

Visualization of Code Changes

Design Prototypes

Example changeset

Software: Mockito, popular mocking framework for unit tests written in Java

Changeset: Pull request #1247

Change details:

- package org.mockito.internal.exceptions **modified**
 - class MockitoLimitations **deleted**
 - class Reporter **modified**
 - method missingMethodInvocation **modified** (**deleted** call to MockitoLimitations)
 - method unfinishedVerificationException **modified** (**deleted** call to MockitoLimitations)
 - method cannotStubVoidMethodWithAReturnValue **modified** (**deleted** call to MockitoLimitations)
 - method misplacedArgumentMatcher **modified** (**deleted** call to MockitoLimitations)
- package org.mockito.internal.junit **modified**
 - class MismatchReportingTestListener **modified**
 - method testFinished **modified** (**deleted** call to org.mockito.internal.junit.util.TestName.getTestName)
- package org.mockito.internal.junit.util **modified**
 - class TestName **deleted**
 - method getTestName **deleted**
- package org.mockito.internal.matchers.text **modified**
 - class ArrayIterator **deleted**
 - method ArrayIterator **deleted**
 - method hasNext **deleted**
 - method next **deleted**
 - method remove **deleted**
 - class ValuePrinter **modified**
 - method print **modified** (**deleted** call to ArrayIterator)
- package org.mockito.internal.util.collections **modified**
 - class Sets **modified**
 - method newIdentitySet **deleted1**

Prototype 1

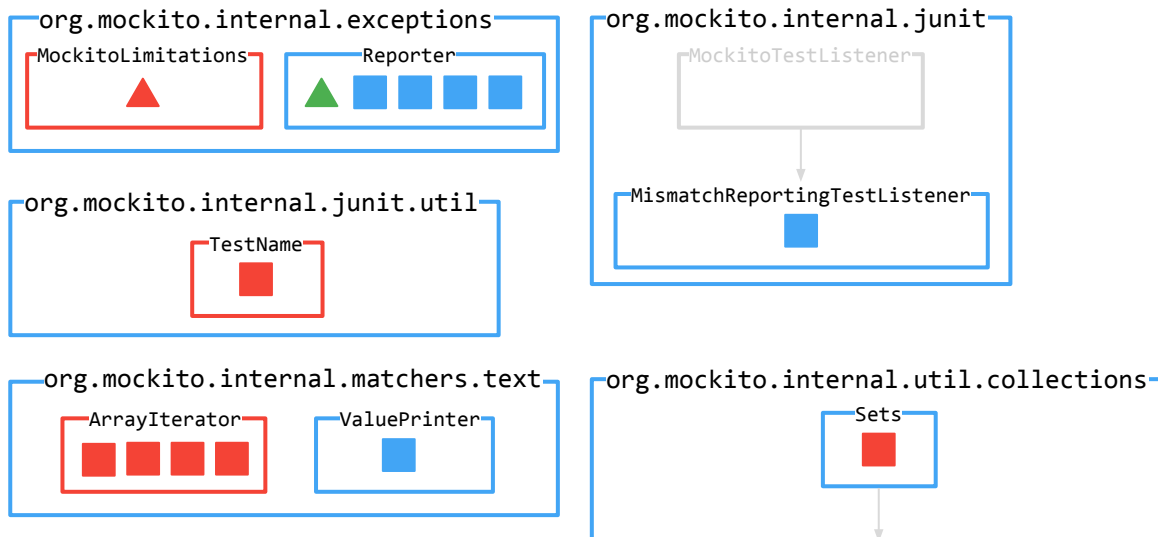
Change Summary

- Packages (0+, 0-, 5🔒)
- Classes (0+, 3-, 4🔒)
- Methods (0+, 6-, 6🔒)

Change Details

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Overview



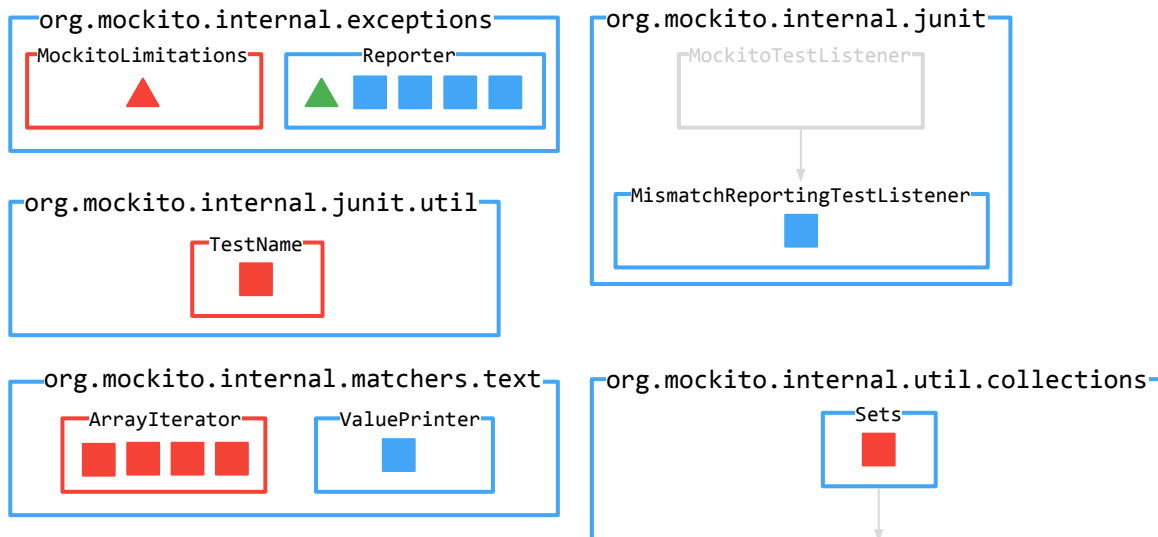
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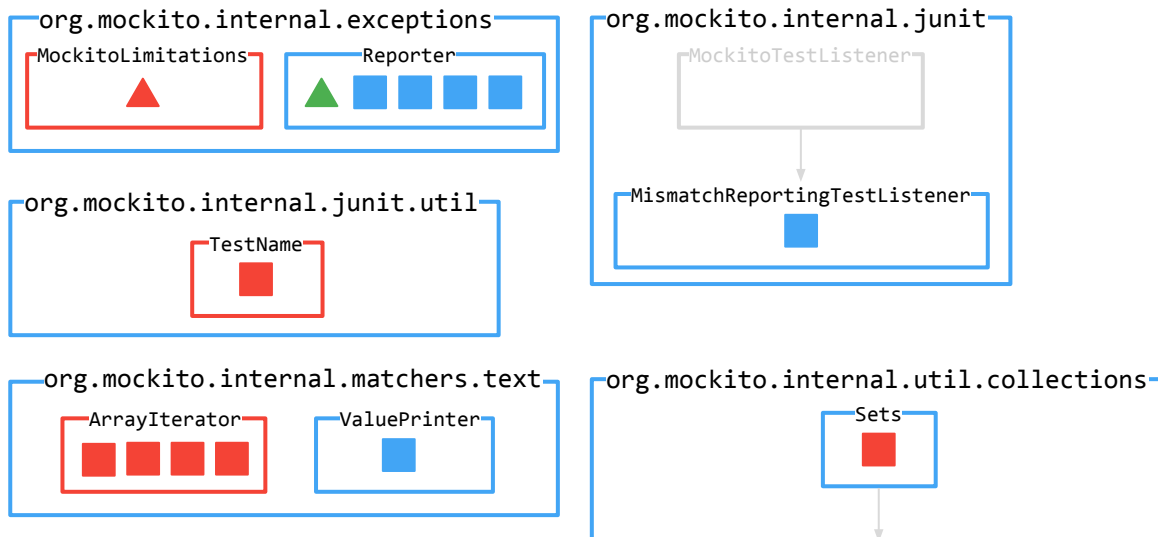
Change Summary

