

# JGiven Report

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*Table 1. Total Statistics*

<b>feature</b>	<b>total classes</b>	<b>successf ul scenari os</b>	<b>failed scenari os</b>	<b>pending scenari os</b>	<b>total scenari os</b>	<b>failed cases</b>	<b>total cases</b>	<b>total steps</b>	<b>duratio n</b>
As Annotati on Example	1	4	0	0	4	0	4	6	1ms
Attachm ents Example	1	7	0	0	7	0	10	15	184ms
Calculat or	1	1	0	0	1	0	1	1	0ms
Commo n Stages	1	1	0	0	1	0	1	2	0ms
Current Step Example	1	3	0	0	3	0	4	4	2ms
Data Table Example s	1	11	0	0	11	0	11	13	44ms
Dynamic Tags	1	1	0	0	1	0	1	3	2ms
Extende d Descript ions	1	5	0	0	5	0	6	6	1ms

feature	total classes	successf ul scenari os	failed scenari os	pending scenari os	total scenari os	failed cases	total cases	total steps	duratio n
Extende d Vocabul ary	1	2	0	0	2	0	2	8	2ms
Extende d Vocabul ary Pan Cake	1	1	0	0	1	0	1	7	42ms
Failing Scenario	1	0	1	0	1	1	1	1	174ms
J Unit Params Serve Coffee	1	1	0	0	1	0	4	28	3ms
Link Example One	1	2	0	0	2	0	2	6	1ms
Link Example Two	1	1	0	0	1	0	1	3	0ms
My Dynamic ally Added	1	1	0	0	1	0	1	4	21ms
My Injected J Given	1	1	0	0	1	0	1	4	0ms
My Shiny J Given	1	1	0	0	1	0	1	3	0ms
Nested Steps	1	1	1	0	2	1	2	17	7ms
Paramet er Formatti ng	1	1	0	0	1	0	2	4	0ms

feature	total classes	successf ul scenari os	failed scenari os	pending scenari os	total scenari os	failed cases	total cases	total steps	duratio n
Paramet erized Pan Cake Scenario	1	1	0	0	1	0	2	12	2ms
Paramet rized Scenario s	1	4	1	0	5	10	108	208	58ms
Pending Example	1	0	0	3	3	0	4	12	3ms
Rocket	1	1	0	0	1	0	1	2	1ms
Rules Example	1	1	0	0	1	0	1	1	0ms
Section	1	1	0	0	1	0	1	7	0ms
Serve Coffee	1	11	4	0	15	4	29	148	1s 121ms
Simple Scenario Test Example	1	3	0	0	3	0	3	12	2ms
Spring Pan Cake Scenario	1	1	0	0	1	0	1	6	4ms
Step Tags	1	1	0	0	1	0	1	5	4ms
Tag Hierarc hy Example	1	2	0	0	2	0	2	6	1ms
Using Rules	1	1	0	0	1	0	1	3	0ms
sum	31	72	7	3	82	16	210	557	1s 694ms

# All Scenarios

## As Annotation Example

☑ 4 Successful, ❶ 0 Failed, ⓪ 0 Pending, 4 Total (1ms)

Demonstrates the usage of the @As annotation

### Scenario that shows the usage of @As with argument enumeration

☑

**Given** the reference to the first argument : *false* and the second argument : *0*

### Scenario that shows the usage of @As with argument names

☑

**Given** the reference to the second argument : *1* and the first argument : *true*

### Scenario that shows the usage of the @As annotation

☑

**Given** something else

, something else

### Scenarios can have an extended description

☑

This scenario has a very long <tt>@ExtendedDescription</tt>. Extended descriptions can give additional information about the rational of a scenario. You can even use <b>HTML</b>.

**Given** something else

**And** something else

## Attachments Example

☑ 7 Successful, ❶ 0 Failed, ⓪ 0 Pending, 7 Total (184ms)

### Attachments can be added to steps

☑

**Given** some text content "*Hello World*"

**Then** it can be added as an attachment to the step with title *Hi*

## Attachments can be directly shown

☑ (9ms)

**Given** an oval circle

## Attachments work with data tables

☑ (4ms)

**Given** some text content `<content>`

**Then** it can be added as an attachment to the step with title `<title>`

Table 2. Cases

#	content	title	Status
1	"Hello World"	English	SUCCESS
2	"Hallo Welt"	German	SUCCESS
3	"你好"	Chinese	SUCCESS

## Inline attachments can be used when having multiple cases

☑ (15ms)

### Case 1

color = blue

**Given** a *blue* oval circle

### Case 2

color = red

**Given** a *red* oval circle

## Large attachments can be zoomed

☑ (51ms)

**Given** a large oval circle

## Steps can have multiple attachments

☑

**Given** some text content *"Hi There"*



**Then** it can be added as an attachment multiple times to the step

## Thumbnails are shown when not drawn

☒ (102ms)

**Given** an oval circle as thumbnail

## Calculator

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (0ms)

### Test

☒

**When** 10 % are added

## Common Stages

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (0ms)

## Subclassing of stages should work

☒

**Given** my common step

**And** cant do this

## Current Step Example

☒ 3 Successful,  0 Failed,  0 Pending, 3 Total (2ms)

Demonstrates the use of the CurrentStep interface

## SetName can also use arguments

☒

Tags: *CurrentStep*

**Given** step one argument

## SetName with arguments also works with parameterized tests

☒

This test shows that setName also works with parametrized tests. Note, however, that data tables cannot be created in this case. Use the @As annotation instead.

