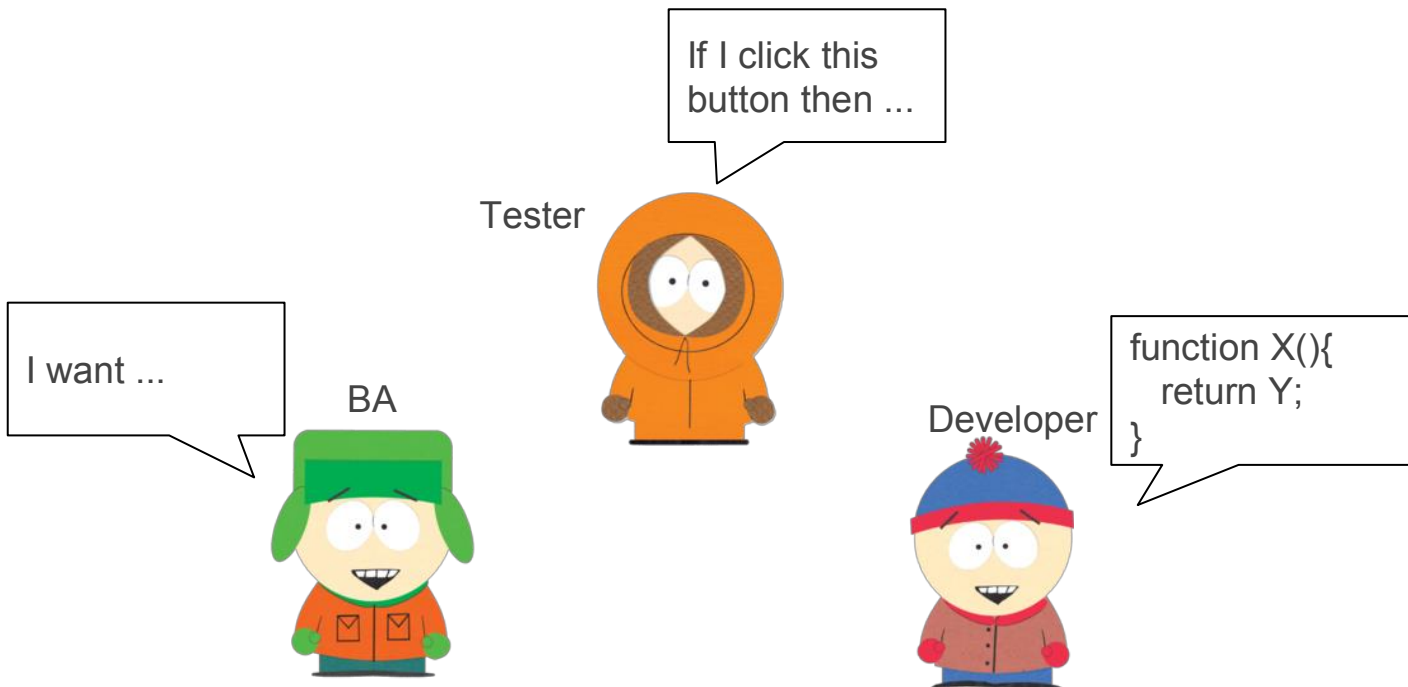# Agenda
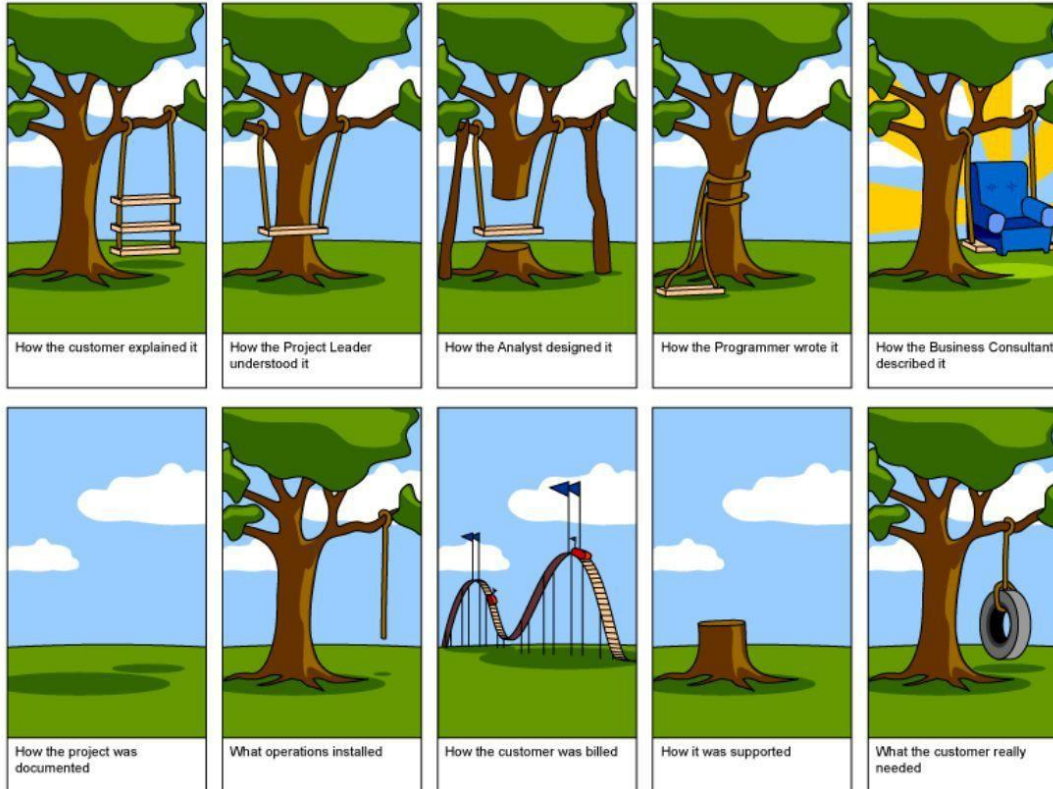
