

# BEHAVIOUR DRIVEN DEVELOPMENT

ALEXANDRU BADIU

# BEHAVIOUR DRIVEN DEVELOPMENT



## ALEXANDRU BADIU

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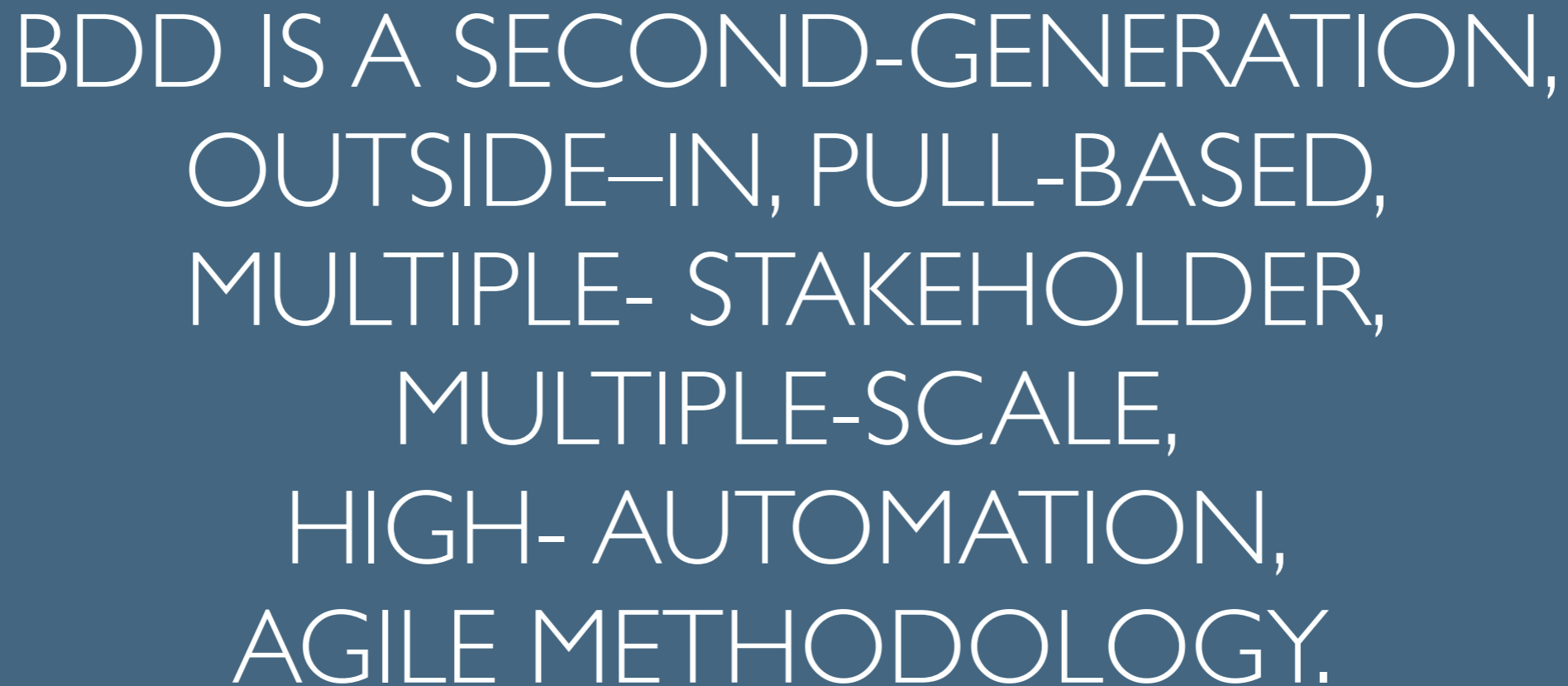
Drupal developer for 10 years.

Drupal Romania founding member.

I work at Demotix / Corbis.

<http://alexandrubadiu.ro>

<http://twitter.com/voidberg>



BDD IS A SECOND-GENERATION,  
OUTSIDE-IN, PULL-BASED,  
MULTIPLE-STAKEHOLDER,  
MULTIPLE-SCALE,  
HIGH-AUTOMATION,  
AGILE METHODOLOGY.