Tags: *CurrentStep*

### Case 1

```
argument = argument 1
```

**Given** step argument 1

### Case 2

```
argument = argument 2
```

**Given** step argument 2

## Step name can be changed with CurrentStep



This test shows how to use the CurrentStep interface to change the name of a step

Tags: *CurrentStep*

**Given** this step name is set with the CurrentStep interface

*This step changes its name programmatically using the setStep method. The name is actually step\_name\_changed\_with\_CurrentStep*

## Data Table Examples

☒ 11 Successful,  0 Failed,  0 Pending, 11 Total (44ms)

### A list of list can be used as table parameter



**Given** a list of lists is used as parameter

Name	Email
John Doe	<a href="mailto:john@doe.com">john@doe.com</a>
Jane Roe	<a href="mailto:jane@roe.com">jane@roe.com</a>

### A list of list can be used as table parameter and column titles can be set

☒ (7ms)

**Given** a list of lists is used as parameter with column titles

Name	Email
John Doe	<a href="mailto:john@doe.com">john@doe.com</a>
Jane Roe	<a href="mailto:jane@roe.com">jane@roe.com</a>

## A list of POJOs can be represented as a data table with a vertical header



**Given** a list of POJOs is used as parameters with header type VERTICAL

name	John Doe	Jane Roe
email	(quoted at POJO field level) <a href="mailto:john@doe.com">"john@doe.com"</a>	(quoted at POJO field level) <a href="mailto:jane@roe.com">"jane@roe.com"</a>

## A list of POJOs can be represented as a data table with a vertical header and numbered columns



**Given** a list of POJOs is used as parameters with header type VERTICAL and numbered columns

#	1	2
name	John Doe	Jane Roe
email	(quoted at POJO field level) <a href="mailto:john@doe.com">"john@doe.com"</a>	(quoted at POJO field level) <a href="mailto:jane@roe.com">"jane@roe.com"</a>

## A list of POJOs can be represented as data tables

☒ (18ms)

**Given** a list of POJOs is used as parameters

name	email
John Doe	(quoted at POJO field level) <a href="mailto:john@doe.com">"john@doe.com"</a>
Jane Roe	(quoted at POJO field level) <a href="mailto:jane@roe.com">"jane@roe.com"</a>

## A list of POJOs can be represented as formatted data tables

☒ (10ms)

**Given** a list of POJOs is used as parameters and some fields are formatted using inline specified named formats

name	email
(uppercased by custom format annotation) JOHN DOE	<a href="mailto:john@doe.com">john@doe.com</a>
(uppercased by custom format annotation) JANE ROE	<a href="mailto:jane@roe.com">jane@roe.com</a>

**And** a list of POJOs is used as parameters and some fields are formatted using a predefined set of named formats

name	email	shippingAddress
JOHN DOE	(quoted by custom format annotation) " <a href="mailto:john@doe.com">john@doe.com</a> "	null
JANE ROE	(quoted by custom format annotation) " <a href="mailto:jane@roe.com">jane@roe.com</a> "	[90017/LOS ANGELES/US]

**And** a list of POJOs is used as parameters and some fields are formatted using a predefined set of named formats

name	email
JOHN DOE	(quoted by custom format annotation) "null"
	(quoted by custom format annotation) " <a href="mailto:jane@roe.com">jane@roe.com</a> "

## A single POJO can be represented as a data table



**Given** a single POJO is used as parameters

name	Jane Roe
email	(quoted at POJO field level) " <a href="mailto:jane@roe.com">jane@roe.com</a> "

## Empty lists also work



**Given** a list of lists is used as parameter

## Parameter tables can have numbered rows



**Given** a list of POJOs with numbered rows

#	name	email
1	John Doe	(quoted at POJO field level) "john@doe.com"
2	Jane Roe	(quoted at POJO field level) "jane@roe.com"
3	Lee Smith	(quoted at POJO field level) "lee@smith.com"

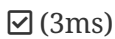
## Parameter tables can have numbered rows with custom headers



**Given** a list of POJOs with numbered rows and custom header

Counter	name	email
1	John Doe	(quoted at POJO field level) "john@doe.com"
2	Jane Roe	(quoted at POJO field level) "jane@roe.com"
3	Lee Smith	(quoted at POJO field level) "lee@smith.com"

## Two dimensional arrays can be numbered



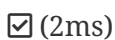
**Given** a two dimensional array with numbered rows

#	t
1	a
2	b

## Dynamic Tags

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (2ms)

### Tags can be added dynamically



Tags: *CarOrder*

**Given** an order for a *BMW* car

**When** the order is processed

**Then** the car is sent to manufacturing

## Extended Descriptions

☑ 5 Successful, ❗ 0 Failed, ⏸ 0 Pending, 5 Total (1ms)

Example for different possibilities to annotate test cases with extended descriptions

### Scenarios with multiple argument parameters can be shown via click on table

☑

**Given** some bool <bool> and int <i> value

*Different number of arguments can be referenced in different order - int : \$2, bool : \$1*

Table 3. Cases

#	bool	i	Status
1	false	0	SUCCESS
2	true	1	SUCCESS

### Steps can have extended descriptions

☑

**Given** some boolean value *true*

*This is a boolean value*

### Steps can have extended descriptions with arguments

☑

**Given** some int value *1*

*We can reference the first argument with \$\$ or \$\$1 : \$*

### Steps can have multiple arguments referenced in extended descriptions

☑

**Given** some bool *false* and int *0* value

*Different number of arguments can be referenced in different order - int : \$2, bool : \$1*

### Steps can reference arguments by name in extended descriptions

☑

**Given** another bool *false* and int *0* value

*Referencing arguments per name - int : \$i, bool : \$bool*

## Extended Vocabulary

☑ 2 Successful, ❗ 0 Failed, ⏸ 0 Pending, 2 Total (2ms)

### With filler words

☑

**Given** the ingredients

an egg

some milk

and the ingredient *flour*

### With joining words

☑ (2ms)

**Given** a (clean) worksurface, a bowl and the ingredients:

an egg

some milk

the ingredient *flour*

## Extended Vocabulary Pan Cake

☑ 1 Successful, ❗ 0 Failed, ⏸ 0 Pending, 1 Total (42ms)

### A pancake can be fried out of an egg milk and flour

☑ (42ms)

**Given** some (fresh) ingredients, consisting of:

an egg

some milk

the ingredient *flour*

**When** the cook mangles everthing to a dough

**And** the cook fries the dough in a pan

**Then** the resulting meal is a pan cake

## Failing Scenario

☑ 0 Successful, ❗ 1 Failed, ⏸ 0 Pending, 1 Total (174ms)

## A scenario with a multi line error message

❗ (174ms)

Tags: *FailingOnPurpose*

**Given** multi line error message ❗ (142ms)

▼ *org.opentest4j.AssertionFailedError: [This message has multiple lines] Expecting value to be false but was true*

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps.multi_line_error_message(Faili
ngScenarioTest.java:23)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u.multi_line_
error_message$accessor$aaw89Qi3R(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u$auxiliary$f
jq2kY9Q.call(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u.multi_line_
error_message(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest.a_scenario_with_a_multi_line_error_m
essage(FailingScenarioTest.java:18)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
```