- Packages (0+, 0-, 5🔒)
 - (+) **Added:** 0
 - (-) **Removed:** 0
 - (🔒) **Modified:** 5
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- Methods (0+, 6-, 6🔒)

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Change Summary	Overview
<div data-bbox="77 128 357 322"><div>➤ Packages (0+, 0-, 5 🛡)</div><div>(+) Added: 0</div><div>(-) Removed: 0</div><div>(🛡) Modified: 5</div><div>➤ Classes (0+, 3-, 4 🛡)</div><div>➤ Methods (0+, 6-, 6 🛡)</div></div>	
Change Details	

Change Summary	Overview
<div data-bbox="79 128 359 323"><div data-bbox="79 128 359 159">> Packages (0+, 0-, 5)</div><div data-bbox="106 159 239 190">(+) Added: 0</div><div data-bbox="106 190 270 220">(-) Removed: 0</div><div data-bbox="106 220 280 251">(Modified: 5)</div><div data-bbox="79 251 336 281">> Classes (+, 3-, 4)</div><div data-bbox="79 281 349 312">> Methods (+, 6-, 6)</div></div>	
Change Details	

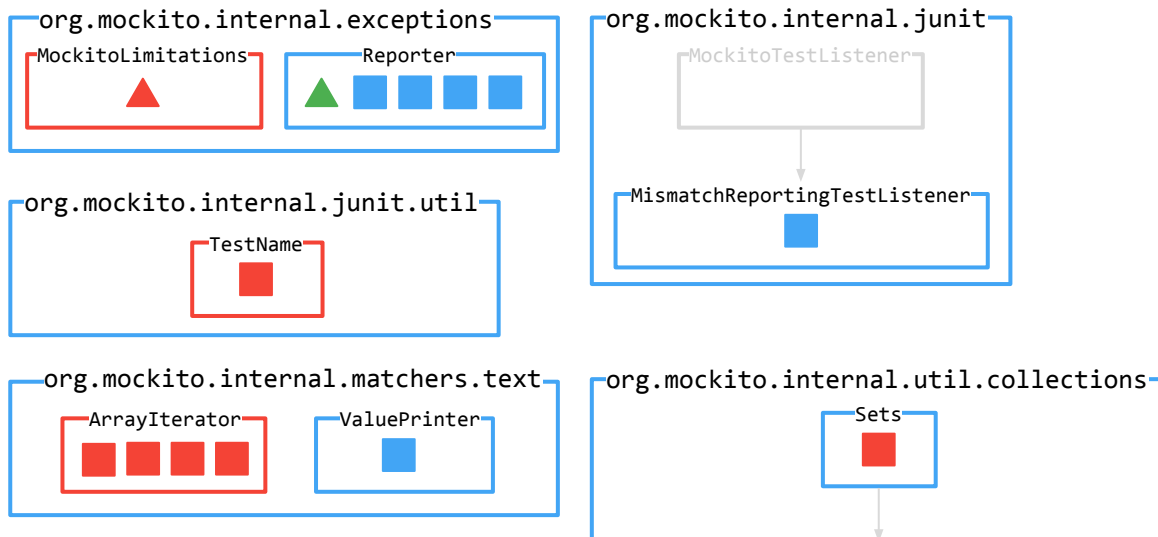
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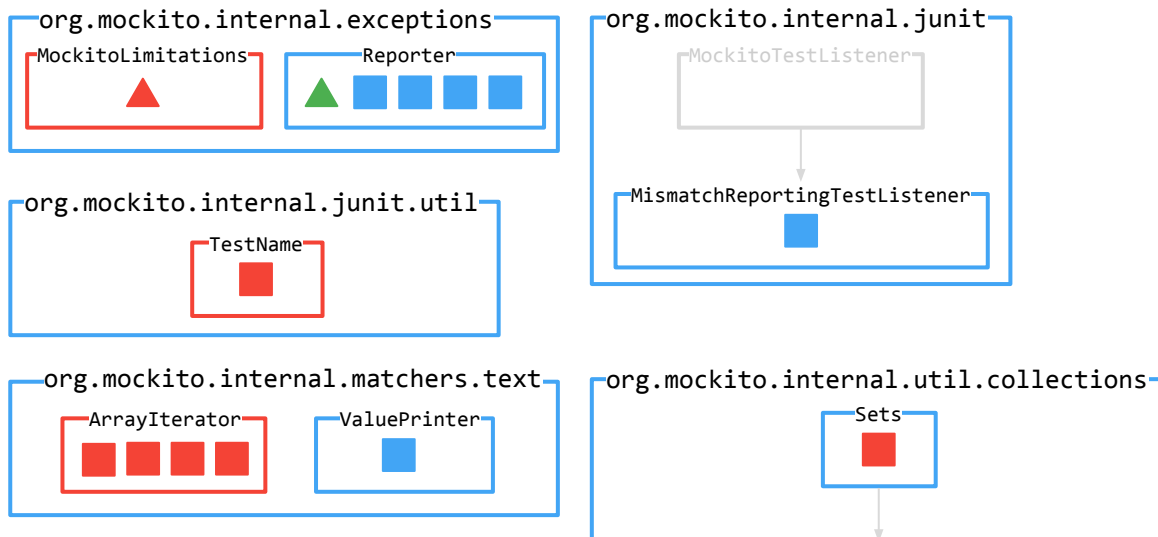
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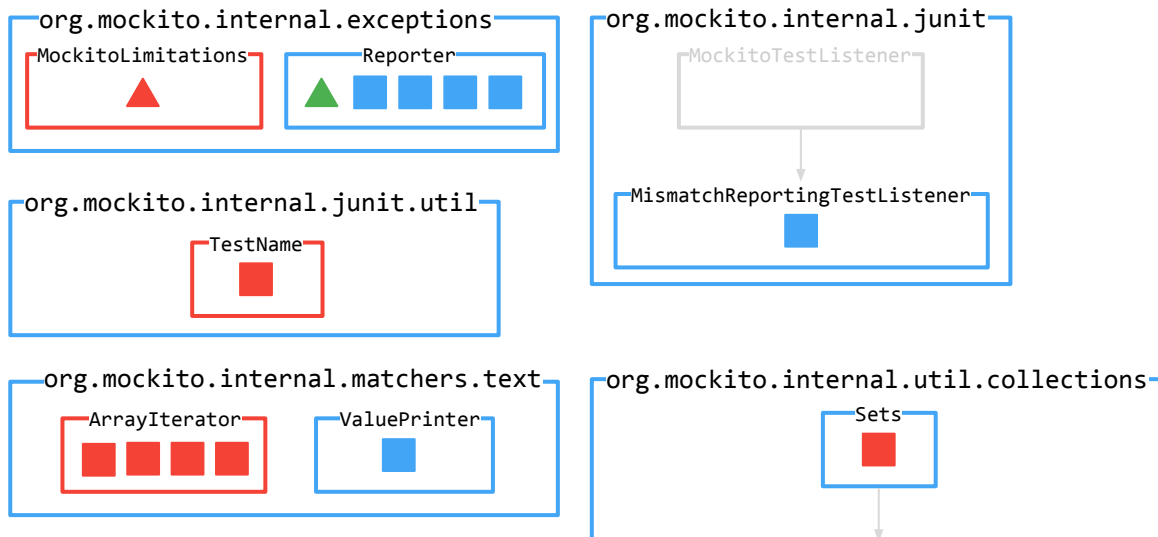
Change Summary

