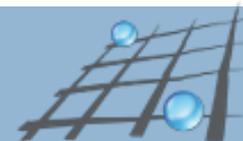# BDD & TEST AUTOMATION:

HOW NOT TO SHOOT YOURSELF IN THE FOOT

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About the speaker

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What this is about

- Introduction to BDD and related tools

- Retro-fitting automation: should you do it?

- How it worked out for us

- Automated UI testing in web applications

- Hands-on session

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Introduction: BDD

- What is BDD

  - Behavior-Driven Development

  - An "outside-in" methodology, starting from the outside by identifying business outcomes, drilling down into the feature set that will achieve these outcomes.

  - Focuses on the "how" of the software, not the "why"

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Introduction: Cucumber

- Describe how the software should behave in plain text

- The descriptions are the documentation...

- ... and the tests...

- ... and the specification.

- Helps us deliver value, create software that matters

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Cucumber: Example

Feature: Search courses

  In order to ensure better utilization of courses

  Potential students should be able to search for courses

  Scenario: Search by topic

    Given there are 240 courses which do not have the topic "BDD"

    And there are 2 courses A001, B205 that have the topic "BDD"

    When I search for "BDD"

    Then I should see the following courses:

```
| Course code |
| A001        |
| B205        |
```

What happened in our case?

- Retro-fitting automation to mature codebase
  - Should you do it?
  - When does it work?
- Use Cucumber as the testing tool
  - Is it good enough?
  - Downside: maintenance hell is easy to achieve
- What are the alternatives?
  - Continue with manual testing? Not good enough!
  - Use another tool?

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UI automation in web apps

- What's good
  - Tests run in a web browser – headless or not
  - Allows to emulate user behavior
  - Can be part of a CI process
- Downsides
  - Performance can suffer, especially in an actual browser
  - Initial test writing can be time-consuming

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Hands-on session

Setup

- Application under test
  - http://bdd-workshop-ntd2013.herokuapp.com
- Prepared test template
  - http://git.io/6wD9Jw
- Required toolset
  - Ruby 1.9+
  - RSpec, Capybara, Selenium-Webdriver
  - Template code from above git repository

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Questions?

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Thank you!