```
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.jav
a:74)
```

## J Unit Params Serve Coffee

☑ 1 Successful, ❶ 0 Failed, ⓪ 0 Pending, 1 Total (3ms)

### Buy a coffee

☑ (3ms)

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are <coffees> coffees left in the machine  
*The number of coffees in the machine is set to the given value.*

**And** the machine is <onOrOff>

**And** the coffee costs 2 euros

**When** I insert <dollars> one euro coins

**And** I press the coffee button

**Then** I <shouldOrShouldNot> be served a coffee

Table 4. Cases

#	coffees	onOrOff	dollars	shouldOrShouldNot	Status
1	1	on	1	should not	SUCCESS
2	1	on	2	should	SUCCESS
3	0	on	2	should not	SUCCESS
4	1	off	2	should not	SUCCESS

## Link Example One

☑ 2 Successful, ❶ 0 Failed, ⓪ 0 Pending, 2 Total (1ms)

### Link to another test

☑

Tags: *LinkToTest*

**Given** test linked to another test

**When** the report is generated

**Then** the link appears in the report

### Link to fixed location

☑

Tags: *SimpleLink*

**Given** test annotated with links

**When** the report is generated

**Then** the link appears in the report

## Link Example Two

☑ 1 Successful, ❶ 0 Failed, ⓪ 0 Pending, 1 Total (0ms)

## Link to another test



Tags: *LinkToTest*

**Given** test linked to another test

**When** the report is generated

**Then** the link appears in the report

## My Dynamically Added

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (21ms)

### Something should happen

☒ (21ms)

**Given** some state

**And** some additional state

**When** some action

**Then** some outcome

## My Injected J Given

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (0ms)

### Something should happen



**Given** some state

**And** some additional state

**When** some action

**Then** some outcome

## My Shiny J Given

☒ 1 Successful,  0 Failed,  0 Pending, 1 Total (0ms)

### Something should happen



**Given** some state

**When** some action

Then some outcome

## Nested Steps

☑ 1 Successful, ❗ 1 Failed, ⏸ 0 Pending, 2 Total (7ms)

### A scenario with a failing nested step on purpose

❗ (1ms)

Tags: *FailingOnPurpose*

**Given** I fill out the registration form with invalid values ❗ (1ms)

- I enter a name *Franky* ☑
  - I think a name *Franky* ☑
  - **And** I write the name *Franky* ☑
- **And** I enter a email address *franky@acme.com* ☑
- **And** something fails for demonstration purposes ❗

**When** I submit the form ⏸

**Then** the password matches ⏸

▼ *org.opentest4j.AssertionFailedError: [Fails on purpose]*

Expecting value to be false but was true

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage.something_fails_for_d
emonstration_purposes(NestedStepsTest.java:72)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.so
mething_fails_for_demonstration_purposes$accessor$Zj6zME7c(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy$au
xiliary$YA6YRU7S.call(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.so
mething_fails_for_demonstration_purposes(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage.I_fill_out_the_regist
ration_form_with_invalid_values(NestedStepsTest.java:67)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.I_
fill_out_the_registration_form_with_invalid_values$accessor$Zj6zME7c(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy$au
xiliary$rAwdzEwx.call(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.I_
fill_out_the_registration_form_with_invalid_values(Unknown Source)
```

```

com.tngtech.jgiven.examples.nested.NestedStepsTest.a_scenario_with_a_failing_nested_
step_on_purpose(NestedStepsTest.java:32)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)

```

```

org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecutionWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.java:74)

```

## A scenario with nested steps

☑ (5ms)

This scenario contains nested steps.

**Given** I fill out the registration form with valid values

- I enter a name *Franky*
  - I think a name *Franky*
  - **And** I write the name *Franky*
- **And** I enter a email address *franky@acme.com*
- **And** I enter a password *password1234*
- **And** I enter a repeated password *password1234*

**When** I submit the form

**Then** the password matches

## Parameter Formatting

☑ 1 Successful, ❶ 0 Failed, ⓪ 0 Pending, 1 Total (0ms)

### Parameters can be formatted

☑

**Given** a machine that is <onOff>

**Then** the power light <isOrIsNot> on

Table 5. Cases

#	onOff	isOrIsNot	Status
1	on	is	SUCCESS
2	off	is not	SUCCESS

# Parameterized Pan Cake Scenario

☑ 1 Successful, ❗ 0 Failed, ⏸ 0 Pending, 1 Total (2ms)

**A meal can be fried out of an egg milk and some ingredient**

☑ (2ms)

**Given** an egg

**And** some milk

**And** the ingredient <ingredient>

**When** the cook mangles everthing to a dough

**And** the cook fries the dough in a pan

**Then** the resulting meal is a <expectedMeal>

Table 6. Cases

#	ingredient	expectedMeal	Status
1	flour	pancake	SUCCESS
2	sugar	mishmash	SUCCESS

## Parametrized Scenarios

☑ 4 Successful, ❗ 1 Failed, ⏸ 0 Pending, 5 Total (58ms)

**A scenario with many cases**

❗ (50ms)

This scenario shows how large case tables are shown in JGiven. As soon as a table has more than 2 entries, grouping by values is possible. This scenario also has some failing steps for demonstration purposes.<p>Btw. this description was created with the <a target='\_blank' href='http://jgiven.org/javadoc/com/tngtech/jgiven/annotation/ExtendedDescription.html'>@ExtendedDescription</a> annotation

Tags: *FailingOnPurpose*

**Given** some group value <grouping>

**And** another value <value>

Table 7. Cases

#	grouping	value	Status
1	some grouping value 0	value 0	SUCCESS
2	some grouping value 0	value 1	SUCCESS

#	grouping	value	Status
3	some grouping value 0	value 2	SUCCESS
4	some grouping value 0	value 3	SUCCESS
5	some grouping value 0	value 4	SUCCESS
6	some grouping value 0	value 5	FAILED
7	some grouping value 0	value 6	SUCCESS
8	some grouping value 0	value 7	SUCCESS
9	some grouping value 0	value 8	SUCCESS
10	some grouping value 0	value 9	SUCCESS
11	some grouping value 1	value 0	SUCCESS
12	some grouping value 1	value 1	SUCCESS
13	some grouping value 1	value 2	SUCCESS
14	some grouping value 1	value 3	SUCCESS
15	some grouping value 1	value 4	SUCCESS
16	some grouping value 1	value 5	FAILED
17	some grouping value 1	value 6	SUCCESS
18	some grouping value 1	value 7	SUCCESS
19	some grouping value 1	value 8	SUCCESS
20	some grouping value 1	value 9	SUCCESS
21	some grouping value 2	value 0	SUCCESS
22	some grouping value 2	value 1	SUCCESS
23	some grouping value 2	value 2	SUCCESS
24	some grouping value 2	value 3	SUCCESS
25	some grouping value 2	value 4	SUCCESS
26	some grouping value 2	value 5	FAILED
27	some grouping value 2	value 6	SUCCESS
28	some grouping value 2	value 7	SUCCESS
29	some grouping value 2	value 8	SUCCESS
30	some grouping value 2	value 9	SUCCESS
31	some grouping value 3	value 0	SUCCESS
32	some grouping value 3	value 1	SUCCESS
33	some grouping value 3	value 2	SUCCESS
34	some grouping value 3	value 3	SUCCESS
35	some grouping value 3	value 4	SUCCESS