- Packages (0+, 0-, 5🔒)
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 - (🔒) **Modified:** 4
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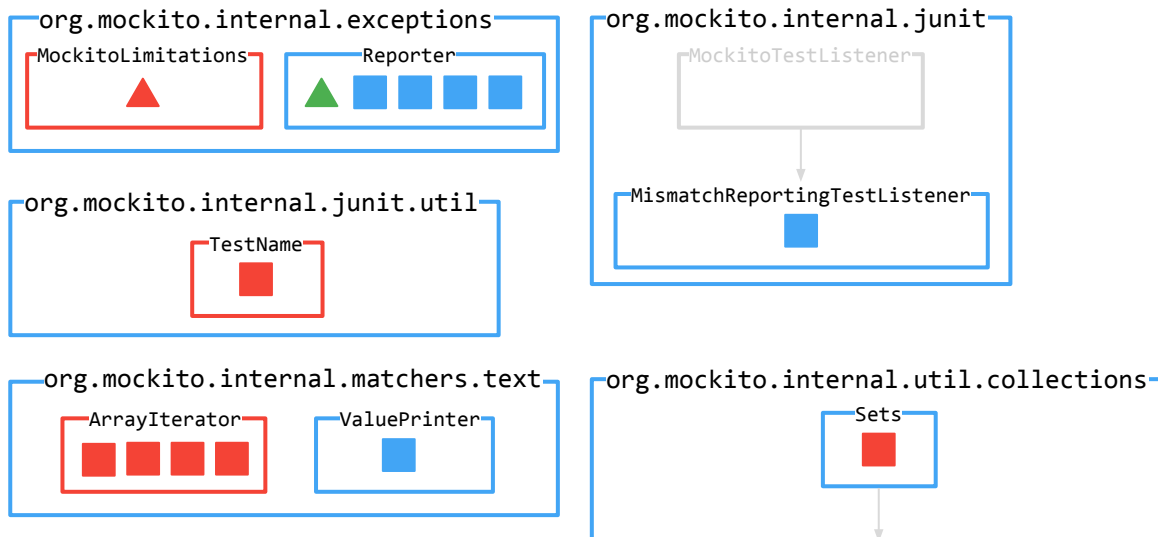
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> Packages (0+, 0-, 5)


> Classes (0+, 3-, 4)

