Boss? Beer? Buzzword? What is **B** in **BDD**?

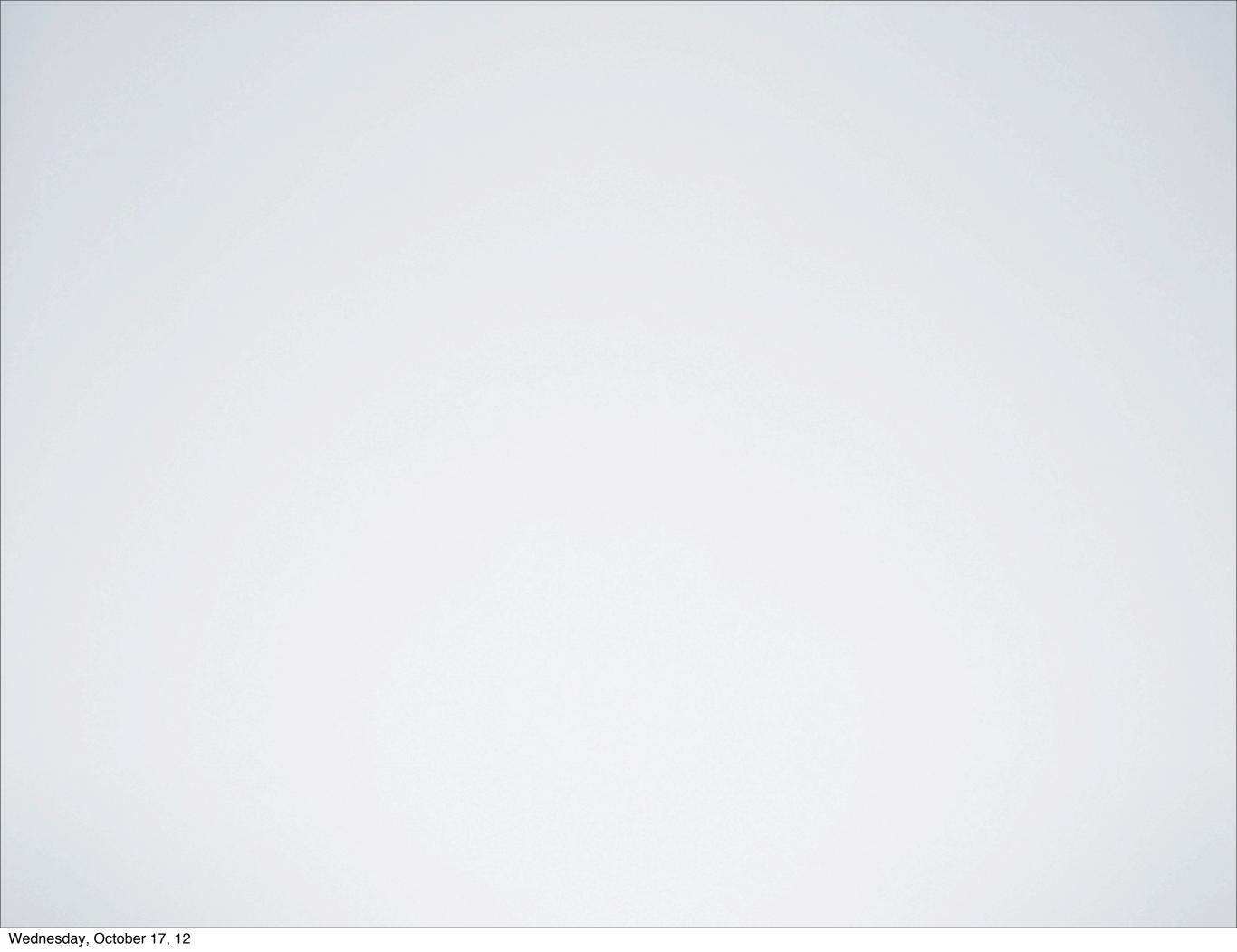
@mpraglowski

WHO IS ...

- .NET Developer,
 Team Leader
- dev's manager
 @ BI-Technologies,
 owner @ Solutions Factory
- Twitter: @mpraglowski
- http://praglowski.com







·Kto z Was korzysta z BDD?

