

Writing better BDD scenarios

Seb Rose

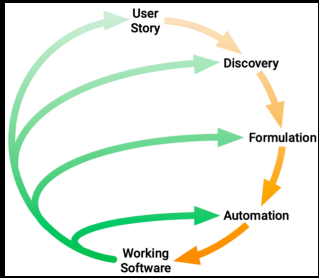
Twitter: @sebrose

Blog: <https://cucumber.io/blog/>

E-mail: seb.rose@smartbear.com

Agenda

- Short introduction to BDD
- Exercise: Learn about good/bad scenarios
- Acronym & heuristics
- Exercise: Write your own scenario
- Wrap-up

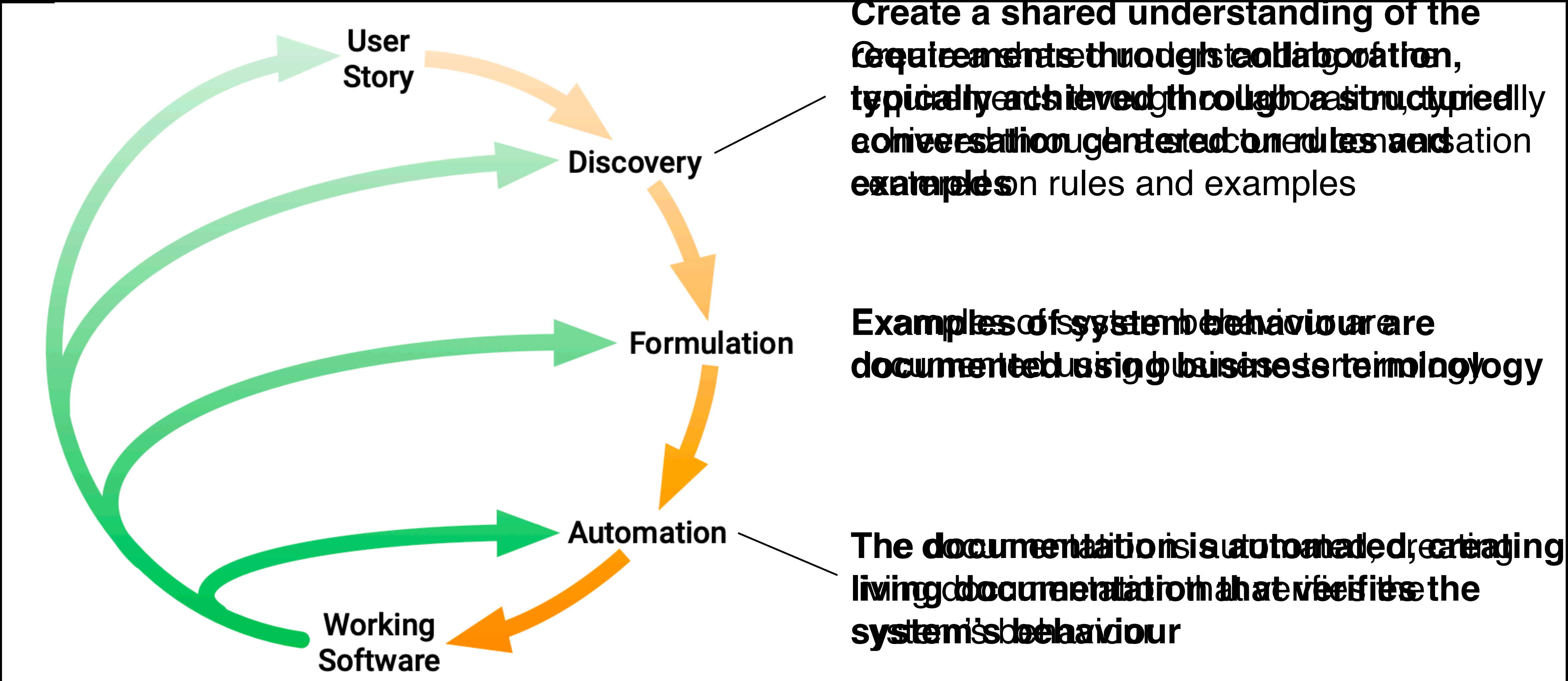


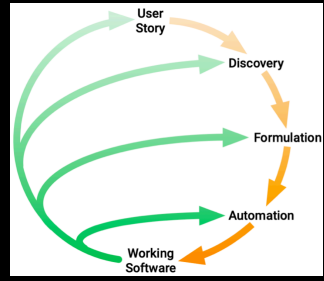
Define BDD

Create a shared understanding of the requirements through collaboration, typically achieved through a structured conversation using scenarios and examples on rules and examples