#	grouping	value	Status
36	some grouping value 3	value 5	FAILED
37	some grouping value 3	value 6	SUCCESS
38	some grouping value 3	value 7	SUCCESS
39	some grouping value 3	value 8	SUCCESS
40	some grouping value 3	value 9	SUCCESS
41	some grouping value 4	value 0	SUCCESS
42	some grouping value 4	value 1	SUCCESS
43	some grouping value 4	value 2	SUCCESS
44	some grouping value 4	value 3	SUCCESS
45	some grouping value 4	value 4	SUCCESS
46	some grouping value 4	value 5	FAILED
47	some grouping value 4	value 6	SUCCESS
48	some grouping value 4	value 7	SUCCESS
49	some grouping value 4	value 8	SUCCESS
50	some grouping value 4	value 9	SUCCESS
51	some grouping value 5	value 0	SUCCESS
52	some grouping value 5	value 1	SUCCESS
53	some grouping value 5	value 2	SUCCESS
54	some grouping value 5	value 3	SUCCESS
55	some grouping value 5	value 4	SUCCESS
56	some grouping value 5	value 5	FAILED
57	some grouping value 5	value 6	SUCCESS
58	some grouping value 5	value 7	SUCCESS
59	some grouping value 5	value 8	SUCCESS
60	some grouping value 5	value 9	SUCCESS
61	some grouping value 6	value 0	SUCCESS
62	some grouping value 6	value 1	SUCCESS
63	some grouping value 6	value 2	SUCCESS
64	some grouping value 6	value 3	SUCCESS
65	some grouping value 6	value 4	SUCCESS
66	some grouping value 6	value 5	FAILED
67	some grouping value 6	value 6	SUCCESS
68	some grouping value 6	value 7	SUCCESS

#	grouping	value	Status
69	some grouping value 6	value 8	SUCCESS
70	some grouping value 6	value 9	SUCCESS
71	some grouping value 7	value 0	SUCCESS
72	some grouping value 7	value 1	SUCCESS
73	some grouping value 7	value 2	SUCCESS
74	some grouping value 7	value 3	SUCCESS
75	some grouping value 7	value 4	SUCCESS
76	some grouping value 7	value 5	FAILED
77	some grouping value 7	value 6	SUCCESS
78	some grouping value 7	value 7	SUCCESS
79	some grouping value 7	value 8	SUCCESS
80	some grouping value 7	value 9	SUCCESS
81	some grouping value 8	value 0	SUCCESS
82	some grouping value 8	value 1	SUCCESS
83	some grouping value 8	value 2	SUCCESS
84	some grouping value 8	value 3	SUCCESS
85	some grouping value 8	value 4	SUCCESS
86	some grouping value 8	value 5	FAILED
87	some grouping value 8	value 6	SUCCESS
88	some grouping value 8	value 7	SUCCESS
89	some grouping value 8	value 8	SUCCESS
90	some grouping value 8	value 9	SUCCESS
91	some grouping value 9	value 0	SUCCESS
92	some grouping value 9	value 1	SUCCESS
93	some grouping value 9	value 2	SUCCESS
94	some grouping value 9	value 3	SUCCESS
95	some grouping value 9	value 4	SUCCESS
96	some grouping value 9	value 5	FAILED
97	some grouping value 9	value 6	SUCCESS
98	some grouping value 9	value 7	SUCCESS
99	some grouping value 9	value 8	SUCCESS
100	some grouping value 9	value 9	SUCCESS

## Cases can have custom descriptions

☒ (1ms)

### Case 1 This is the first case

description = This is the first case, value = true

**Given** the power light *is* on

### Case 2 This is another case

description = This is another case, value = false

**Given** a machine that is *on*

## Custom descriptions of cases appear as a separate column in the data table

☒ (1ms)

**Given** the power light <value> on

Table 8. Cases

#	Description	value	Status
1	This is the first case	is	SUCCESS
2	This is another case	is not	SUCCESS

## Multiple cases are reported if a data table cannot be generated

☒

### Case 1

value = true

**Given** the power light *is* on

### Case 2

value = false

**Given** a machine that is *on*

## Parameter values with very long text are truncated in the html report

☑ (4ms)

**Given** a very long parameter value <**x**>

*Table 9. Cases*







# Pending Example

☑ 0 Successful, ❗ 0 Failed, ⏸ 3 Pending, 3 Total (3ms)

As a good BDD practitioner,  
I want to write my scenarios before I start coding  
In order to discuss them with business stakeholders

## Multiple cases can be pending

⏸ (1ms)

Tags: *Pending Annotation*

**Given** some state ⏸

**When** a <actionCount> action ⏸

**Then** some result ⏸

Table 10. Cases

#	actionCount	Status
1	1st	SCENARIO_PENDING
2	2nd	SCENARIO_PENDING

## Scenarios that are pending can be annotated with the Pending annotation

⏸

Tags: *Pending Annotation*

**Given** some state ⏸

**When** some action ⏸

**Then** some result ⏸

## Single steps can be annotated with Pending

⏸

Tags: *Pending Annotation*

**Given** some state ☑

**When** some pending action ⏸

**Then** some result ☑

# Rocket

☑ 1 Successful, ❗ 0 Failed, ⏸ 0 Pending, 1 Total (1ms)



## First Test of new Rocket

☑ (1ms)

**When** launch rocket

*Actually uses a rocket simulator*

**Then** rocket is launched

## Rules Example

☑ 1 Successful, ❗ 0 Failed, ⏸ 0 Pending, 1 Total (0ms)

### Rules work as expected

☑

**Given** resource is allocated

## Section

☑ 1 Successful, ❗ 0 Failed, ⏸ 0 Pending, 1 Total (0ms)

Large scenarios can be structured by sections.