- ·Kto z Was korzysta z BDD?
- ·Kto z Was słyszał o BDD?

- ·Kto z Was korzysta z BDD?
- ·Kto z Was słyszał o BDD?
- Kto z Was zna TDD?

- ·Kto z Was korzysta z BDD?
- ·Kto z Was słyszał o BDD?
- Kto z Was zna TDD?
- •Kim jest w Waszych zespołach

tester?

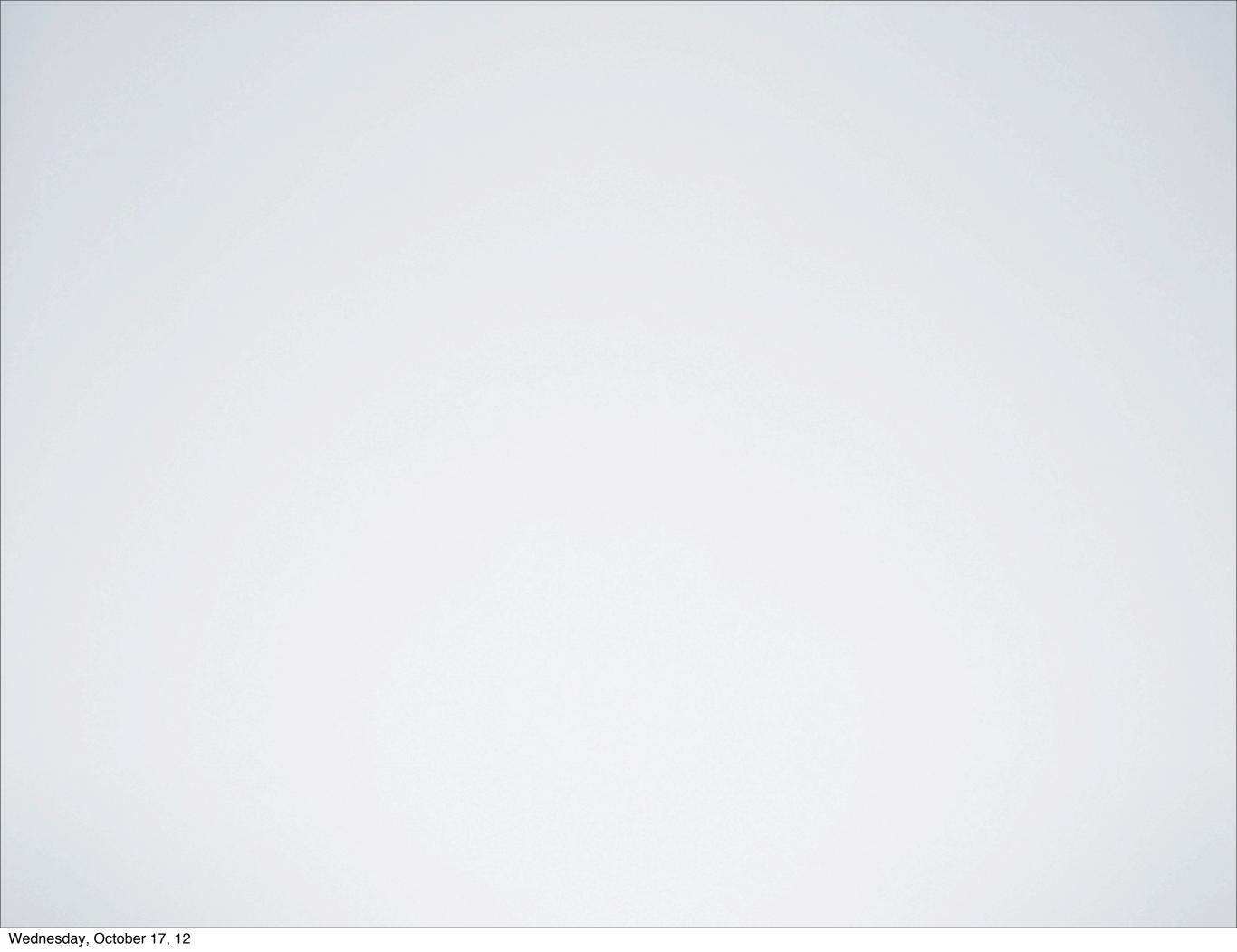
BDD vs TDD

- Stack Overflow
 - TDD: 2382 & I.Ik followers
 - BDD: 866 & 377 followers
- Stack Exchange
 - TDD: 205 & 99 followers
 - BDD: 37 & 15 followers