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(-) Removed: 3

(🔗) Modified: 4

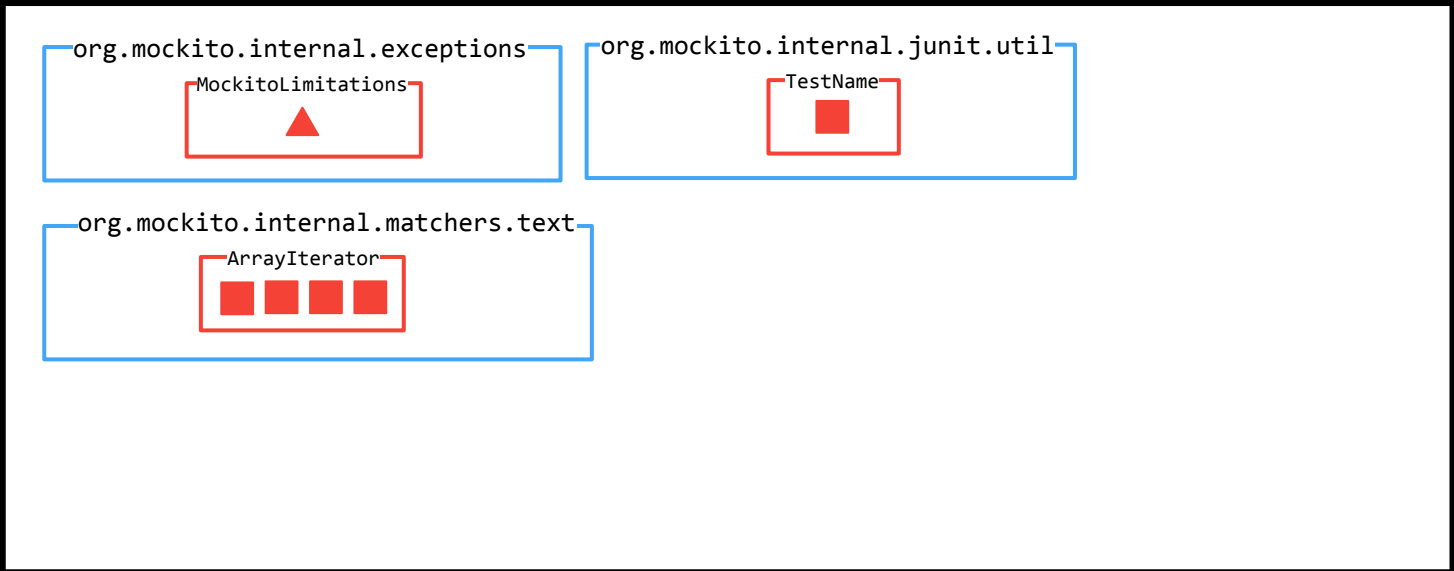
> Methods 6-, 6



Change Details

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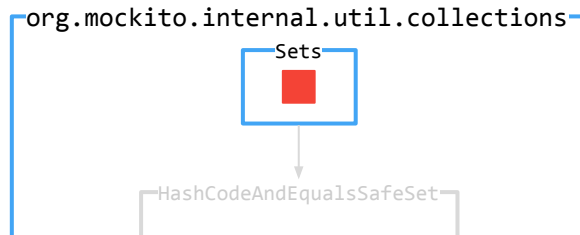
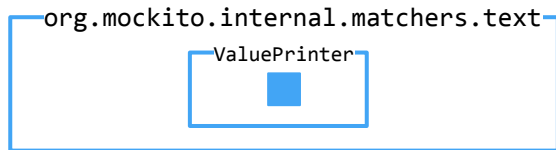
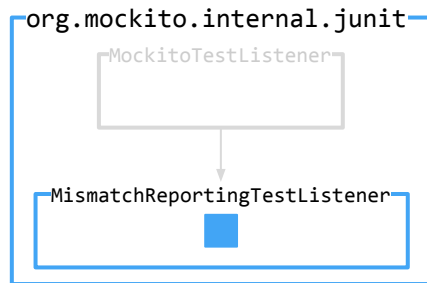
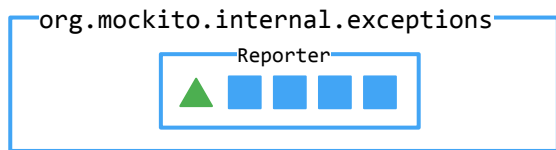
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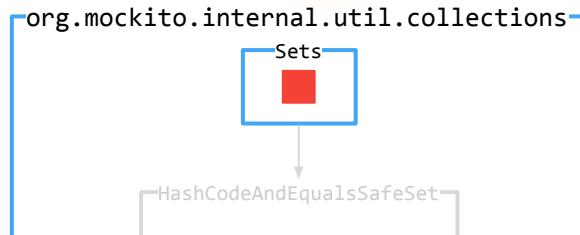
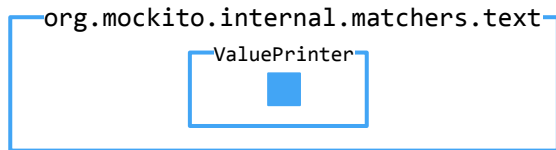
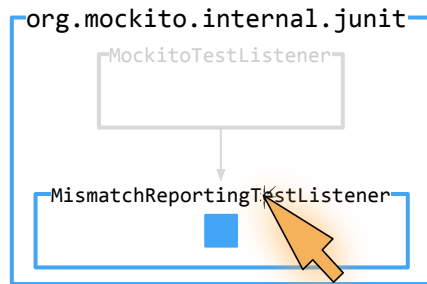
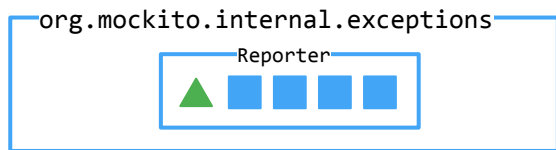
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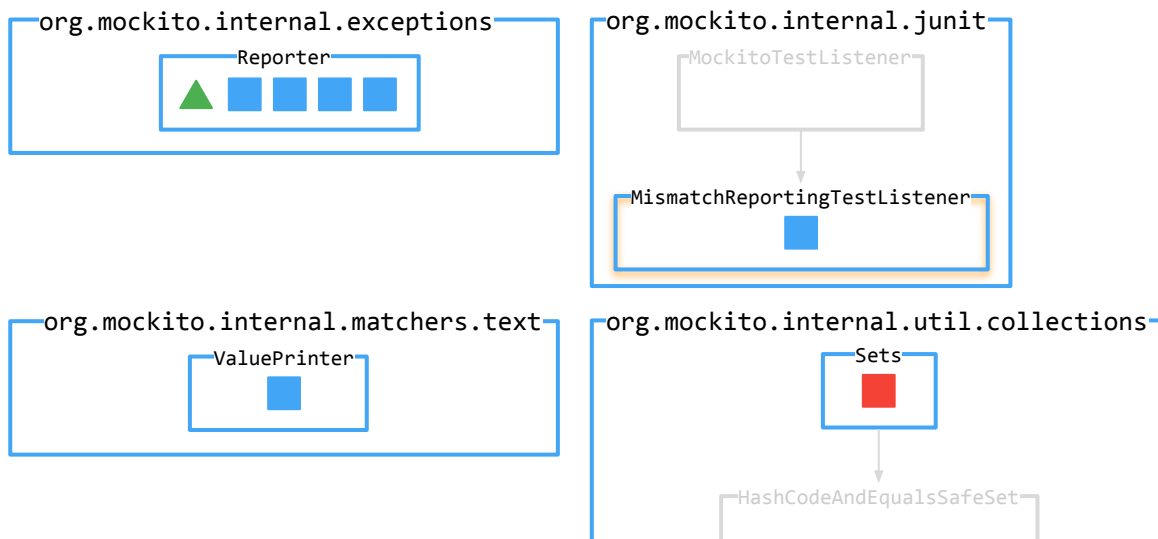
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Overview



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3  src/main/java/org/mockito/internal/junit/MismatchReportingTestListener.java
4  /**
5   * package org.mockito.internal.junit;
6   *
7   * -import org.mockito.internal.junit.util.TestName;
8   * import org.mockito.internal.util.MockitoLogger;
9   * import org.mockito.mock.MockCreationSettings;
10  *
11  * @0 -30,7 +29,7 @@ public void testFinished(TestFinishedEvent event) {
12  * //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
13  * nobody will read, it's also duplicated
14  * mocks = new LinkedList<Object>();
15  *
16  * - String testName = TestName.getTestName(event);
17  * if (event.getFailure() != null) {
18  * //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
19  * new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
20  *
21  * 4  /**
22  * 5  * package org.mockito.internal.junit;
23  * 6  *
24  * 7  * import org.mockito.internal.util.MockitoLogger;
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27  * 29  * //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
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30  * 32  *
31  * 33  * + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
32  * 34  * if (event.getFailure() != null) {
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34  * 36  * new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
35  * 37  * }
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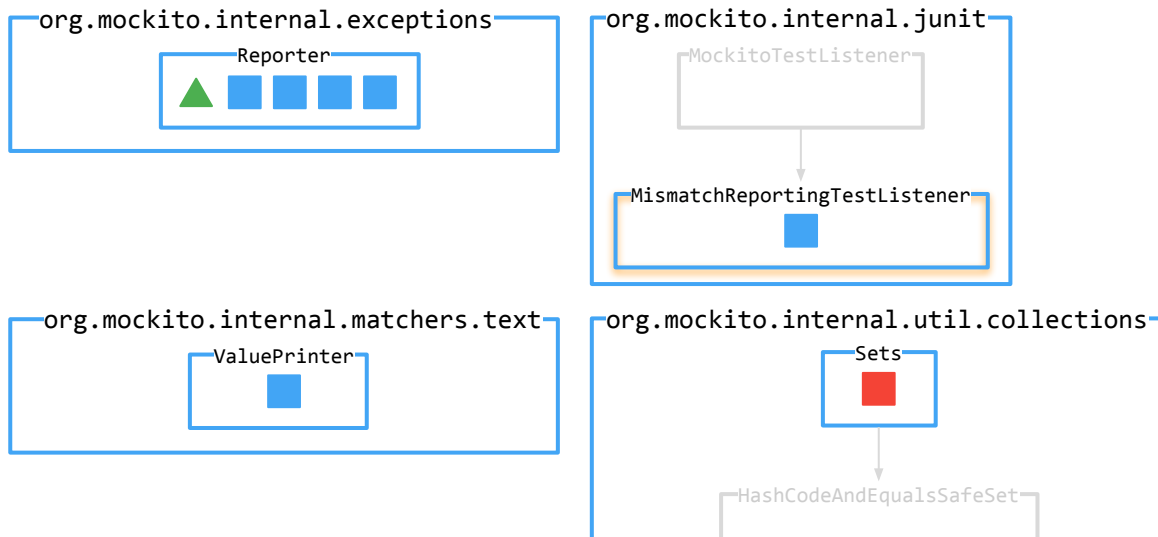
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CTRL + click to
select multiple
entities