- Introduction to BDD
- Cucumber BDD framework
- Pros/cons of BDD
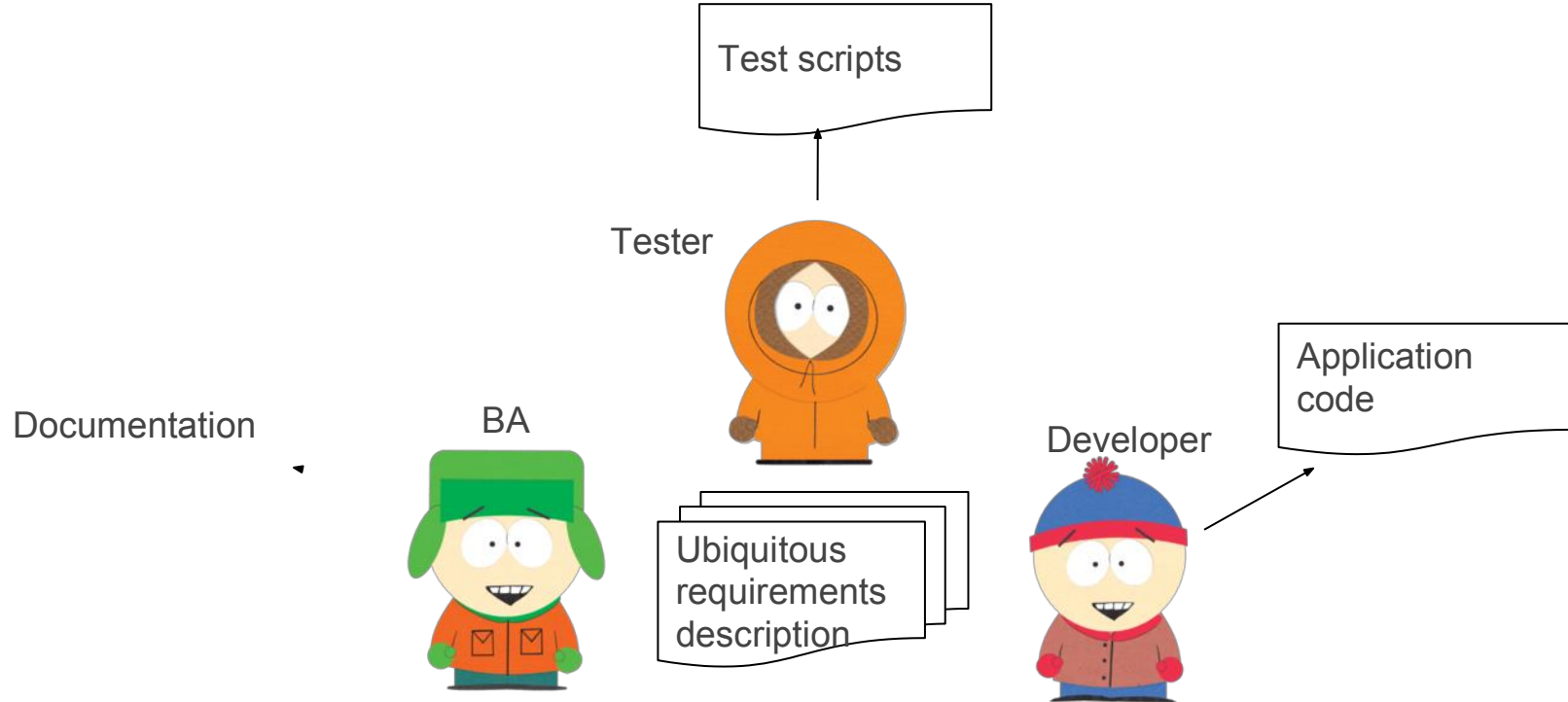