### Scenarios can have sections

☑

*The first section*

**Given** something

**When** something

**Then** something

**When** something else

**Then** something else

## Serve Coffee

☑ 11 Successful, ❗ 4 Failed, ⏸ 0 Pending, 15 Total (1s 121ms)

In order to refresh myself</br>as a customer</br>I want coffee to be served

### A failing scenario for demonstration purposes

❗ (20ms)

Tags: *FailingOnPurpose*

**Given** a coffee machine ☑

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are no more coffees left ☑

**When** I press the coffee button ☑

**Then** I should be served a coffee !

**And** steps following a failed step should be skipped Ⓢ

*This step is still visible in the report, but was actually not executed. It is marked as skipped in the report.*

▼ *org.opentest4j.AssertionFailedError:*

expected: true but was: false

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:30)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:58)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee$accessor$l4LzqPjN(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$auxili
ary$LFK0cHyV.call(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.a_failing_scenario_for_dem
onstration_purposes(ServeCoffeeTest.java:148)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
```

```

org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnit4TestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnit4TestClassExecutor.execute(JUnit4Test
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnit4TestClassExecutor.execute(JUnit4Test
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnit4TestClassProcessor.processT
estClass(AbstractJUnit4TestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.jav
a:74)

```

## A scenario with a failing test case for demonstration purposes

❗ (5ms)

Tags: *FailingOnPurpose*

## Case 1

withCoffees = true

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are 2 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert 2 one euro coins

**And** I press the coffee button

**Then** I should be served a coffee

## Case 2

withCoffees = false

**Given** a coffee machine ☒

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**When** I insert 2 one euro coins ☒

**And** I press the coffee button ☒

**Then** I should be served a coffee  (2ms)

▼ *org.opentest4j.AssertionFailedError:*

expected: true but was: false

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:30)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:58)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee$accessor$l4LzqPjN(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$auxili
ary$LFK0cHyV.call(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.a_scenario_with_a_failing_
```

```
test_case_for_demonstration_purposes(ServeCoffeeTest.java:167)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
com.tngtech.java.junit.dataprovider.DataProviderFrameworkMethod.invokeExplosively(Da
taProviderFrameworkMethod.java:76)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUni
tTestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
```

```
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecutionWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.java:74)
```

## A turned off coffee machine cannot serve coffee

☑ (2ms)

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** the machine is turned off

**When** I press the coffee button

**Then** no coffee should be served

## An empty coffee machine cannot serve any coffee

☑ (1ms)

Tags: *Order*

**Given** an empty coffee machine

**When** I insert 5 one euro coins

**And** I press the coffee button

**Then** an error should be shown

**And** no coffee should be served

## Buy a coffee

☑ (11ms)

Tags: *TagsWithCustomStyle*

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are <coffees> coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**And** the machine is <onOrOff>

**And** the coffee costs 2 euros

**When** I insert <dollars> one euro coins

**And** I press the coffee button

**Then** I <shouldOrShouldNot> be served a coffee

Table 11. Cases

#	coffees	onOrOff	dollars	shouldOrShouldNot	Status
1	1	on	1	should not	SUCCESS
2	1	on	2	should	SUCCESS
3	0	on	2	should not	SUCCESS
4	1	off	2	should not	SUCCESS

## Coffe making gets better

☒ (5ms)

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**When** I make coffee for the <runNr> time

**Then** the result is <result>

Table 12. Cases

#	Description	runNr	result	Status
1	On the first run	1	quite ok	SUCCESS
2	And on the second run	2	well-done	SUCCESS

## Coffee is not served

☒ (4ms)

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** the coffee costs 2 euros

**And** there are <coffees> coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert <euros> one euro coins

**And** I press the coffee button

**Then** I should not be served a coffee

Table 13. Cases

#	coffees	euros	Status
1	1	1	SUCCESS
2	0	2	SUCCESS
3	1	0	SUCCESS

## Correct messages are shown

☒ (10ms)

Tags: *Data Tables*

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are <coffees left> coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert <number of coins> one euro coins

**And** I press the coffee button

**Then** the message <message> is shown

Table 14. Cases

#	coffees left	number of coins	message	Status
1	0	0	Error: No coffees left	SUCCESS
2	0	1	Error: No coffees left	SUCCESS
3	1	0	Error: Insufficient money	SUCCESS
4	0	5	Error: No coffees left	SUCCESS
5	1	5	Enjoy your coffee!	SUCCESS

## Intro words are not required

☒ (1ms)

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*



the coffee costs 5 euros

there are 3 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I press the coffee button

**Then** an error should be shown

no coffee should be served

## Long error messages should wrapped



Tags: *FailingOnPurpose*

**Given** an exception with a very long message

▼ *java.lang.RuntimeException: This is a very long exception message that should be wrapped at some point in the report and it is even longer than that*

```
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee.an_exception_with_a_very_long_message(GivenCoffee.java:57)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$CawmqOAR.an_exception_with_a_very_long_message$accessor$XXLbcv90(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$CawmqOAR$auxiliary$2lU5k1qB.call(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$CawmqOAR.an_exception_with_a_very_long_message(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.long_error_messages_should_wrapped(ServeCoffeeTest.java:231)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
```

```

org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.jav
a:74)

```

## No coffee left error is shown when there is no coffee left

☑ (4ms)

Tags: *Order*

**Given** an empty coffee machine

**When** I insert 5 one euro coins

**And** I press the coffee button

**Then** the message *Error: No coffees left* is shown

## Not enough money message is shown when insufficient money was given

☑ (1ms)

Tags: *Order*

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are 2 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert 1 one euro coins

**And** I press the coffee button

**Then** the message *Error: Insufficient money* is shown

## Serving a coffee reduces the number of available coffees by one

☑ (10ms)

Tags: *Data Tables*

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are <initial coffees> coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert 2 one euro coins

**And** I press the coffee button

**Then** a coffee should be served

**And** there are <coffees left> coffees left in the machine <coffees left>

Table 15. Cases

#	initial coffees	coffees left	Status
1	1	0	SUCCESS
2	3	2	SUCCESS
3	10	9	SUCCESS

## Should fail with unexpected runtime exception

❗ (1s 8ms)

