

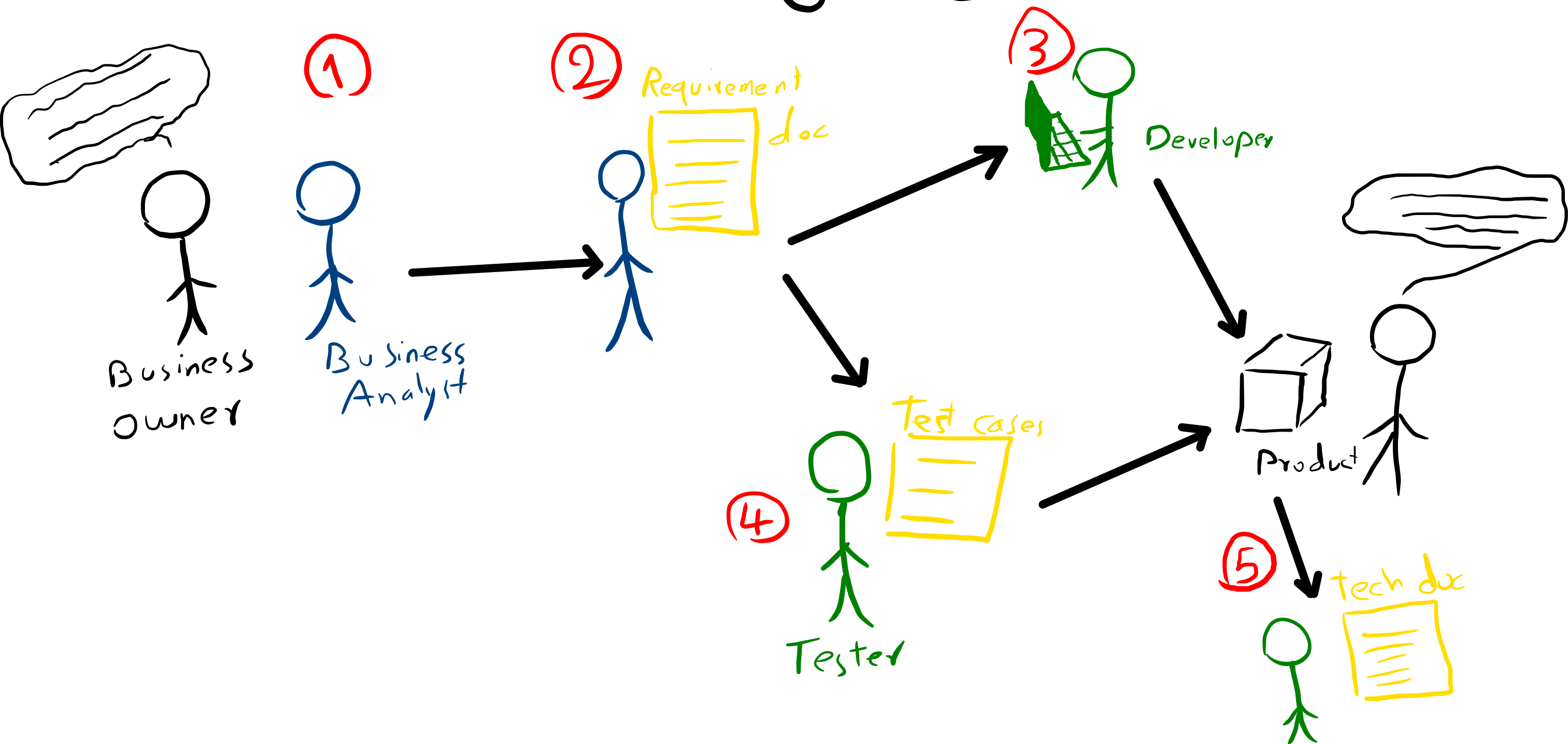
# Behavior-Driven Development (BDD)