Introduction to BDD
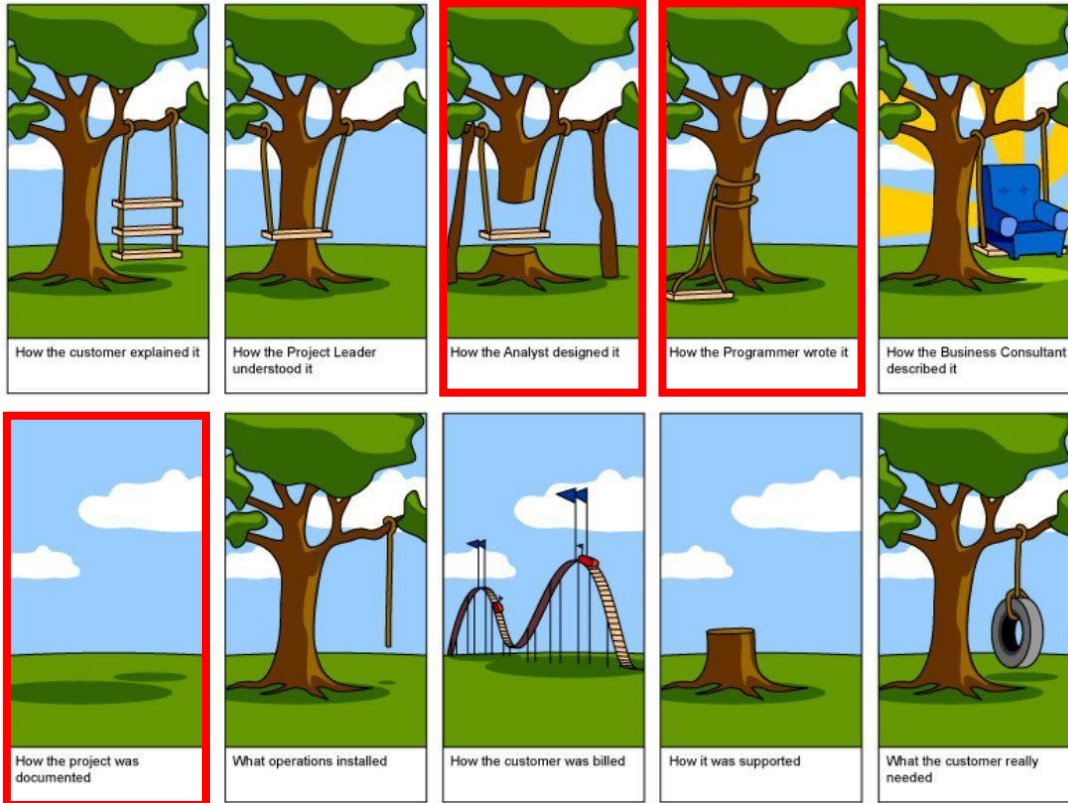
Introduction to BDD