Tags: *FailingOnPurpose*

**Then** should throw a runtime exception  (1s 0ms)

▼ *java.lang.InterruptedExecution: sleep interrupted*

```
java.base@11.0.16.1/java.lang.Thread.sleep(Native Method)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest$1.apply(ServeCoffeeTest.java:209)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest$1.apply(ServeCoffeeTest.java:205)
app//com.tngtech.jgiven.base.StageBase.$(StageBase.java:43)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$$accessor$14LzqPjN(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$auxiliary$RSo8W9ea.call(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.shouldFailWithUnexpectedRuntimeException(ServeCoffeeTest.java:204)
java.base@11.0.16.1/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base@11.0.16.1/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base@11.0.16.1/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
app//org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
app//org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
app//org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
app//org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
app//org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call(FailOnTimeout.java:299)
app//org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call(FailOnTimeout.java:293)
java.base@11.0.16.1/java.util.concurrent.FutureTask.run(FutureTask.java:264)
java.base@11.0.16.1/java.lang.Thread.run(Thread.java:829)
```

## Turned off machines should not serve coffee

☒ (32ms)

Tags: *Case Diffs*

### Case 1

onOrOff = true

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are 2 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**And** the machine is on

**When** I insert 2 one euro coins

**And** I press the coffee button

**Then** I should be served a coffee

## Case 2

onOrOff = false

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are 2 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**And** the machine is off

**When** I insert 2 one euro coins

**And** I press the coffee button

**Then** I should not be served a coffee

**And** no error is shown

## Simple Scenario Test Example

☑ 3 Successful, 🚫 0 Failed, ⏸ 0 Pending, 3 Total (2ms)

### Coffee should be served

☑

**Given** a coffee machine with 100 coffees

**When** enough money is deposited

**And** the coffee button is pressed

**Then** a cup of coffee is served

## Coffee should not be served if not enough money is deposited



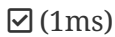
**Given** a coffee machine

**When** 1 euros are deposited

**And** the coffee button is pressed

**Then** no cup of coffee is served

## Coffee should not be served if there are no coffees left



**Given** a coffee machine with 0 coffees

**When** enough money is deposited

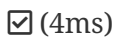
**And** the coffee button is pressed

**Then** no cup of coffee is served

## Spring Pan Cake Scenario



## A pancake can be fried out of an egg milk and flour



**Given** an egg

**And** some milk

**And** the ingredient *flour*

**When** the cook mangles everthing to a dough

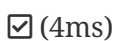
**And** the cook fries the dough in a pan

**Then** the resulting meal is a pan cake

## Step Tags



## Premium members can order premium products



Tags: *PremiumMembership, Shop, PremiumProduct*

**Given** a premium customer

**And** a product

**And** the product is only available for premium members

**When** the customer orders the product

**Then** the product is shipped

## Tag Hierarchy Example

☑ 2 Successful, ❶ 0 Failed, ⓪ 0 Pending, 2 Total (1ms)

### Parent tags can have values

☑

Tags: *TagThatIsNotVisibleInNavigation*, *AnotherExampleSubCategory*

**Given** tags annotated with tags that have values

**When** the report is generated

**Then** the tags appear in a hierarchy

### Tags can form a hierarchy

☑

Tags: *ExampleSubCategory*

**Given** tags annotated with tags

**When** the report is generated

**Then** the tags appear in a hierarchy

## Using Rules

☑ 1 Successful, ❶ 0 Failed, ⓪ 0 Pending, 1 Total (0ms)

### Something should happen

☑

**Given** some state

**When** some action

**Then** some outcome

## Failed Scenarios

There are 7 failed scenarios

# A scenario with a multi line error message

❗ (174ms)

Tags: *FailingOnPurpose*

**Given** multi line error message ❗ (142ms)

▼ *org.opentest4j.AssertionFailedError: [This message has multiple lines] Expecting value to be false but was true*

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps.multi_line_error_message(Faili
ngScenarioTest.java:23)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u.multi_line_
error_message$accessor$aaw89Qi3R(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u$auxiliary$f
jq2kY9Q.call(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest$Steps$ByteBuddy$Vk7bHq4u.multi_line_
error_message(Unknown Source)
com.tngtech.jgiven.examples.FailingScenarioTest.a_scenario_with_a_multi_line_error_m
essage(FailingScenarioTest.java:18)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
```



```
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.jav
a:74)
```

## A scenario with a failing nested step on purpose

❗ (1ms)

Tags: *FailingOnPurpose*

**Given** I fill out the registration form with invalid values ❗ (1ms)

- I enter a name *Franky* ☒
  - I think a name *Franky* ☒
  - **And** I write the name *Franky* ☒

- **And** I enter a email address *franky@acme.com* ☑
- **And** something fails for demonstration purposes ❗

**When** I submit the form ☹

**Then** the password matches ☹

▼ *org.opentest4j.AssertionFailedError: [Fails on purpose]*

Expecting value to be false but was true

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage.something_fails_for_d
emonstration_purposes(NestedStepsTest.java:72)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.so
mething_fails_for_demonstration_purposes$accessor$Zj6zME7c(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy$au
xiliary$YA6YRU7S.call(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.so
mething_fails_for_demonstration_purposes(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage.I_fill_out_the_regist
ration_form_with_invalid_values(NestedStepsTest.java:67)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.I_
fill_out_the_registration_form_with_invalid_values$accessor$Zj6zME7c(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy$au
xiliary$rAwdzEwx.call(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest$NestedStage$ByteBuddy$LmQRfnWy.I_
fill_out_the_registration_form_with_invalid_values(Unknown Source)
com.tngtech.jgiven.examples.nested.NestedStepsTest.a_scenario_with_a_failing_nested_
step_on_purpose(NestedStepsTest.java:32)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
```

```

org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnit
TestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTest
ClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processT
estClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(Suite
TestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccesso
rImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderD
ispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke
(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.ja
va:74)

```

## A scenario with many cases

❗ (50ms)

This scenario shows how large case tables are shown in JGiven. As soon as a table has more than 2 entries, grouping by values is possible. This scenario also has some failing steps for demonstration

purposes.<p>Btw. this description was created with the <a target='\_blank' href='http://jgiven.org/javadoc/com/tngtech/jgiven/annotation/ExtendedDescription.html'>@ExtendedDescription</a> annotation