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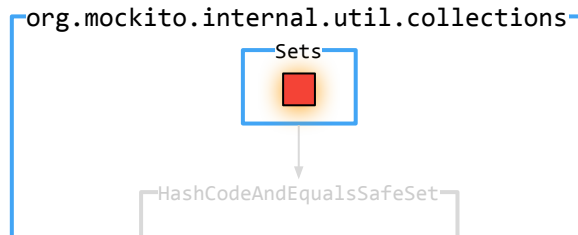
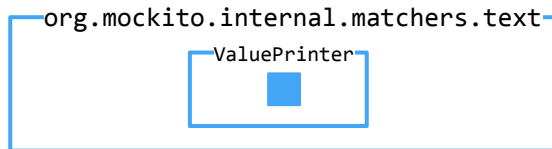
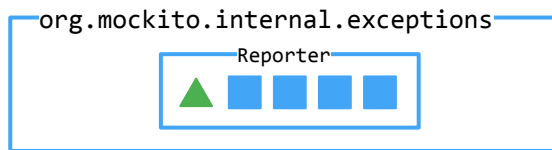
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35  *
36  * diff are shown one above the other, with scroll
```

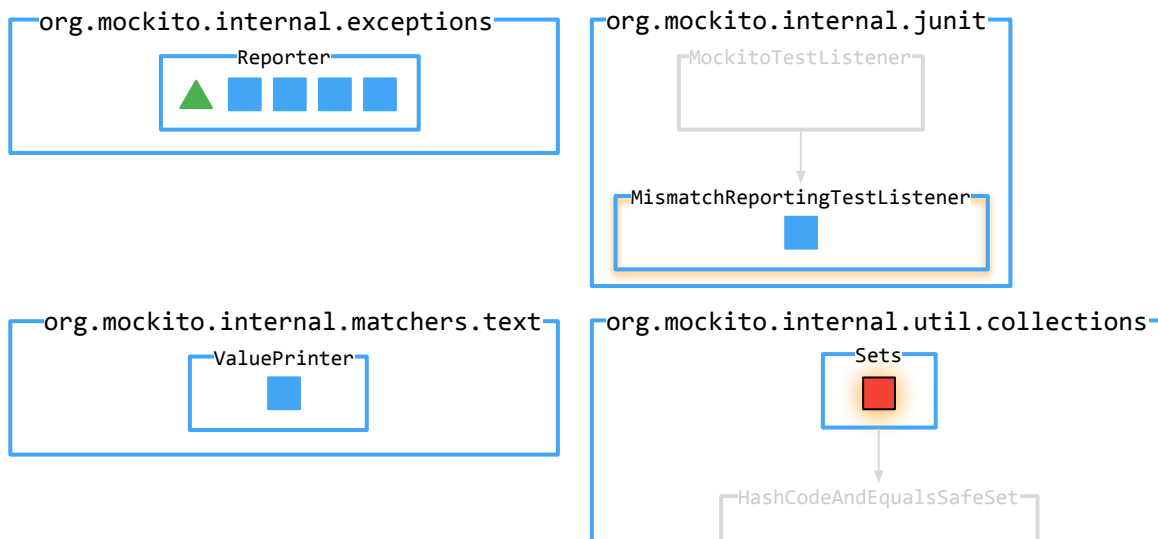
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```

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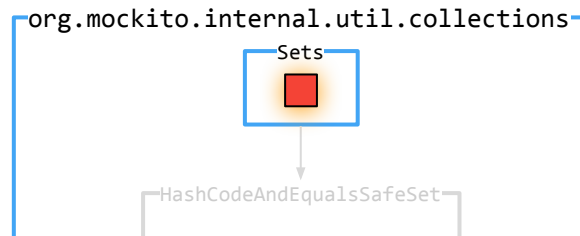
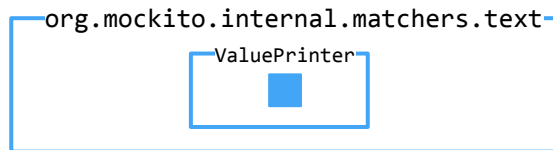
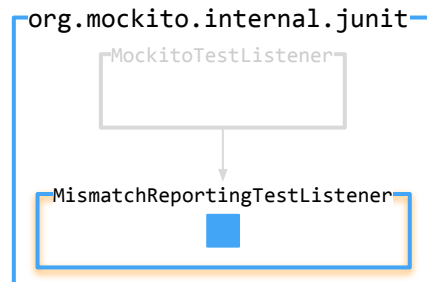
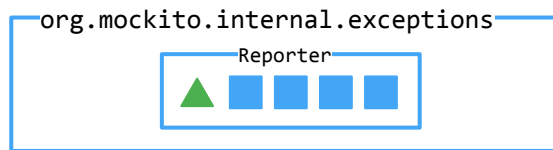
Change Summary

- Packages (0+, 0-, 5🔗)
- Classes (0+, 3-, 4🔗)
 - (+) **Added:** 0
 - (-) **Removed:** 3
 - (🔗) **Modified:** 4
- Methods (0+, 6-, 6🔗)

Change Details

- org.mockito.internal.exceptions
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.matchers.text
 - ValuePrinter
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



```
33 - String testName = testName.getTestName(event);
34   if (event.getFailure() != null) {
35     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
36     new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);
37   }
38 }
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52 + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
53   if (event.getFailure() != null) {
54     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
55     new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);
56   }
57 }
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the order of the diffs reflects the order of the user's clicks

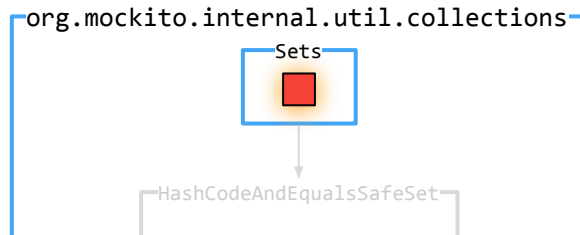
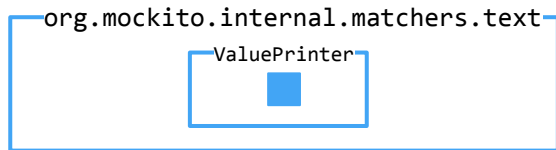
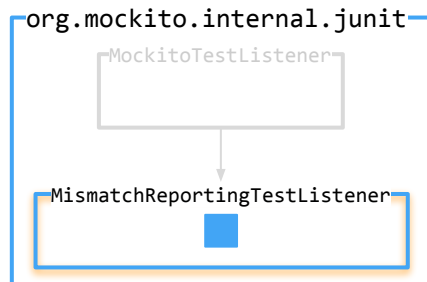
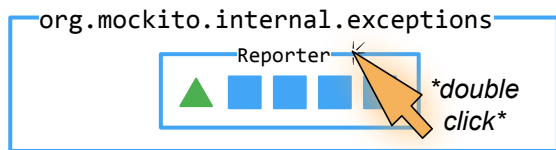
Change Summary

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Change Details

- org.mockito.internal.exceptions
 - Reported
 - missingMethodInvocation
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 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



```
33 - String testName = testName.getTestName(event);
34   if (event.getFailure() != null) {
35       //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
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37   }
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42 + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
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45       new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);
46   }
47 }
```

4 src/main/java/org/mockito/internal/util/collections/Sets.java

```
18 return hashCodeAndEqualsSafeSet.of(mocks);
19 }
20
21 public static IdentitySet newIdentitySet() {
22     return new IdentitySet();
23 }
24
25 public static <T> Set<T> newSet(T ... elements) {
26     if (elements == null) {
27         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
28     }
29     return hashCodeAndEqualsSafeSet.of(mocks);
30 }
31
32 public static <T> Set<T> newSet(T ... elements) {
33     if (elements == null) {
34         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
35     }
36     return hashCodeAndEqualsSafeSet.of(mocks);
37 }
```

org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

Callees

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.MissingMethodInvocationException