Introduction to BDD

Test scripts

Tester

Application code

Documentation

BA

Developer

Ubiquitous requirements description

Introduction to BDD

Introduction to BDD

Story (feature):

As a [role] **I want** [feature] **so that** [benefit]

Example: **As a** customer **I want** to withdraw money from an ATM **so that** I don't have to go to the bank
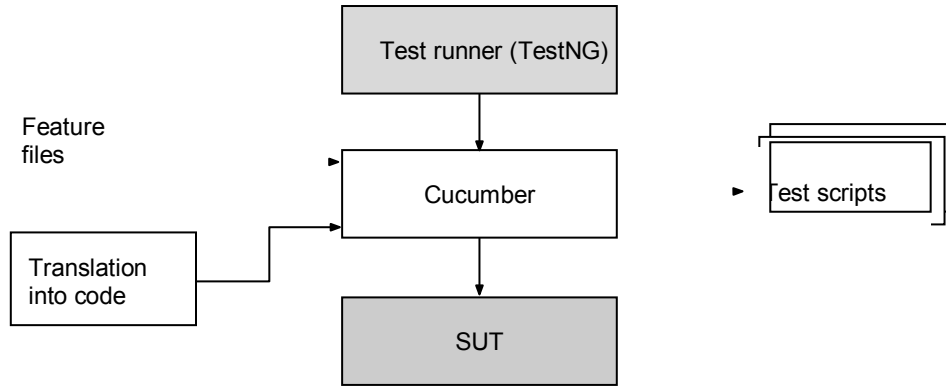
Introduction to BDD

Story acceptance criteria (scenario):

Given [initial context] **when** [event] **then** [outcomes]

Example: **Given** there is enough money on my account **when** I make a withdrawal **then** I get the expected amount of money from the ATM

Cucumber BDD framework

Cucumber: Gherkin logic

Gherkin logic

Feature: Withdraw money
   In order to avoid going to the bank
   As a customer
   I want to withdraw money from an ATM

   Scenario: Withdraw less money than the account has
      Given there is enough money on my account
      When I make a withdrawal
      Then I get the expected amount of money from the ATM
      And receipt is printed

Cucumber: parametrization

Gherkin logic

Scenario: Withdraw less money ...
    Given I have 200 SEK on my account
    When I withdraw 100 SEK
    Then I get 100 SEK from the ATM

Scenario: Withdraw more money ...
    Given I have 50 SEK on my account
    When I withdraw 100 SEK
    Then I get 0 SEK from the ATM

Scenario: Withdraw money from the account
    Given I have <balance> SEK on my account
    When I withdraw <withdraw> SEK
    Then I get <received> SEK from the ATM

Examples:

balance	withdraw	received
200	100	100
50	100	0

Cucumber: annotations

Gherkin logic

@prod
Scenario: Withdraw less money ...
    Given I have 200 SEK on my account
    When I withdraw 100 SEK
    Then I get 100 SEK from the ATM