Tags: *FailingOnPurpose*

**Given** some group value <grouping>

**And** another value <value>

Table 16. Cases

#	grouping	value	Status
1	some grouping value 0	value 0	SUCCESS
2	some grouping value 0	value 1	SUCCESS
3	some grouping value 0	value 2	SUCCESS
4	some grouping value 0	value 3	SUCCESS
5	some grouping value 0	value 4	SUCCESS
6	some grouping value 0	value 5	FAILED
7	some grouping value 0	value 6	SUCCESS
8	some grouping value 0	value 7	SUCCESS
9	some grouping value 0	value 8	SUCCESS
10	some grouping value 0	value 9	SUCCESS
11	some grouping value 1	value 0	SUCCESS
12	some grouping value 1	value 1	SUCCESS
13	some grouping value 1	value 2	SUCCESS
14	some grouping value 1	value 3	SUCCESS
15	some grouping value 1	value 4	SUCCESS
16	some grouping value 1	value 5	FAILED
17	some grouping value 1	value 6	SUCCESS
18	some grouping value 1	value 7	SUCCESS
19	some grouping value 1	value 8	SUCCESS
20	some grouping value 1	value 9	SUCCESS
21	some grouping value 2	value 0	SUCCESS
22	some grouping value 2	value 1	SUCCESS
23	some grouping value 2	value 2	SUCCESS
24	some grouping value 2	value 3	SUCCESS
25	some grouping value 2	value 4	SUCCESS
26	some grouping value 2	value 5	FAILED

#	grouping	value	Status
27	some grouping value 2	value 6	SUCCESS
28	some grouping value 2	value 7	SUCCESS
29	some grouping value 2	value 8	SUCCESS
30	some grouping value 2	value 9	SUCCESS
31	some grouping value 3	value 0	SUCCESS
32	some grouping value 3	value 1	SUCCESS
33	some grouping value 3	value 2	SUCCESS
34	some grouping value 3	value 3	SUCCESS
35	some grouping value 3	value 4	SUCCESS
36	some grouping value 3	value 5	FAILED
37	some grouping value 3	value 6	SUCCESS
38	some grouping value 3	value 7	SUCCESS
39	some grouping value 3	value 8	SUCCESS
40	some grouping value 3	value 9	SUCCESS
41	some grouping value 4	value 0	SUCCESS
42	some grouping value 4	value 1	SUCCESS
43	some grouping value 4	value 2	SUCCESS
44	some grouping value 4	value 3	SUCCESS
45	some grouping value 4	value 4	SUCCESS
46	some grouping value 4	value 5	FAILED
47	some grouping value 4	value 6	SUCCESS
48	some grouping value 4	value 7	SUCCESS
49	some grouping value 4	value 8	SUCCESS
50	some grouping value 4	value 9	SUCCESS
51	some grouping value 5	value 0	SUCCESS
52	some grouping value 5	value 1	SUCCESS
53	some grouping value 5	value 2	SUCCESS
54	some grouping value 5	value 3	SUCCESS
55	some grouping value 5	value 4	SUCCESS
56	some grouping value 5	value 5	FAILED
57	some grouping value 5	value 6	SUCCESS
58	some grouping value 5	value 7	SUCCESS
59	some grouping value 5	value 8	SUCCESS

#	grouping	value	Status
60	some grouping value 5	value 9	SUCCESS
61	some grouping value 6	value 0	SUCCESS
62	some grouping value 6	value 1	SUCCESS
63	some grouping value 6	value 2	SUCCESS
64	some grouping value 6	value 3	SUCCESS
65	some grouping value 6	value 4	SUCCESS
66	some grouping value 6	value 5	FAILED
67	some grouping value 6	value 6	SUCCESS
68	some grouping value 6	value 7	SUCCESS
69	some grouping value 6	value 8	SUCCESS
70	some grouping value 6	value 9	SUCCESS
71	some grouping value 7	value 0	SUCCESS
72	some grouping value 7	value 1	SUCCESS
73	some grouping value 7	value 2	SUCCESS
74	some grouping value 7	value 3	SUCCESS
75	some grouping value 7	value 4	SUCCESS
76	some grouping value 7	value 5	FAILED
77	some grouping value 7	value 6	SUCCESS
78	some grouping value 7	value 7	SUCCESS
79	some grouping value 7	value 8	SUCCESS
80	some grouping value 7	value 9	SUCCESS
81	some grouping value 8	value 0	SUCCESS
82	some grouping value 8	value 1	SUCCESS
83	some grouping value 8	value 2	SUCCESS
84	some grouping value 8	value 3	SUCCESS
85	some grouping value 8	value 4	SUCCESS
86	some grouping value 8	value 5	FAILED
87	some grouping value 8	value 6	SUCCESS
88	some grouping value 8	value 7	SUCCESS
89	some grouping value 8	value 8	SUCCESS
90	some grouping value 8	value 9	SUCCESS
91	some grouping value 9	value 0	SUCCESS
92	some grouping value 9	value 1	SUCCESS

#	grouping	value	Status
93	some grouping value 9	value 2	SUCCESS
94	some grouping value 9	value 3	SUCCESS
95	some grouping value 9	value 4	SUCCESS
96	some grouping value 9	value 5	FAILED
97	some grouping value 9	value 6	SUCCESS
98	some grouping value 9	value 7	SUCCESS
99	some grouping value 9	value 8	SUCCESS
100	some grouping value 9	value 9	SUCCESS

## A failing scenario for demonstration purposes

❗ (20ms)

Tags: *FailingOnPurpose*

**Given** a coffee machine ☒

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are no more coffees left ☒

**When** I press the coffee button ☒

**Then** I should be served a coffee ❗

**And** steps following a failed step should be skipped ⌛

*This step is still visible in the report, but was actually not executed. It is marked as skipped in the report.*

▼ *org.opentest4j.AssertionFailedError:*

expected: true but was: false

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:30)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:58)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee$accessor$l4LzqPjN(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$auxili
ary$LFK0cHyV.call(Unknown Source)
```

```

com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_should_be_served_a_coffee(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.a_failing_scenario_for_demonstration_purposes(ServeCoffeeTest.java:148)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnitTestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processTestClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(SuiteTestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderDispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName

```



```
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecutionWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.java:74)
```

## A scenario with a failing test case for demonstration purposes

❗ (5ms)

Tags: *FailingOnPurpose*

### Case 1

withCoffees = true

**Given** a coffee machine

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**And** there are 2 coffees left in the machine

*The number of coffees in the machine is set to the given value.*

**When** I insert 2 one euro coins

**And** I press the coffee button

**Then** I should be served a coffee

### Case 2

withCoffees = false

**Given** a coffee machine ☒

*An empty coffee machine that is already turned on.*

*The coffee price is set to 2 EUR.*

**When** I insert 2 one euro coins ☒

**And** I press the coffee button ☒

**Then** I should be served a coffee 🚫 (2ms)

▼ *org.opentest4j.AssertionFailedError:*

expected: true but was: false