Callers

- org.mockito.internal.MockitoCore
 - when(T methodCall)

➔ unfinishedVerificationException

Callees

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.UnfinishedVerificationException

Callers

- org.mockito.internal.progress.MockingProgressImpl
 - validateMostStuff()

➔ cannotStubVoidMethodWithAReturnValue

Callees

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.CannotStubVoidMethodWithReturnValue

Callers

- org.mockito.internal.stubbing.answers

Unchanged methods

➔ checkedExceptionInvalid

Callees

- org.mockito.internal.util.StringUtil
 - join(Object ... linesToBreak)

Callers

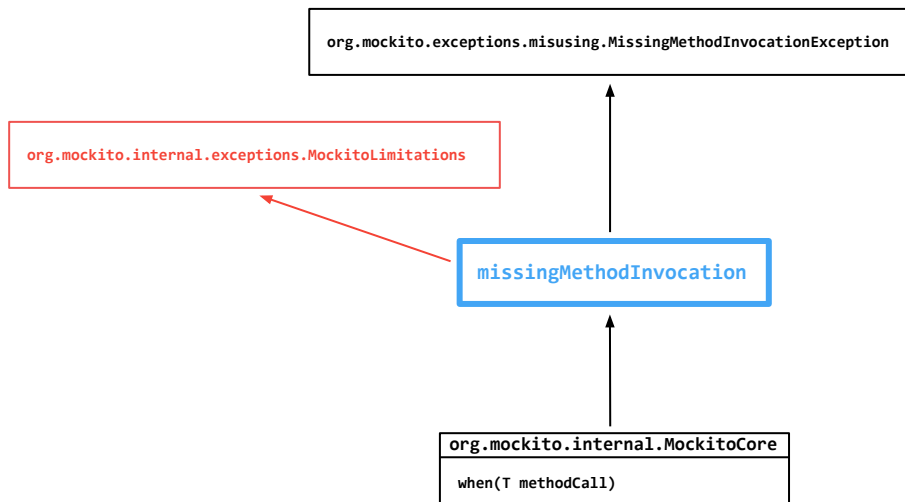
- org.mockito.internal.stubbing.answers
 - validateFor(InvocationOnMock invocation)

⊕ cannotStubWithNullThrowable

⊕ unfinishedStubbing

⊕ incorrectUseOfApi

callgraph view, the arrow direction expresses the kind of relationship:
outward = callee, inward = caller



< Back

org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

Callees

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.MissingMethodInvocationException

Callers

- org.mockito.internal.MockitoCore
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➔ unfinishedVerificationException

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Callers

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➔ cannotStubVoidMethodWithAReturnValue

Callees

- org.mockito.internal.exceptions.MockitoLimitations
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Callers

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Unchanged methods

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Callees

- org.mockito.internal.util.StringUtil
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Callers

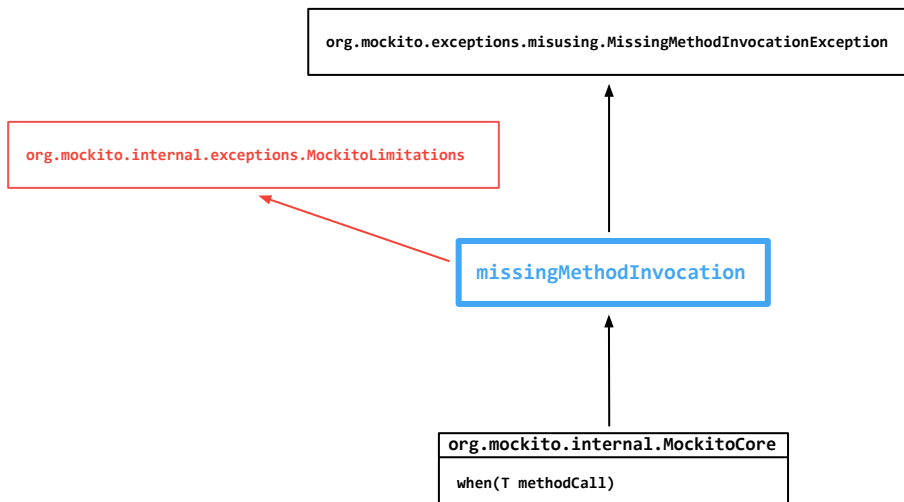
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⊕ incorrectUseOfApi

< Back



org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

Callees

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.MissingMethodInvocationException

Callers

- org.mockito.internal.MockitoCore
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➔ unfinishedVerificationException

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Callers

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Unchanged methods

➔ checkedExceptionInvalid

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- org.mockito.internal.util.StringUtil
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Callers

- org.mockito.internal.stubbing.answers
 - validateFor(InvocationOnMock invocation)

⊕ cannotStubWithNullThrowable

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< Back

org.mockito.internal.exceptions.MockitoLimitations

unfinishedVerificationException

org.mockito.exceptions.misusing.UnfinishedVerificationException

org.mockito.internal.progress.MockingProgressImpl

validateMostStuff()

org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

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Callers

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Callers

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Unchanged methods

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Callers

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org.mockito.internal.exceptions.MockitoLimitations

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org.mockito.exceptions.misusing.UnfinishedVerificationException

org.mockito.internal.progress.MockingProgressImpl

validateMostStuff()

org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

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Unchanged methods

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< Back

org.mockito.internal.exceptions.MockitoLimitations

unfinishedVerificationException

org.mockito.exceptions.misusing.UnfinishedVerificationException

org.mockito.internal.progress.MockingProgressImpl

validateMostStuff()

org.mockito.internal.exceptions.Reporter

Changed methods

missingMethodInvocation

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unfinishedVerificationException

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cannotStubVoidMethodWithAReturnValue

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Callers

- org.mockito.internal.stubbing.answers

Unchanged methods

- checkedExceptionInvalid
- cannotStubWithNullThrowable
- unfinishedStubbing
- incorrectUseOfApi

< Back

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.exceptions.misusing.UnfinishedVerificationException

unfinishedVerificationException

```
public static MockitoException unfinishedVerificationException(Location location) {  
    return new UnfinishedVerificationException(join(  
        "Missing method call for verify(mock) here:",  
        location,  
        "",  
        "Example of correct verification:",  
        "  verify(mock).doSomething()",  
        "",  
        "Also, this error might show up because you verify either of: final/private/equals()/hashCode() methods.",  
        "Those methods 'cannot' be stubbed/verified.",  
        MockitoLimitations.NON_PUBLIC_PARENT,  
        NON_PUBLIC_PARENT,  
        ""  
    ));  
}
```

Impl

org.mockito.internal.exceptions.Reporter

Changed methods

➔ missingMethodInvocation

Calleses

- org.mockito.internal.exceptions.MockitoLimitations
- org.mockito.exceptions.misusing.MissingMethodInvocationException

Callers

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Callers

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Unchanged methods

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org.mockito.internal.exceptions.MockitoLimitations

unfinishedVerificationException

org.mockito.exceptions.misusing.UnfinishedVerificationException

org.mockito.internal.progress.MockingProgressImpl

validateMostStuff()

