/register”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then the response code should be 200

And the url should be “/”

# **Feature: registration**

**in order to maintain my shopping history  
as a site visitor**

**i need to be able to register on this site**

**Scenario: Successful registration  
when visitor provides  
all the required info**

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then the response code should be 200

And I should be on homepage



# **Feature: registration**

**in order to maintain my shopping history  
as a site visitor**

**i need to be able to register on this site**

**Scenario: Successful registration  
when visitor provides  
all the required info**

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then the response code should be 200

And I should be on homepage

# **Feature: registration**

**in order to maintain my shopping history  
as a site visitor  
i need to be able to register on this site**

**Scenario: Successful registration  
when visitor provides  
all the required info**

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then I should see “You have been successfully registered”

And I should be on homepage

# ***Feature: registration***

***in order to maintain my shopping history  
as a site visitor  
i need to be able to register on this site***

***Scenario: Successful registration  
when visitor provides  
all the required info***

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Then I should see “You have been successfully registered”

And I should be on homepage

***case #2***

***About Sending Emails***

***I want my users to be able to send  
feedback messages through contact  
form.***



*Your hypothetical client*

***1. Who?***

# ***1. Who?***

## ***users***

**1. *Who?***

***users***

**2. *Why?***



**1. Who?**

***users***

**2. Why?**

***to give feedback***

***in order to give feedback***

***as a site user***

***i need to be able to use contact form***

# ***Feature: contact form***

***in order to give feedback***

***as a site user***

***i need to be able to use contact form***

# ***Feature: contact form***

***in order to give feedback***

***as a site user***

***i need to be able to use contact form***

***Scenario: Successfully sending  
feedback through a  
contact form***

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Given I am on homepage

And I follow “contact-us”

And I do not follow redirects

When I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

**Feature:** contact form

**in order** to give feedback

**as a site user**

**i need** to be able to contact you

**Scenario:** Successfully sending

**This text is a very boring text and I bet you will not manage to read the whole text since the only period in the text is the one that ends the whole text that is by the way so long and pointless that writing it is just as fun as the text becomes boring since it is so long and pointless and also quite boring since it does not happen a single thing the whole time it is going on which is very long so you will probably not even manage reading to this point which is somewhere halfway and yet you do incredibly as it is since you are reading these words in this long and boring text where nothing happens at all but you will probably stop reading soon as it is just too boring and long and pointless and I notice you are still reading my boring text and wonder how you can withstand it since it is so long and boring plus there is more fun things to do that I would prefer to do rather than reading this soulless text that is really damn boring and now even I am starting to get tired of it so now I am cutting it out.**

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending feedback through a contact form**

Given I am on homepage

And I follow “sign up”

When I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

Given I am on homepage

And I follow “contact-us”

And I do not follow redirects

When I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am on homepage

And I follow “sign up”

And I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”



# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending feedback through a contact form**

Given I am on homepage

And I follow “sign up”

And I fill in “email” with “linkedin@example.com”

And I fill in “username” with “linkedin”

And I fill in “password” with “sha1\_without\_salt”

And I press “register”

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

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And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside “.notifications > p:first-child”

## **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**



**Hey, techies  
it's for  
you. Again!**

And I should see "message sent" inside `".notifications > p:first-child"`

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside notification area

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending feedback through a contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I do not follow redirects

And I fill in “text” with “hello, guys”

And I press “send”

Then email with the subject “feedback” should have been sent

And I should be redirected

And I should see “message sent” inside notification area

# **Feature: contact form**

**in order to give feedback**

**as a site user**

**i need to be able to use contact form**

**Scenario: Successfully sending  
feedback through a  
contact form**

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I fill in “text” with “hello, guys”

And I send a feedback

Then the feedback email should have been sent

And I should see “message sent” inside notification area



# ***Feature: contact form***

***in order to give feedback***

***as a site user***

***i need to be able to use contact form***

***Scenario: Successfully sending  
feedback through a  
contact form***

Given I am registered user

And I am on homepage

When I follow “contact-us”

And I fill in “text” with “hello, guys”