```
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native
Method)
java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConst
ructorAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(Delegat
ingConstructorAccessorImpl.java:45)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:30)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee.I_should_be_served_a_coff
ee(ThenCoffee.java:58)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee$accessor$l4LzqPjN(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$auxili
ary$LFK0cHyV.call(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.I_shou
ld_be_served_a_coffee(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.a_scenario_with_a_failing_
test_case_for_demonstration_purposes(ServeCoffeeTest.java:167)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorI
mpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodA
ccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
com.tngtech.java.junit.dataprovider.DataProviderFrameworkMethod.invokeExplosively(Da
taProviderFrameworkMethod.java:76)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUni
```

```
tTestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processTestClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(SuiteTestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderDispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecutionWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(SystemApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.java:74)
```

## Long error messages should be wrapped



Tags: *FailingOnPurpose*

**Given** an exception with a very long message

▼ *java.lang.RuntimeException: This is a very long exception message that should be wrapped at some point in the report and it is even longer than that*

```
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee.an_exception_with_a_very_long_message(GivenCoffee.java:57)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$CawmqOAR.an_ex
```

```

ception_with_a_very_long_message$accessor$XXLbcv90(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$Cawmq0AR$auxiliary$21U5k1qB.call(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.steps.GivenCoffee$ByteBuddy$Cawmq0AR.an_exception_with_a_very_long_message(Unknown Source)
com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.long_error_messages_should_wrapped(ServeCoffeeTest.java:231)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:59)
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:56)
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17)
com.tngtech.jgiven.junit.JGivenMethodRule$1.evaluate(JGivenMethodRule.java:73)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.BlockJUnit4ClassRunner$1.evaluate(BlockJUnit4ClassRunner.java:100)
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:366)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:103)
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:63)
org.junit.runners.ParentRunner$4.run(ParentRunner.java:331)
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:79)
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:329)
org.junit.runners.ParentRunner.access$100(ParentRunner.java:66)
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:293)
org.junit.rules.TestWatcher$1.evaluate(TestWatcher.java:61)
org.junit.rules.RunRules.evaluate(RunRules.java:20)
org.junit.runners.ParentRunner$3.evaluate(ParentRunner.java:306)
org.junit.runners.ParentRunner.run(ParentRunner.java:413)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.runTestClass(JUnitTestClassExecutor.java:108)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:58)
org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecutor.execute(JUnitTestClassExecutor.java:40)
org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClassProcessor.processTestClass(AbstractJUnitTestClassProcessor.java:60)
org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor.processTestClass(SuiteTestClassProcessor.java:52)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:36)
org.gradle.internal.dispatch.ReflectionDispatch.dispatch(ReflectionDispatch.java:24)
org.gradle.internal.dispatch.ContextClassLoaderDispatch.dispatch(ContextClassLoaderDispatch.java:33)
org.gradle.internal.dispatch.ProxyDispatchAdapter$DispatchingInvocationHandler.invoke

```

```
e(ProxyDispatchAdapter.java:94)
org.gradle.api.internal.tasks.testing.worker.TestWorker$2.run(TestWorker.java:176)
org.gradle.api.internal.tasks.testing.worker.TestWorker.executeAndMaintainThreadName
(TestWorker.java:129)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:100)
org.gradle.api.internal.tasks.testing.worker.TestWorker.execute(TestWorker.java:60)
org.gradle.process.internal.worker.child.ActionExecutionWorker.execute(ActionExecuti
onWorker.java:56)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:113)
org.gradle.process.internal.worker.child.SystemApplicationClassLoaderWorker.call(Sys
temApplicationClassLoaderWorker.java:65)
worker.org.gradle.process.internal.worker.GradleWorkerMain.run(GradleWorkerMain.java
:69)
worker.org.gradle.process.internal.worker.GradleWorkerMain.main(GradleWorkerMain.jav
a:74)
```

## Should fail with unexpected runtime exception

❗ (1s 8ms)

Tags: *FailingOnPurpose*

**Then** should throw a runtime exception ❗ (1s 0ms)

▼ *java.lang.InterruptedExecution: sleep interrupted*

```
java.base@11.0.16.1/java.lang.Thread.sleep(Native Method)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest$1.apply(ServeCoffeeTe
st.java:209)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest$1.apply(ServeCoffeeTe
st.java:205)
app//com.tngtech.jgiven.base.StageBase.$(StageBase.java:43)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$
$accessor$14LzqPjN(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8$a
uxiliary$RS08W9ea.call(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$
(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.steps.ThenCoffee$ByteBuddy$SyWjwby8.$
(Unknown Source)
app//com.tngtech.jgiven.examples.coffeemachine.ServeCoffeeTest.shouldFailWithUnexpec
tedRuntimeException(ServeCoffeeTest.java:204)
java.base@11.0.16.1/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native
Method)
java.base@11.0.16.1/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMetho
dAccessorImpl.java:62)
java.base@11.0.16.1/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(Delegat
ingMethodAccessorImpl.java:43)
app//org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.jav
```

```
a:59)
app//org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:
:12)
app//org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:
56)
app//org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:1
7)
app//org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call(Fail
OnTimeout.java:299)
app//org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call(Fail
OnTimeout.java:293)
java.base@11.0.16.1/java.util.concurrent.FutureTask.run(FutureTask.java:264)
java.base@11.0.16.1/java.lang.Thread.run(Thread.java:829)
```

## Pending Scenarios

There are 3 pending scenarios

### Multiple cases can be pending

⌚ (1ms)

Tags: *Pending Annotation*

**Given** some state ⌚

**When** a <actionCount> action ⌚

**Then** some result ⌚

Table 17. Cases

#	actionCount	Status
1	1st	SCENARIO_PENDING
2	2nd	SCENARIO_PENDING

### Scenarios that are pending can be annotated with the Pending annotation

⌚

Tags: *Pending Annotation*

**Given** some state ⌚

**When** some action ⌚

**Then** some result ⌚

## Single steps can be annotated with Pending



Tags: *Pending Annotation*

**Given** some state ☒

**When** some pending action

**Then** some result ☒