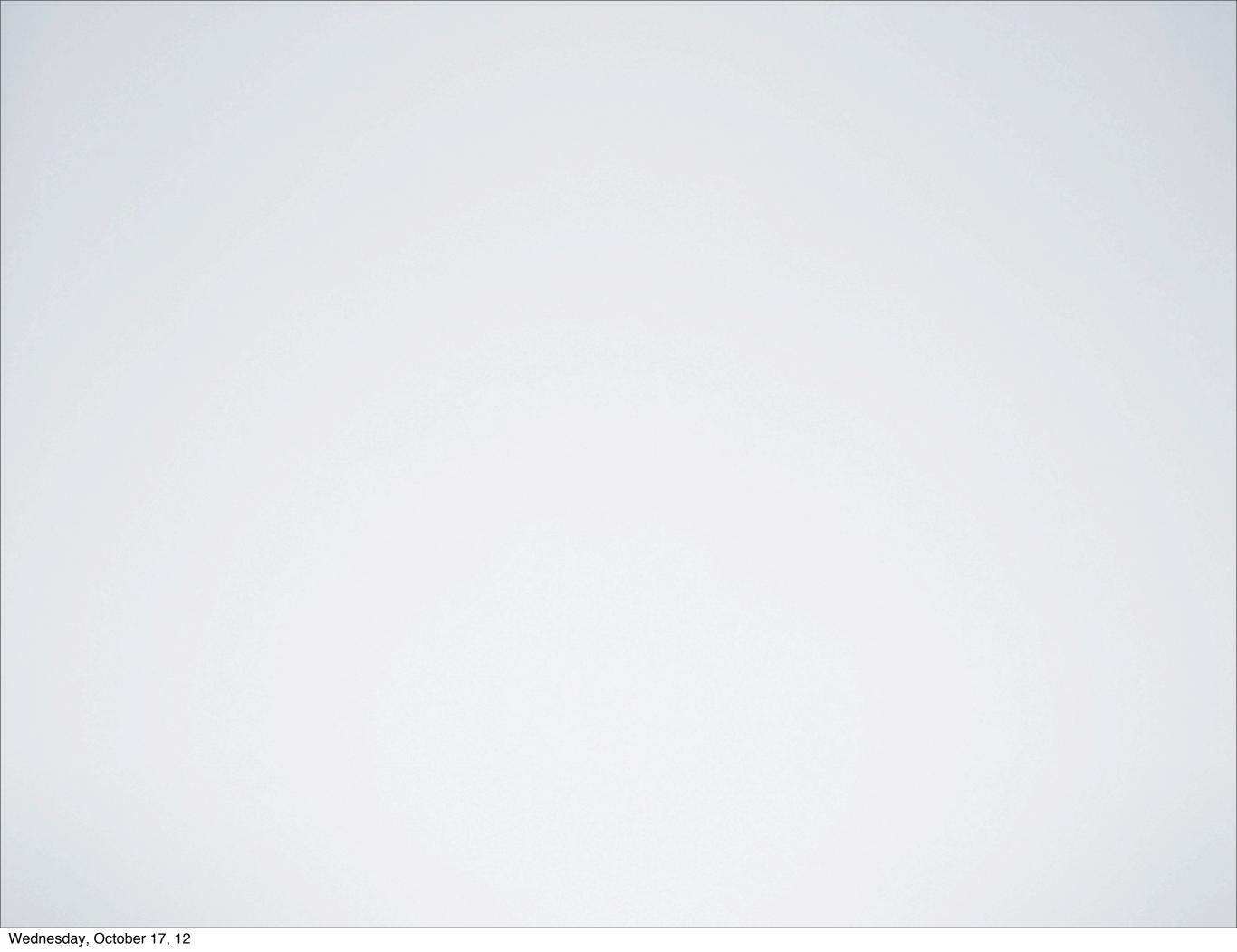
SpecFlow

- Open source tool for BDD in .NET
- Focus on high level behavior: features & acceptance tests
- Story-style plain text specifications
- Using Gherkin as a DSL for defining specifications
- Use existing testing frameworks for execution (NUnit, MSTest, xUnit)
- Integration with dev's tools (VisualStudio) & build servers (TeamCity)

using SpecFlow



You're doing it wrong!