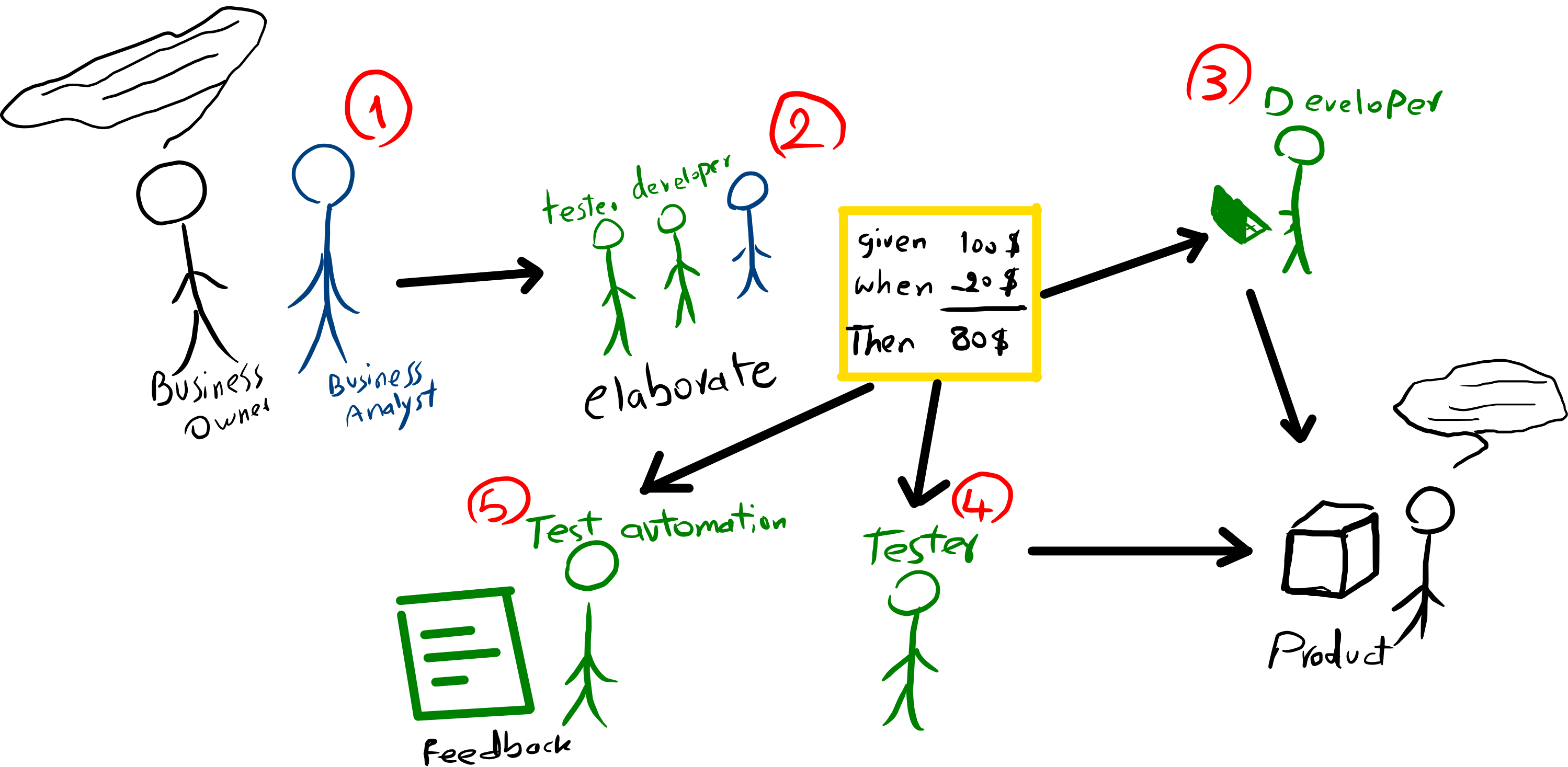
خطای انسانی را  
کشف می کنند

بهر است روی رفتار سیستم  
تمرکز کنیم

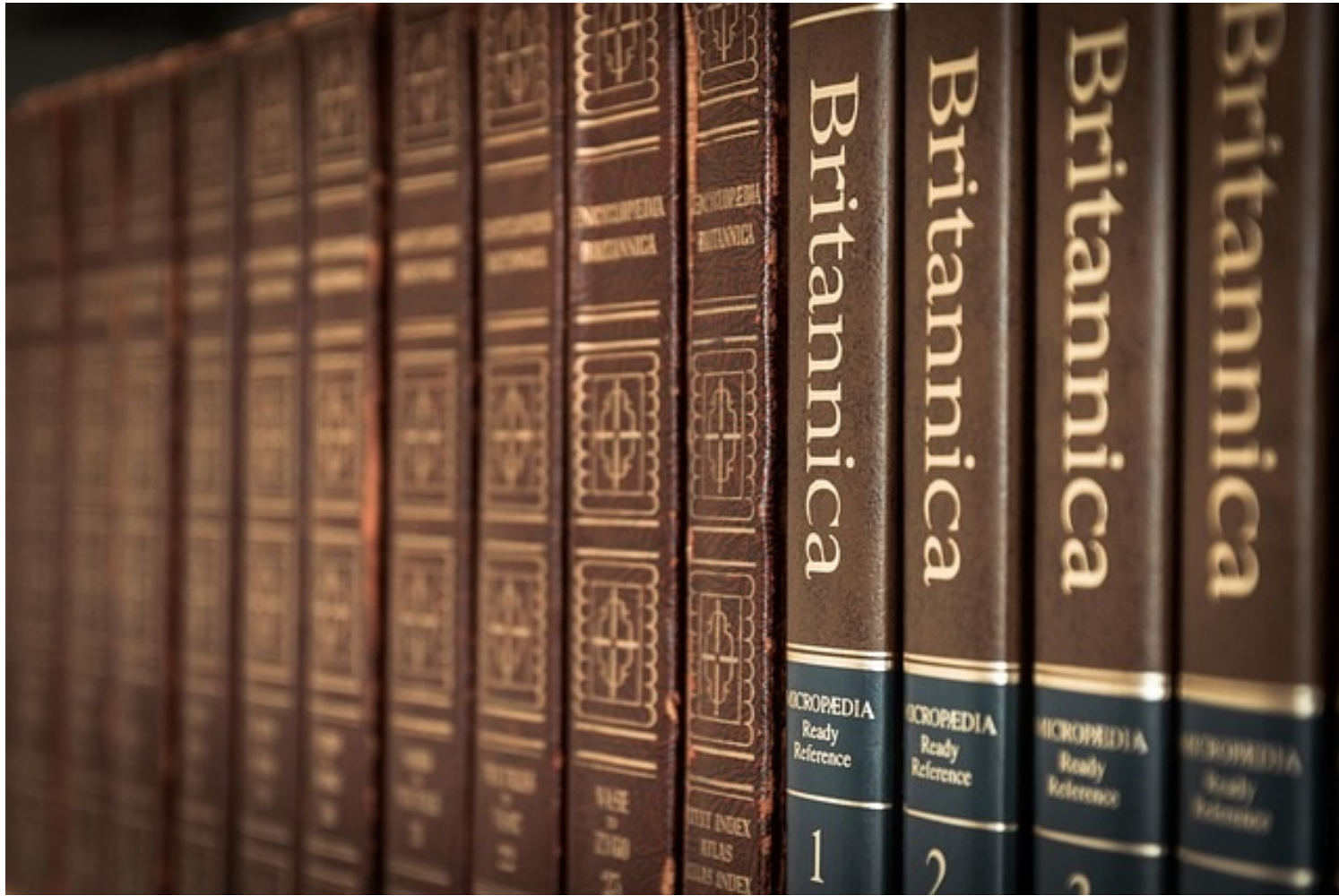
# روش سنتی



# BDD اہم اصول



# Living documentation



یک مرجع اصلی  
برای اطلاعات سیستم  
همیشه با هم به دست اند



① Cucumber  
framework



② Gherkin  
scripts



# Gherkin Script

زبان قابل فہم ہے

**Scenario:** *Successful withdrawal from an account in credit*

**Given** I have \$100 in my account # the context

**When** I request \$20 # the event(s)

**Then** \$20 should be dispensed # the outcome(s)

**Scenario:** Successful withdrawal from an account in credit

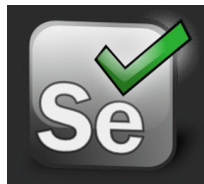
- 1 Given I have \$100 in my account # the context
- 2 When I request \$20 # the event(s)
- 3 Then \$20 should be dispensed # the outcome(s)

← Feature Files

Test cases ↓

Test runner ↓

JUnit



TestNG

```
1 @Given("I have ${int} in my account")
  public void i_have_${int}_in_my_account(Integer amount) {
    originalAmount = amount;
    account = new Account(amount);
  }

2 @When("I request ${int}")
  public void i_request_${int}(Integer amount) {
    account.withdraw(amount);
  }

3 @Then("${int} should be dispensed")
  public void ${int}_should_be_dispensed(Integer amount) {
    Assert.assertEquals((amount.floatValue() +
        account.getBalance()), originalAmount, /*delta*/ delta: 0);
  }
```



# Test types

White box (TDD)



Black box (BDD)