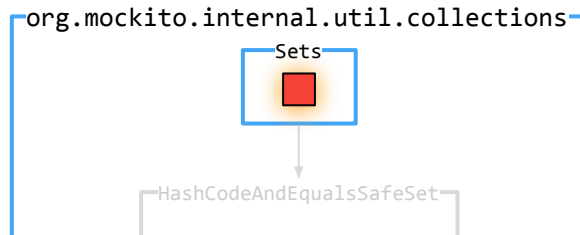
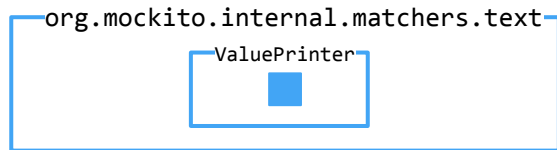
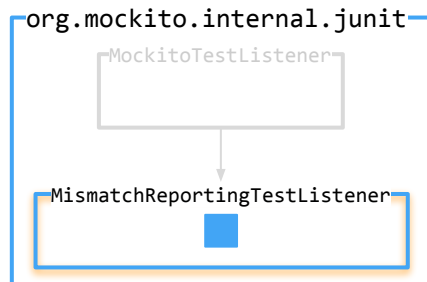
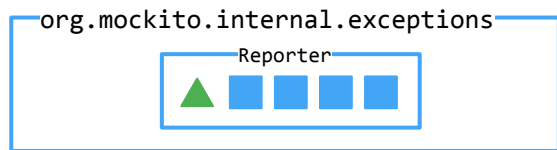
Change Summary

- Packages (0+, 0-, 5🔒)
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 - (-) **Removed:** 3
 - (🔒) **Modified:** 4
- Methods (0+, 6-, 6🔒)

Change Details

- org.mockito.internal.exceptions
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

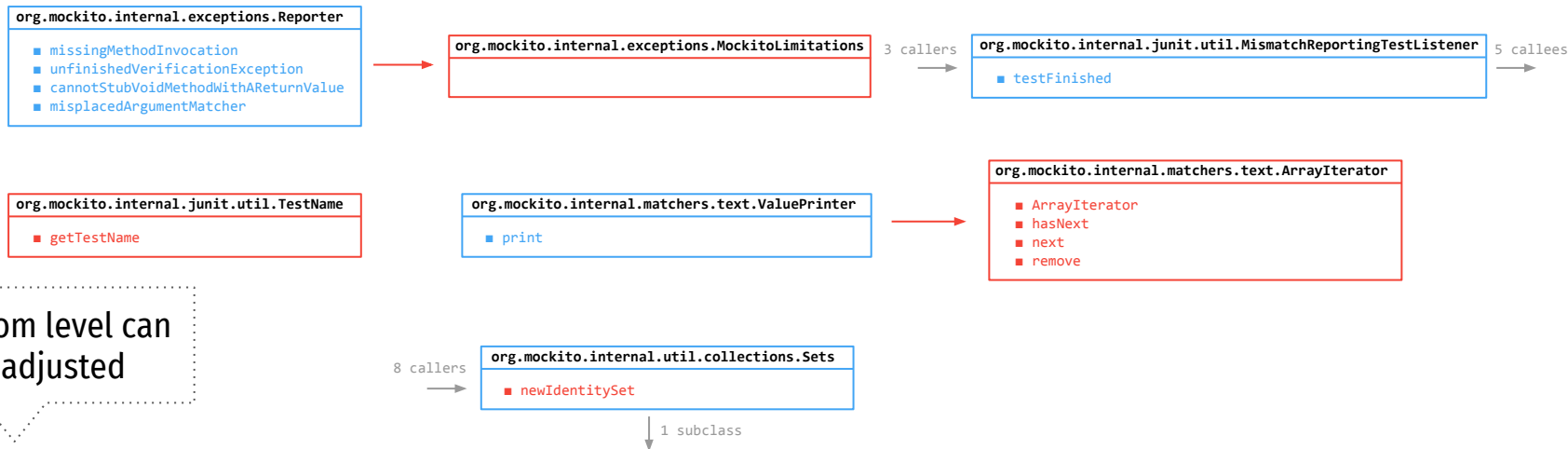
Overview



```
33 - String testName = testName.getTestName(event);
34   if (event.getFailure() != null) {
35       //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
36       new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);
37   }
38 }
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Prototype 2

infinite canvas. arrows position and direction express type of relation: superclass, subclass, caller, callee.



Zoom level can
be adjusted

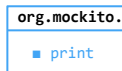
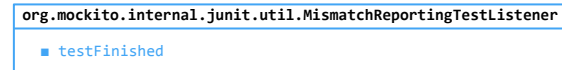
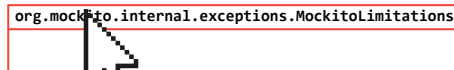
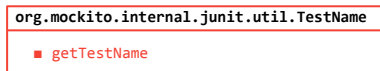
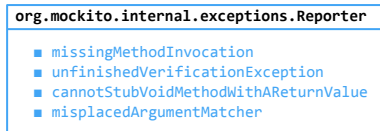
Current Zoom: 300%



The canvas can
be browsed
through the
minimap

Minimap

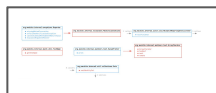
Diff



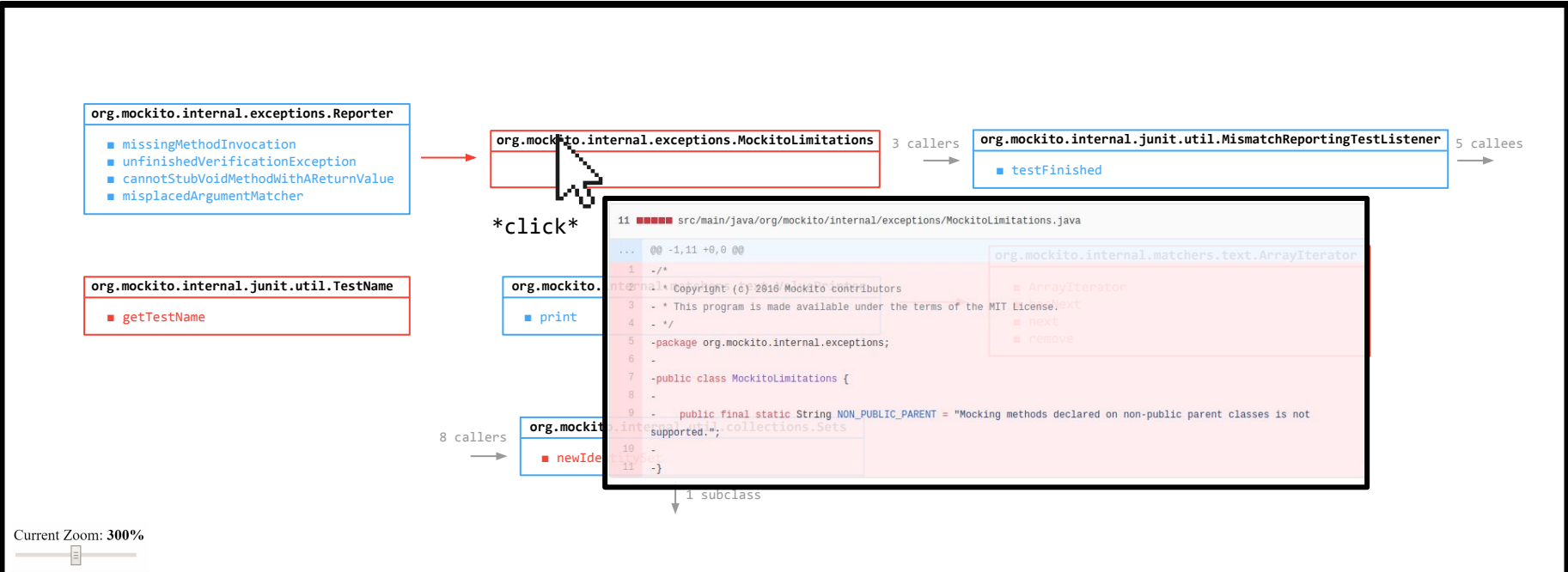
```
11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License, see:
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10 -supported.";
11 -}
```

Current Zoom: 300%

Minimap



Diff

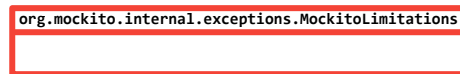
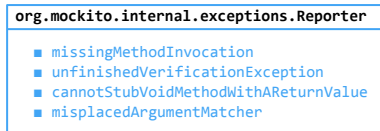


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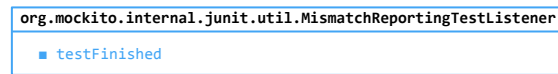
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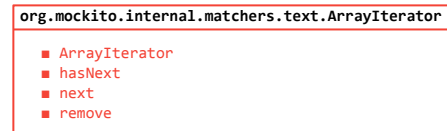
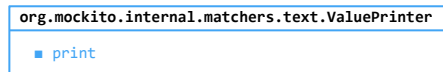
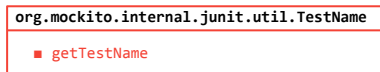
Diff



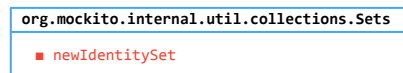
3 callers



5 callees



8 callers



1 subclass

Current Zoom: 300%

Minimap



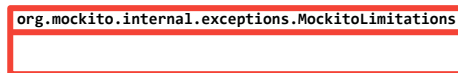
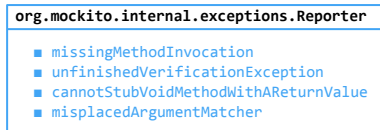
Diff