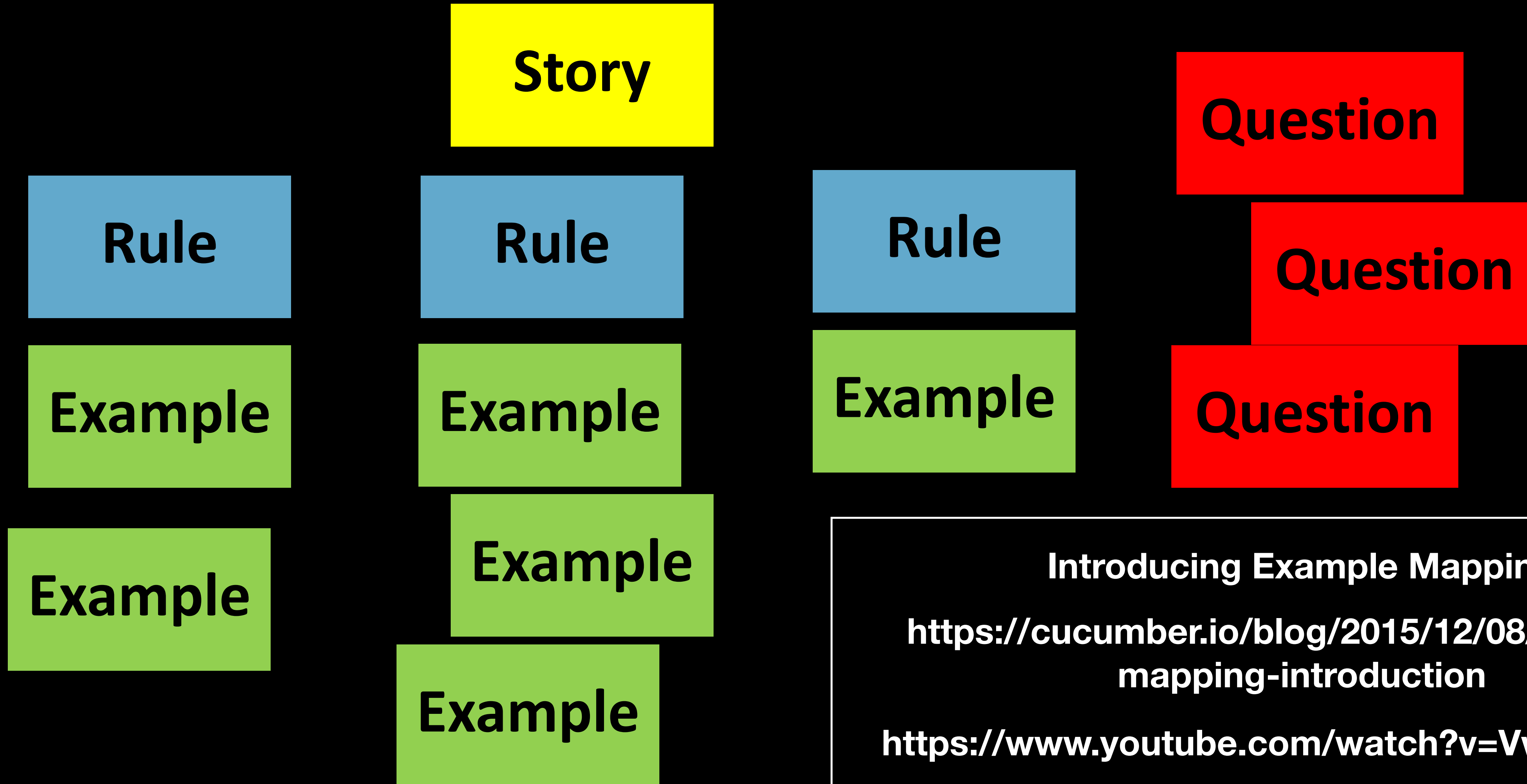
Examples of system behaviour are documented using business terminology

The documentation is automated, creating living documentation that verifies the system's behaviour