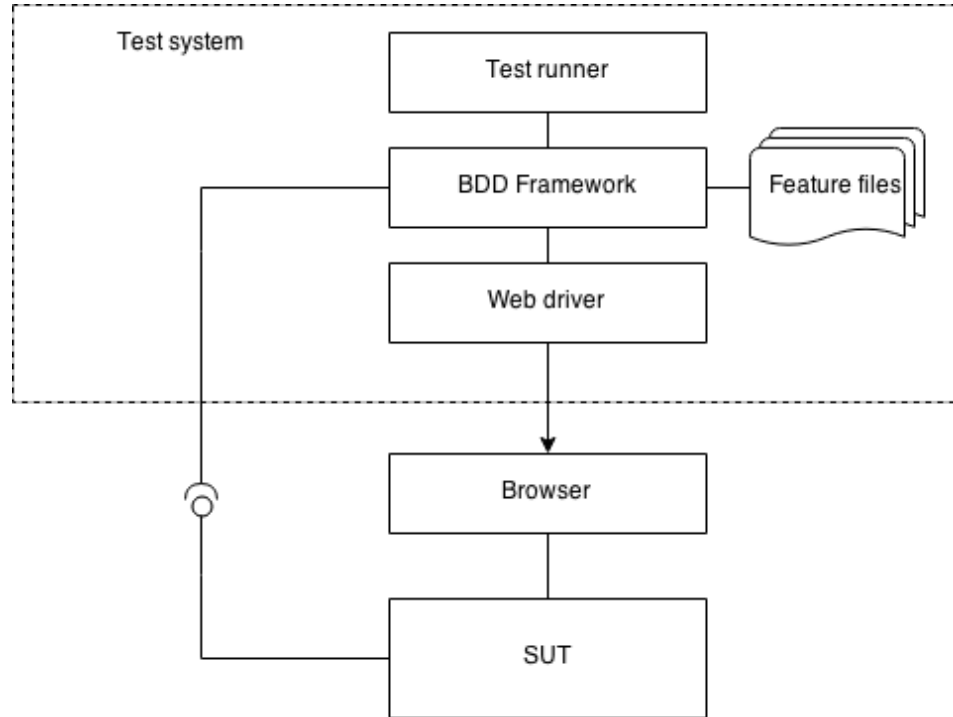@test
Scenario: Withdraw more money ...
    Given I have 50 SEK on my account
    When I withdraw 100 SEK
    Then I get 0 SEK from the ATM
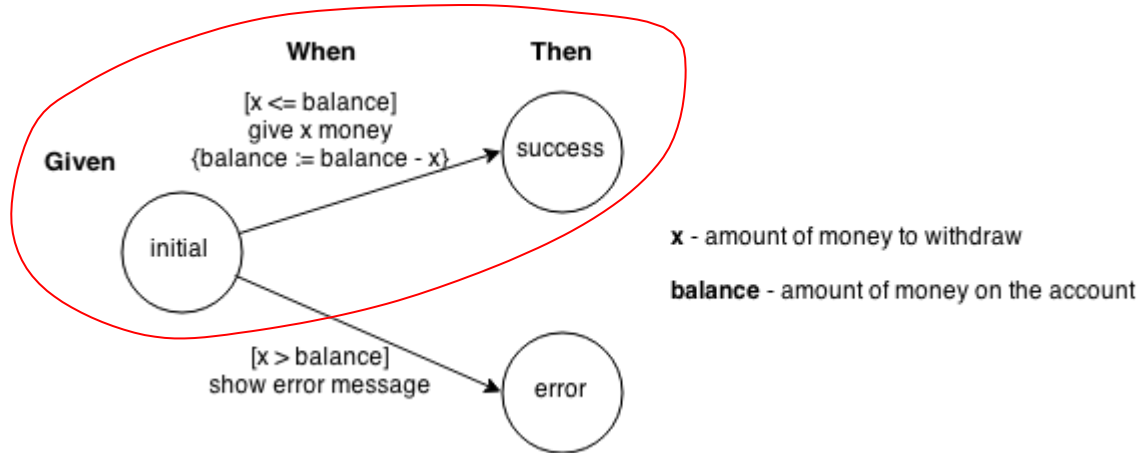
BDD for complex systems

Pros/cons of BDD

- Level of abstraction for steps?
- Becomes complex for complex systems
- Lack of tool support

P.S. BDD in a context of FSM

Given I have 200 SEK on my account **when** I withdraw 100 SEK **then** I get 100 SEK from the ATM

References

Cucumber framework:

https://cucumber.io/

How BDD can be misused:

https://cucumber.io/blog/2014/03/03/the-worlds-most-misunderstood-collaboration-tool