1. Started by installing a tool

- 1. Started by installing a tool
- 2. Expected that customer could define test by himself

- 1. Started by installing a tool
- 2. Expected that customer could define test by himself
- 3. Assumed that tests will be acceptance criteria

- 1. Started by installing a tool
- 2. Expected that customer could define test by himself
- 3. Assumed that tests will be acceptance criteria
- 4. ...

- 1. Started by installing a tool
- 2. Expected that customer could define test by himself
- 3. Assumed that tests will be acceptance criteria
- 4. ...
- 5. In long term our test set will become a regression tests

BDD myths

by Gojko Adzic (@gojkoadzic)

MYTH#1: INSTOOLATION

MYTH #1: INSTOOLATION

Belief that process problems can be solved by installing a tool

MYTH #2: BUSINESTING

MYTH #2: BUSINESTING

Belief that business users should write acceptance tests

MYTH #2: BUSINESTING

Belief that business users should write acceptance tests

MYTH #3: ACCEPTEGRATION

MYTH #3: ACCEPTEGRATION

Belief that tests are either unit of acceptance-integration

MYTH #4: ROLATION

MYTH #4: ROLATION

<insert role> should do
BDD in isolation (eg
testers do everything)

MYTH #5: LONGRESSION

MYTH #5: LONGRESION

Belief that the long term value of BDD is in regression testing

What BDD is not?

• BDD is a framework

- BDD is a framework
- BDD is for defining system behavior

- BDD is a framework
- BDD is for defining system behavior
- BDD is for Business Applications

It is really BDD?

- BDD is a framework
- BDD is for defining system behavior
- BDD is for Business Applications
- BDD frameworks are for higher level, TDD for lower level components

It is really BDD?

- BDD is a framework
- BDD is for defining system behavior
- BDD is for Business Applications
- BDD frameworks are for higher level, TDD for lower level components
- BDD frameworks are for end users to use

It is really BDD?

- BDD is a framework
- BDD is for defining system behavior
- BDD is for Business Applications
- BDD frameworks are for higher level, TDD for lower level components
- BDD frameworks are for end users to use
- BDD is for Integration Testing, TDD is Unit Testing

So, what the f**k is BDD

DAN'S DEFINITION OF BDD

DAN'S DEFINITION OF BDD

BDD is a second-generation, outside—in, pull-based, multiple-stakeholder, multiple-scale, high-automation, agile methodology. It describes a cycle of interactions with well-defined outputs, resulting in the delivery of working, tested software that matters.

DAN'S DEFINITION OF BDD

BDD is a Bod gon Bratien Chian Dich-based multiple-stakeholder, multiple-scale, high-automation, agile methodology. It destribes a 25le blints a choice with well-defined ejyor, walting, in Clindraghof Sarking, tested software Othrotagh blm, jen-qoq, Qincha' tlhevjaQ.

translation by Gojko Adzic

BDD is unambiguous language for development process

Is defined by User Story

- Is defined by User Story
- User story has a title

- Is defined by User Story
- User story has a title
- User story has a narrative

- Is defined by User Story
- User story has a title
- User story has a narrative
 - As a [role] I want [some feature] so that [reason]

- Is defined by User Story
- User story has a title
- User story has a narrative
 - As a [role] I want [some feature] so that [reason]
- User story has test scenarios

- Is defined by User Story
- User story has a title
- User story has a narrative
 - As a [role] I want [some feature] so that [reason]
- User story has test scenarios
 - Given [context] when [sth happen] then [some output]

- Is defined by User Story
- User story has a title
- User story has a narrative
 - As a [role] I want [some feature] so that [reason]
- User story has test scenarios
 - Given [context] when [sth happen] then [some output]
- · Test scenarios are a definition of done

BDD it's about communication

Business Analyst tries to define system requirements

- · Business Analyst tries to define system requirements
- · Requirements are defined as a set of features