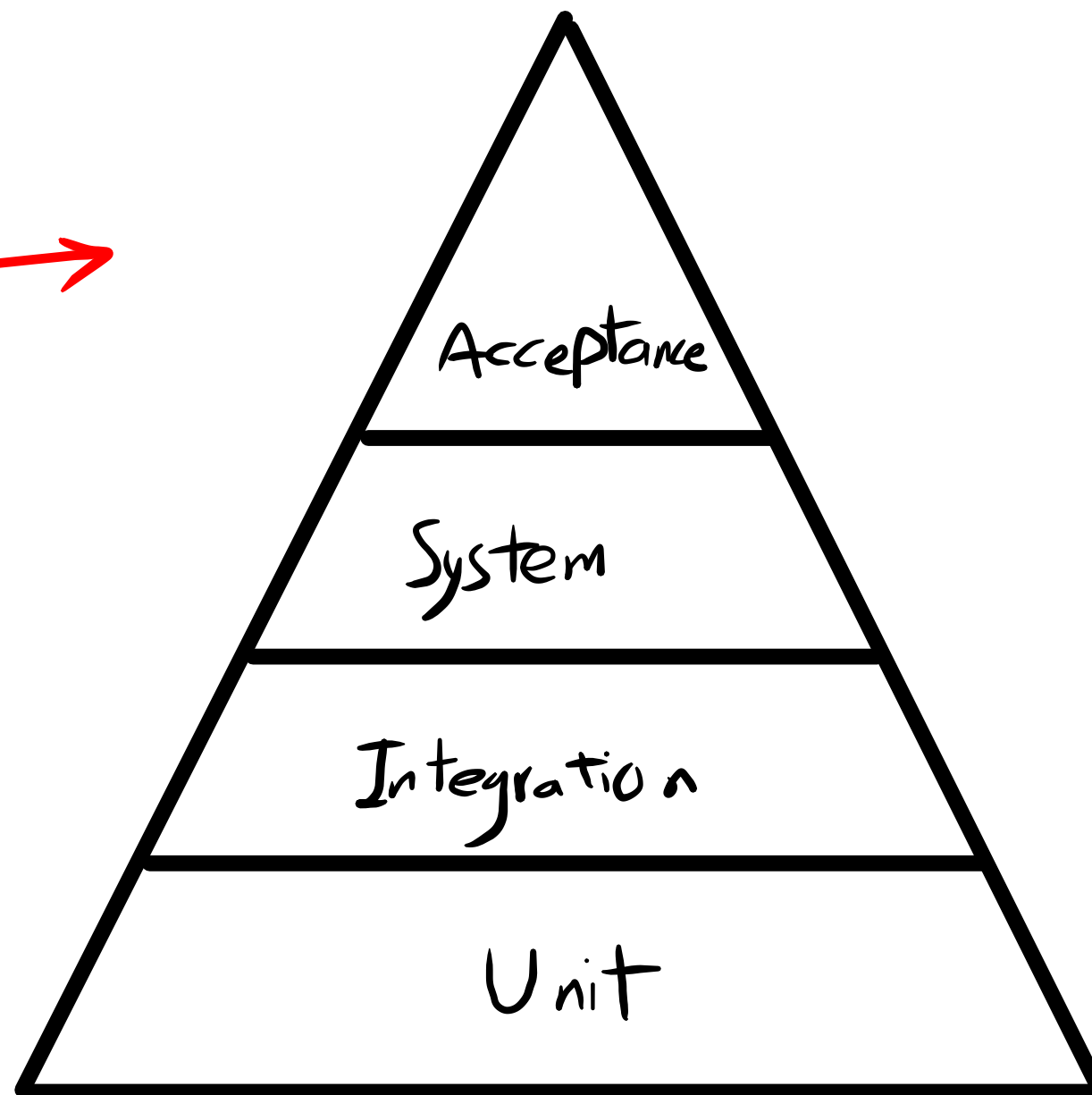


# Test Levels

BDD

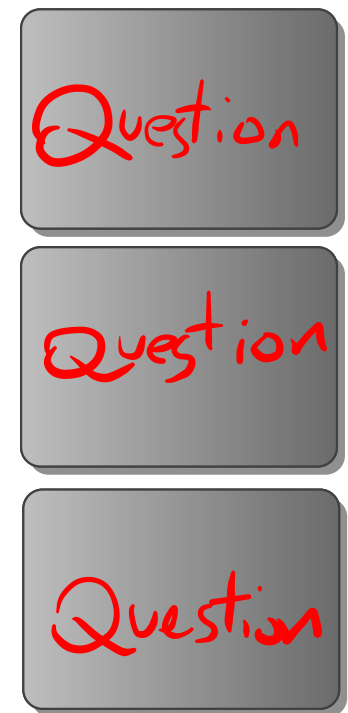
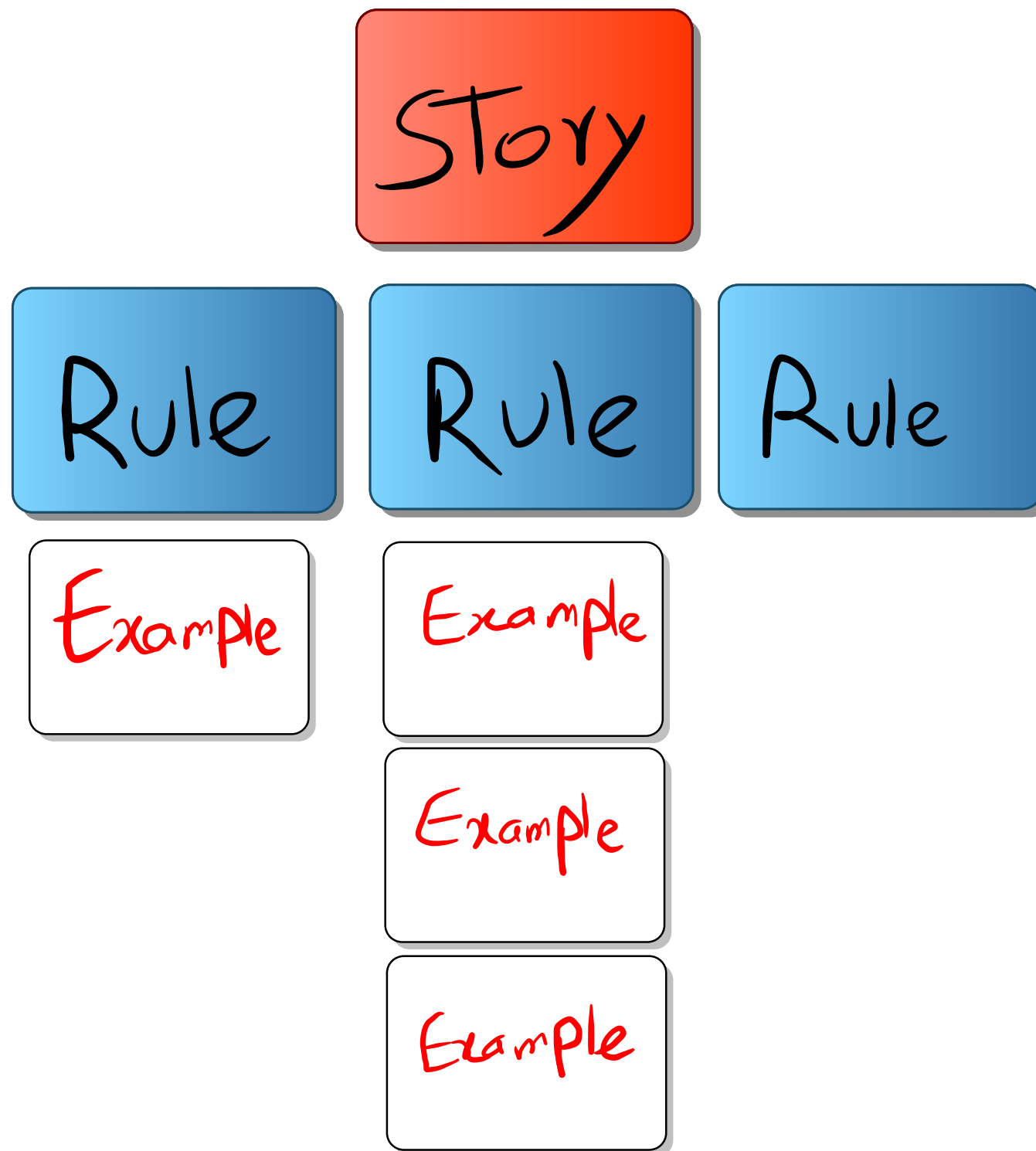


TDD



# Example mapping

روس





"Pet clinic"

تعريف سستم

Owners

vets

Pets

Visits





# find owners feature

The screenshot shows a web application interface for finding owners. The top navigation bar is dark grey with four links: 'HOME' (with a house icon), 'FIND OWNERS' (with a magnifying glass icon and a red circle '1' above it), 'VETERINARIANS' (with a list icon), and 'ERROR' (with a warning triangle icon). The 'FIND OWNERS' link is underlined in red. Below the navigation bar, the main content area is light grey. It features a section titled 'Find Owners'. Under this title, there is a label 'Last name' followed by a text input field. A red circle '2' is drawn around the input field, and a red wavy line extends from its right side. Below the input field is a dark grey button labeled 'Find Owner'. A red circle '3' is drawn around this button, and a red arrow points to it from below. In the bottom left corner of the main content area, there is another dark grey button labeled 'Add Owner'.

HOME FIND OWNERS VETERINARIANS ERROR

Find Owners

Last name

Find Owner

Add Owner

find owners

Add owner

Search  
by last name

Empty  
field for  
search?

1 match  
found

Several  
match found

No match  
found