# BEHAVIOUR DRIVEN DEVELOPMENT

WAIT, WHAT?



# BEHAVIOUR DRIVEN DEVELOPMENT

## TDD'S SHORTCOMINGS

- Unit tests, Inside - out.
- Write the unit test before the code.
- Typically written by the programmer.
- Can't test everything: full functional tests?
- Can't refactor as you wish: dependent on early tests.

# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD FEATURES

- It picks up where TDD leaves off.
- Rethinking the approach to unit and acceptance testing.
- Uses a common language that everyone can use from all chains of command.
- Becomes a test, a piece of documentation, a specification.
- Supported by a wide range of tools: Gherkin, Cucumber, Behat, Travis, Jenkins, Jira and so on.

# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD FEATURES

- Test code or describe behaviour?
- Both.
- TDD is about ensuring behaviour.
- BDD is about describing behaviour.

# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD FEATURES

- User story.
- Stakeholder, effect, value.
- Acceptance criteria or scenarios.
- Steps.
- Initial conditions.
- Triggers.
- Outcomes.



# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD FEATURES

### Feature: Authentication

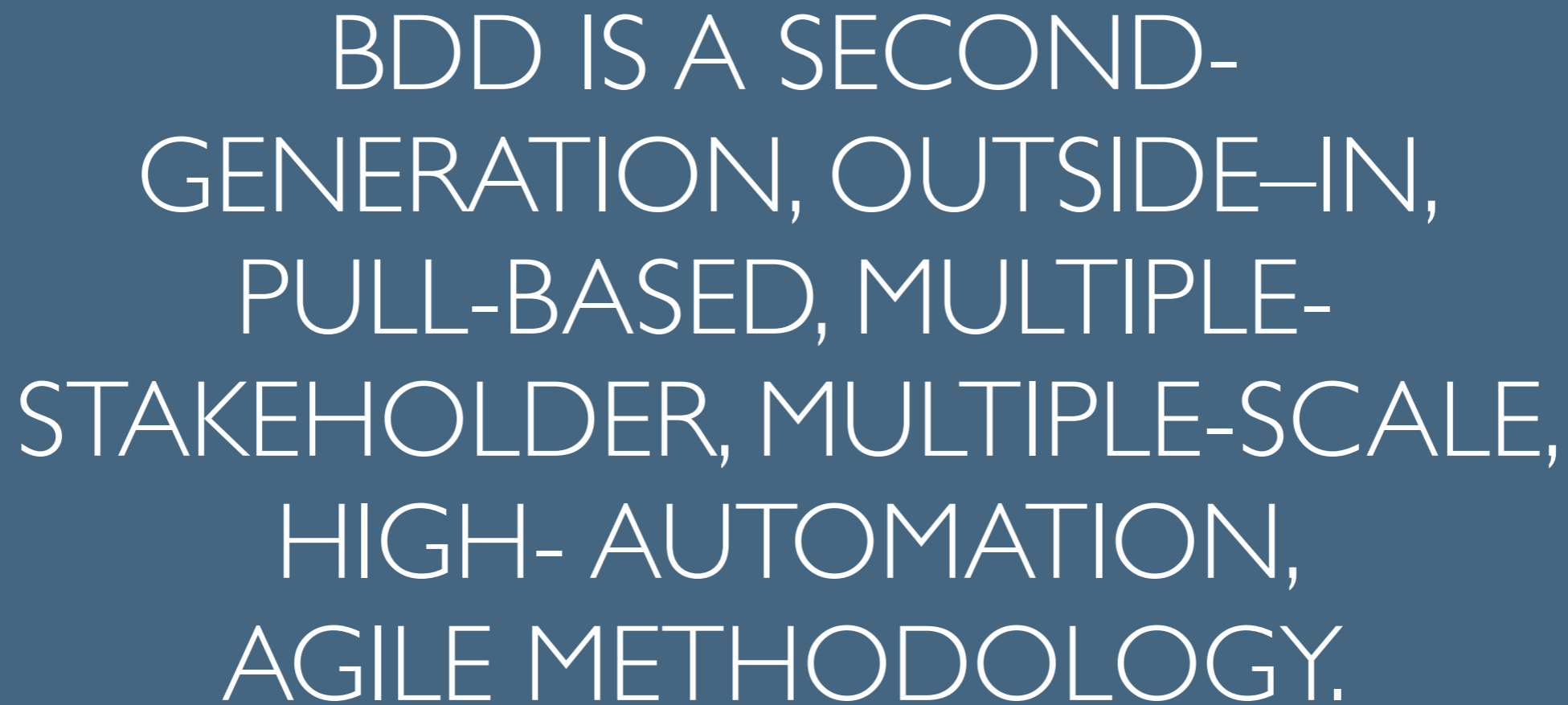
In order to change my information and add sessions  
As a registered Drupalcamp user  
I need to be able to authenticate