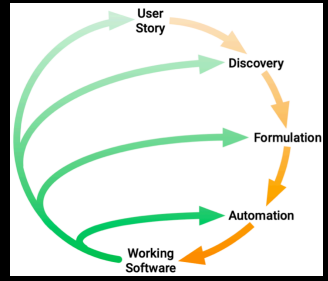




Example map



Introducing Example Mapping
<https://cucumber.io/blog/2015/12/08/example-mapping-introduction>
https://www.youtube.com/watch?v=VwvrGfWmG_U

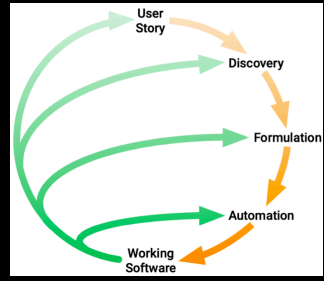


Synonyms

Requirement

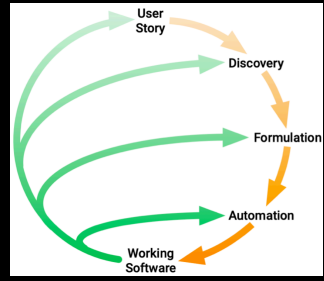
Rule

**Acceptance
criterion**



A sample rule

The customer can change the delivery address of an order until it has been dispatched.



A sample example map

Change delivery address

Within delivery area

**Address is changed within area
Address change is accepted**

**Address is changed outwith area
Address change is rejected**

Before dispatch

**Pizza is in oven
Address change is accepted**

**Pizza is awaiting dispatch
Address change is accepted**

**Pizza has been dispatched
Address change is rejected**



Exercise: Review sample scenarios



Scenario A

Scenario: USERNAME SHOULD BE UNIQUE

Given a user "Marvin" is in the database

And I navigate to <http://myapp.com>

And I click on "Register"

And I fill in "Username" with "Marvin"

And I fill in "Password" with "1234"

When I click on "Submit registration"

Then "ValidationSummary" should be visible

And "ValidationSummary" should contain "Username already in"



Scenario A - suggestion

Scenario: Duplicate username error message displayed

Given there is a registered user called "Marvin"

When a customer registers as "Marvin"