- · Business Analyst tries to define system requirements
- · Requirements are defined as a set of features
- · Features are described in a form of user story

- · Business Analyst tries to define system requirements
- · Requirements are defined as a set of features
- · Features are described in a form of user story
- · For each user story some test scenarios are prepared

- · Business Analyst tries to define system requirements
- · Requirements are defined as a set of features
- · Features are described in a form of user story
- · For each user story some test scenarios are prepared
- User stories are implemented by developers

- Business Analyst tries to define system requirements
- · Requirements are defined as a set of features
- · Features are described in a form of user story
- · For each user story some test scenarios are prepared
- User stories are implemented by developers
- Completed features are tested by testers

Separation of roles

User Stories



Programming



Functional gaps Inconsistencies Testing



Misunderstood requirements

Specifying collaboratively

User Stories



Functional gaps Inconsistencies

Misunderstood requirements

Programming



Testing



Unexpected stuff

BDD is living specification

What is TEST?

What is TEST?

When it's written is **not** a **test**, it is an **example** of something I don't have yet, it's a **specification**

by Dan North

What if test FAILS?

What if test FAILS?

It is not completed feature.

What if test FAILS?

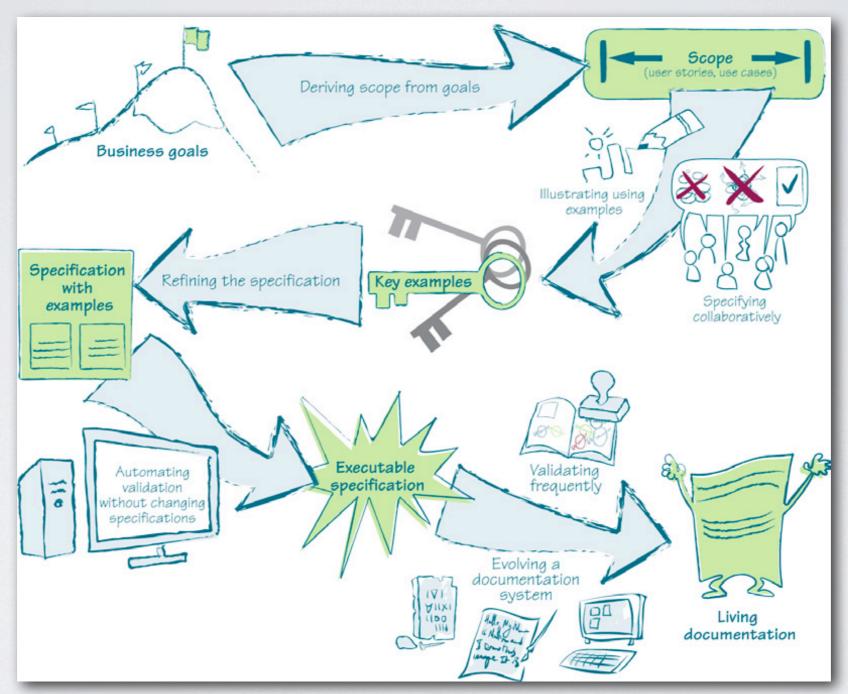
It is not completed feature.

It is a missing specification!

SPECIFICATION BY EXAMPLE

- Abstract requirements & specifications are not good tool for communication
- Concrete examples are much better
- · Usually examples are not formalized nor shared

Specification by example



The key process patters of Specification by example (Gojko Adzic)



THERE IS NO SILVER BULLET!

- INTRODUCING BDD by Dan North http://dannorth.net/introducing-bdd/
- BDD IS LIKETDD IF... by Dan North
 http://dannorth.net/2012/05/31/bdd-is-like-tdd-if/
- Behaviour-Driven Development by Dan North http://www.viddler.com/v/c54123a
- BDD: Busting the myths by Gojko Adzic https://vimeo.com/43612884
- What BDD has taught me by Hadi Hariri
 http://hadihariri.com/2012/04/11/what-bdd-has-taught-me/
- How to sell BDD to the business by Dan North
 http://skillsmatter.com/podcast/java-jee/how-to-sell-bdd-to-the-business
- BDD Wiki http://behaviour-driven.org/