And I send a feedback

Then the feedback email should have been sent

And I should see “message sent” inside notification area

***case #3***

***Complex One***

***I want students to optionally receive notifications about missed topics after failing tests.***

*Your hypothetical client*

***1. Who?***

# ***1. Who?***

## ***students***

**1. *Who?***  
***students***

**2. *Why?***

**1. Who?**

***students***

**2. Why?**

***to learn topics***

***Feature: topics notifications***

***in order to fully learn topics***

***as a student***

***i need to receive notifications about badly learned topics***



# **Feature: topics notifications**

**in order to fully learn topics**

**as a student**

**i need to receive notifications about badly learned topics**

**Scenario: Recieving notification  
about badly learned  
topics**

Given there is a test “test1” with questions:

topic	question	answers	correct
math	2+7	5, 8, 3, 9	9

And I am authenticated student

And I have activated notifications

When I follow “test1”

And I answer “5” for first question

Then I should see “Test is not passed”

And I should see “Learn math more”

# **Feature: topics notifications**

**in order to fully learn topics**

**as a student**

**i need to receive notifications about badly learned topics**

**Scenario: Recieving notification  
about badly learned  
topics**

Given there is a test “test1” with questions:

topic	question	answers	correct
math	2+7	5, 8, 3, 9	9

And I am authenticated student

And I have activated notifications

When I follow “test1”

And I answer “5” for first question

Then I should see “Test is not passed”

And I should see “Learn math more”

# **Feature: topics notifications**

**in order to fully learn topics**

**as a student**

**i need to receive notifications about badly learned topics**

**Scenario: Recieving notification  
about badly learned  
topics**

Given there are test “test1” with questions:

topic	question	answers	correct
math	2+7	5, 8, 3, 9	9

And I am authenticated student

And I have activated notifications

When I follow “test1”

And I answer “5” for first question

Then I should see “Test is not passed”

And I should see a “Learn math more”

**Later we’ve discovered, that this option should  
be available only for teacher accounts and  
should not be visible to students.**

***1. Who?***

***1. Who?***

***teacher***

**1. *Who?***

***teacher***

**2. *Why?***

**1. Who?**

***teacher***

**2. Why?**

***to help students***

# ***Feature: topics notifications***

***in order to ensure students learn topics well  
as a teacher***

***i need to be able to activate failed topics notifications***

***Scenario: Student with  
activated notifications  
should receive them.***



# **Feature: topics notifications**

**in order to ensure students learn topics well  
as a teacher**

**i need to be able to activate failed topics notifications**

**Scenario: Student with  
activated notifications  
should receive them.**

Given there is a test “test1” with questions:

topic	question	answers	correct
math	2+7	5, 8, 3, 9	9

And I am authenticated teacher

And I have activated notifications for student “everzet”

When student “everzet” fails test “test1”

Then he should see “Learn math more”

***case #4***

***Technical One***

# ***Feature: sending delayed emails***

***in order to ensure that all emails have been sent  
as an technical administrator***

***i need to be able to send all delayed emails through CLI***

***Scenario: Successfully sending  
delayed emails through  
CLI***

Given I am at the project root

And there are 3 delayed emails in the project

When I run “app/console project:delayed-emails:send”

Then it should return 0

And 3 emails should have been sent

# **Feature: sending delayed emails**

**in order to ensure that all emails have been sent  
as an technical administrator**

**i need to be able to send all delayed emails through CLI**

**Scenario: Successfully sending  
delayed emails through  
CLI**

Given I am at the project root

And there are 3 delayed emails in the project

When I run “app/console project:delayed-emails:send”

Then it should return 0

And 3 emails should have been sent



# ***Feature: sending delayed emails***

***in order to ensure that all emails have been sent***

***as a technical administrator***

***i need to be able to send all delayed emails through CLI***

***Scenario: Successfully sending  
delayed emails through  
CLI***

Given I am at the project root

And there are 3 delayed emails in the project

When I run “app/console project:delayed-emails:send”

Then it should return 0

And 3 emails should have been sent

***I think the real difference between  
mid-level and pro-level Behat users  
is the understanding of roles and  
their place in features.***

*Questions?*

***Awesome @weaverryan and my good  
friend has a wedding right now with  
amazing @leannapelhalm. Tweet  
them congrats right now!***



***joind.in/6592***