Then they should see the "Username already in use" error



Scenario B

Scenario: DELIVERY ADDRESS CHANGE

Given I have placed an order

When I change the delivery address

Then I should receive a confirmation

And the estimated arrival time should be updated

And the delivery person should be notified about the new address



Scenario B - suggestion

Scenario: Customer notified of change of address

Given a customer has placed an order for delivery

When they change the delivery address

Then they should receive a confirmation of the change

Scenario: Delivery person notified of change of address

Given a customer has placed an order for delivery

When they change the delivery address

Then the delivery person should be notified of the change



Scenario C

Scenario: CLIENT RECEIVES ORDER NOTIFICATION

Given I visit Geek Pizza shop site

And I browse for "Margarita" pizza

And I add the pizza to the basket

And I proceed to checkout

And I enter delivery address

And I enter payment details

When I confirm the order

Then I should receive an order notification



Scenario C - suggestion

Scenario: Delivery person notified of change of address

When a customer places an order for delivery

Then the delivery person should receive an order notification



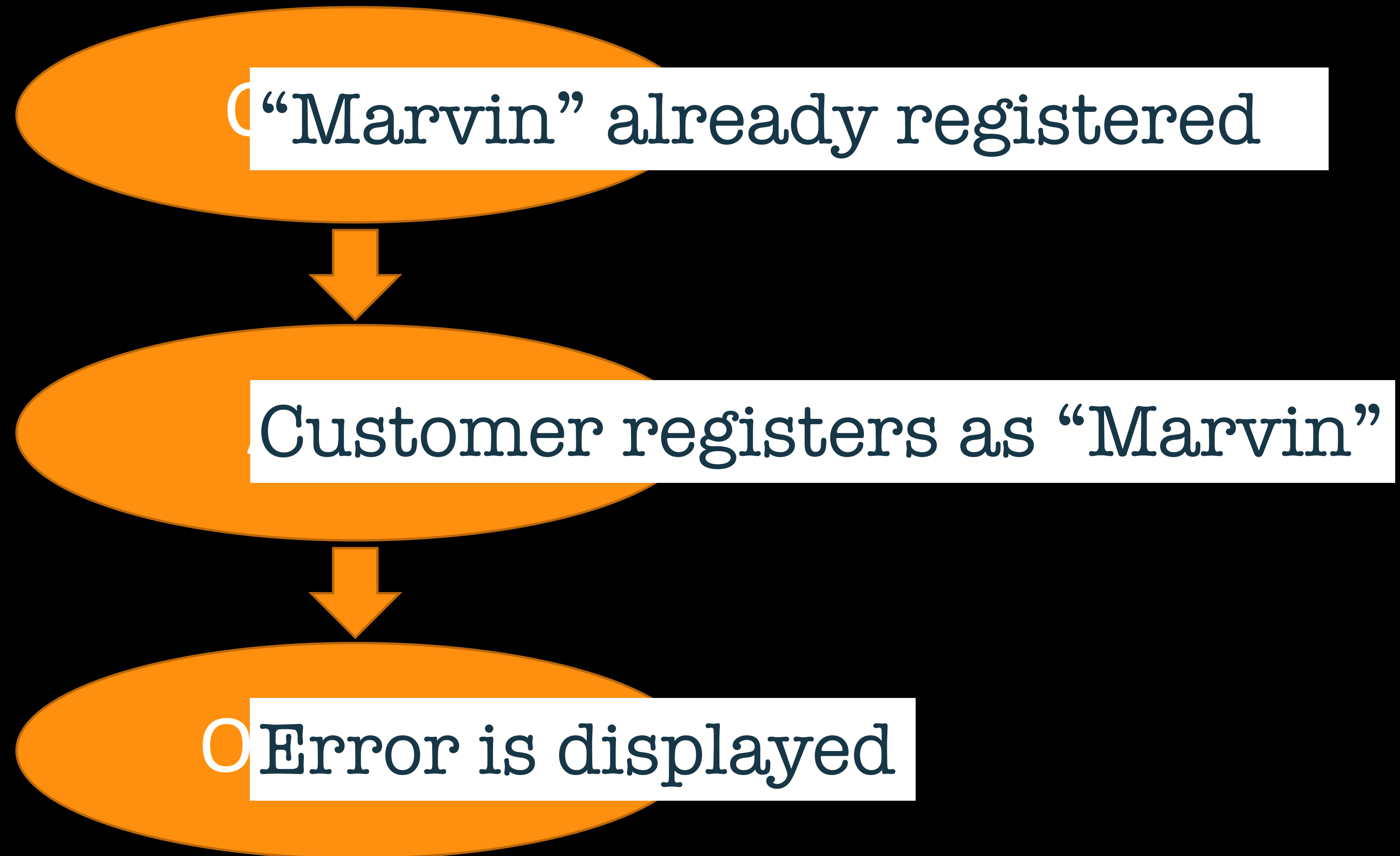
Good **scenarios** should be **BRIEF**

- **Business readable** - terminology drawn from business domain
- **Real data** - use concrete data for clarity
- **Intention revealing** - reveal intent, don't describe *mechanics*
- **Essential** - remove incidental details
- **Focused** - each scenario illustrates a single rule
- **BRIEF** - keep scenarios short (less than 6 steps)

[https://cucumber.io/blog/bdd/keep-your-scenarios-brief-\(1\)/](https://cucumber.io/blog/bdd/keep-your-scenarios-brief-(1)/)



Anatomy of a **scenario**





Scenario writing heuristics

- Give it a name - “The one where...”
- One rule per scenario
- Write it upwards: Then, When, Given
- Single **When** per Scenario
- Write **Given** steps in past tense
- What, not how. No UI in steps (click, fill in)
- Max 5 steps per scenario
- Omit the obvious (Given app is open)
- Be deterministic (no “or”)
- Make sure it can fail