### Scenario: User login

Given I am on "/"  
When I follow "Log in"  
And I fill in "name" with "bddtest"  
And I fill in "pass" with "bddtest"  
And I press "Log in"  
Then I should see "My account"

### Scenario: User logout

Given I am logged in  
And I am on "/"  
When I follow "Log out"  
Then I should see "Log in"



BDD IS A SECOND-  
GENERATION, OUTSIDE-IN,  
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# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD IN PHP

- Behat.
- OSS.
- Cucumber “language”.
- Mink for testing web apps.
- Different drivers: Selenium, zombie.js, goutte etc.

# BEHAVIOUR DRIVEN DEVELOPMENT

## COMPOSER.JSON

```
{
  "require": {
    "behat/behat": "2.4.*@stable",
    "behat/mink": "1.5.*@stable",
    "behat/mink-extension": "*",
    "behat/mink-goutte-driver": "*",
    "behat/mink-selenium-driver": "*",
    "behat/mink-selenium2-driver": "*",
    "behat/mink-sahi-driver": "*",
    "behat/mink-zombie-driver": "*",
  },
  "minimum-stability": "dev",
  "config": {
    "bin-dir": "bin/"
  }
}
```

# BEHAVIOUR DRIVEN DEVELOPMENT

## INSTALL

```
curl http://getcomposer.org/installer | php  
php composer.phar install --prefer-source
```

```
bin/behat --init
```

```
+d features - place your *.feature files here
```

```
+d features/bootstrap - place bootstrap scripts and  
static files here
```

```
+f features/bootstrap/FeatureContext.php - place your  
feature related code here
```

# BEHAVIOUR DRIVEN DEVELOPMENT

## BEHAT.YML

```
default:
  extensions:
    Behat\MinkExtension\Extension:
      base_url: http://drupalcamp.ro/
      goutte: ~
      zombie: ~
      sahi:
        port: 9999
      selenium2:
        wd_host: "http://127.0.0.1:4444/wd/hub"

  default_session: 'selenium2'
  javascript_session: 'selenium2'
```



DEMO



# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD IN DRUPAL



- Behat Drupal Extension.
- Provides step definitions for common testing scenarios specific to Drupal sites.



# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD IN DRUPAL

`composer.json`

```
"require": {  
    "drupal/drupal-extension": "*" } ,
```

`behat.yml`

```
Drupal\DrupalExtension\Extension:  
    blackbox: ~
```

# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD IN DRUPAL

Given I am logged in as a user with the "authenticated user" role

Then I should see the heading "History"

Then I should see the heading "User login" in the "left sidebar" region

Given the cache has been cleared

When I run cron

# BEHAVIOUR DRIVEN DEVELOPMENT

## BDD IN DRUPAL

Given "page" nodes:

	title	
	Page one	
	Page two	

And "article" nodes:

	title	
	First article	
	Second article	

Given "article" nodes:

	title		promote		body	
	First article with fields		1		PLACEHOLDER BODY	

Given users:

	name		mail		status	
	Joe User		joe@example.com		1	

# THANK YOU

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Alexandru Badiu

[ALEXANDRUBADIU.RO](http://ALEXANDRUBADIU.RO)



We're hiring!

AngularJS, Node.js.

Come talk to me if you're interested.