Exercise: Write your own scenario

Wrap up

Discovery and
Formulation are
discrete practices

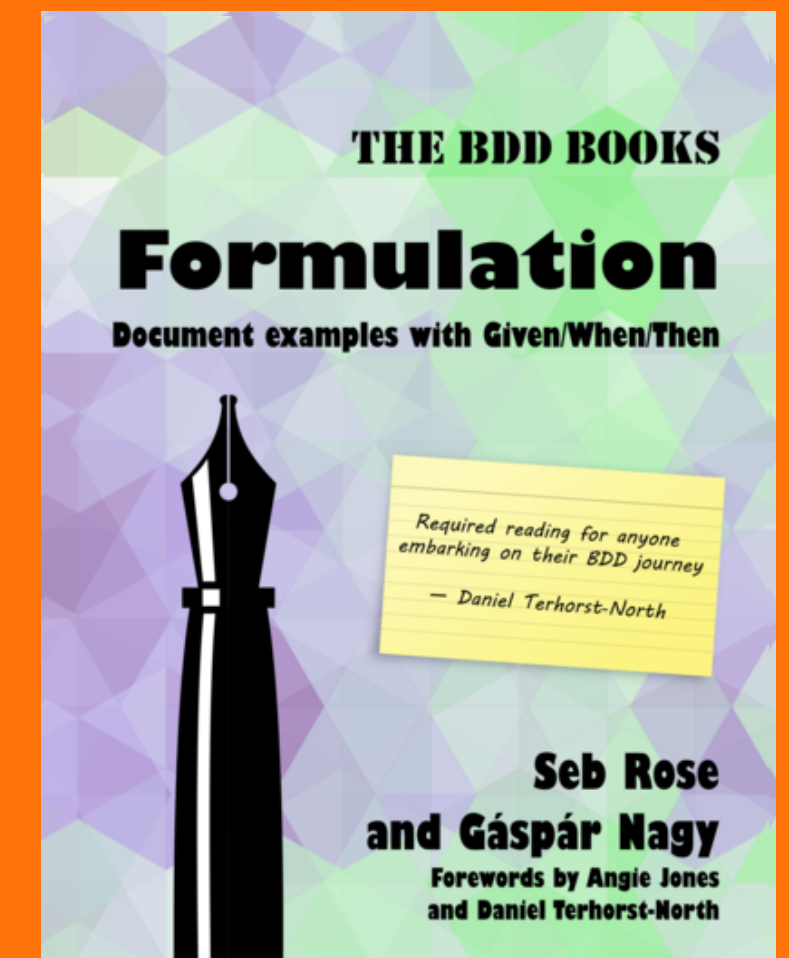
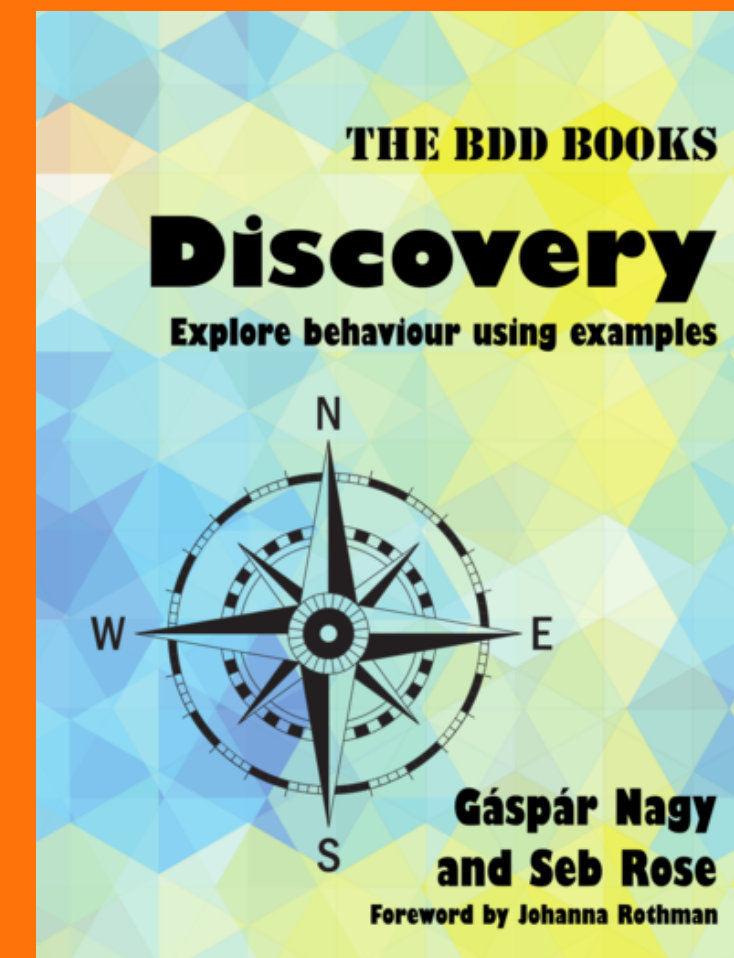
Formulated
examples are
documentation

BDD is a
collaborative
design/
development
approach

Keep your
documentation
BRIEF

Gherkin can be
used for testing -
but that's not BDD

Ease-of-
automation should
not influence the
documentation



<http://bddbooks.com>

Seb Rose

Twitter: @sebrose

Blog: <https://cucumber.io/blog/>

E-mail: seb.rose@smartbear.com