```

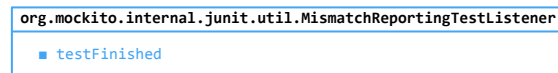
11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
supported.";
10 -
11 -}

```

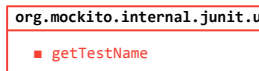
View



3 callers



5 callees

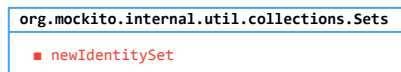


4 calls to org.mockito.internal.exceptions.MockitoLimitations were removed:

- missingMethodInvocation to MockitoLimitations
- unfinishedVerificationException to MockitoLimitations
- cannotStubVoidMethodWithAReturnValue to MockitoLimitations
- misplacedArgumentMatcher to MockitoLimitations

org.mockito.internal.matchers.text.ArrayIterator

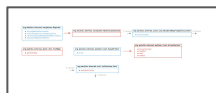
8 callers



1 subclass

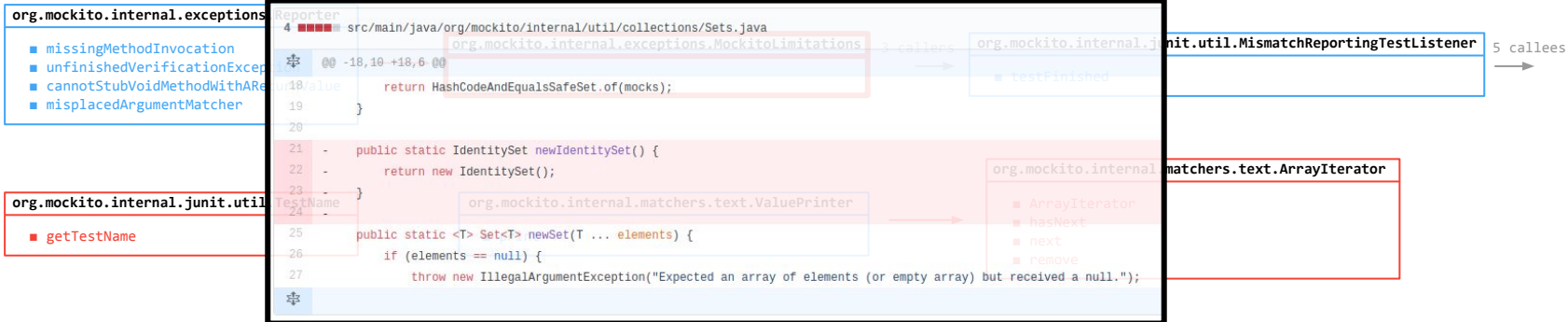
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Minimap



Diff

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11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
supported.";
10 -
11 -}
```



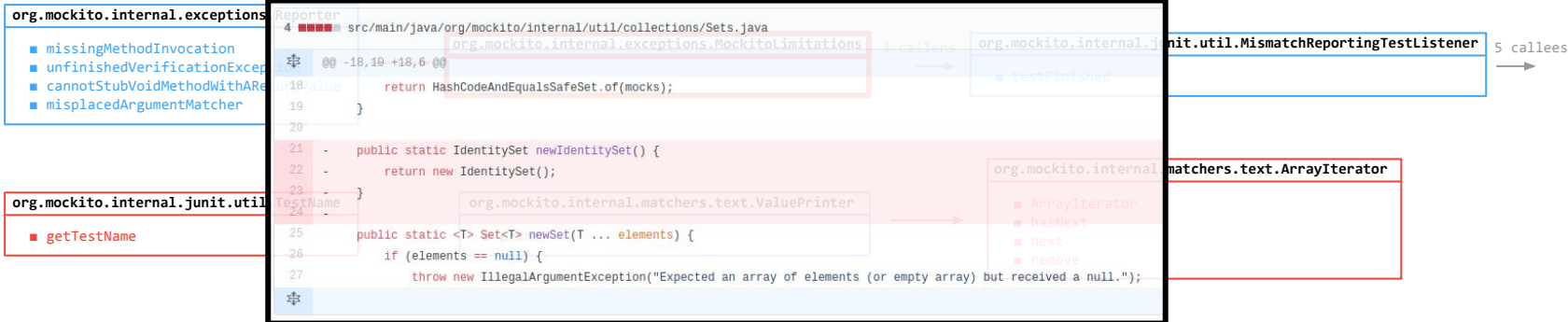
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Minimap



Diff

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11 src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10     supported.";
11     -}
```



8 callers

org.mockito.internal.util.collections.Sets

newIdentitySet

1 subclass

CTRL + click
to show multiple diffs

Current Zoom: 300%

Minimap

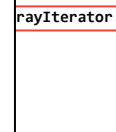
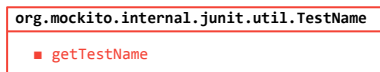
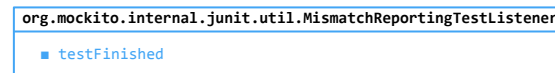
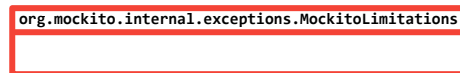
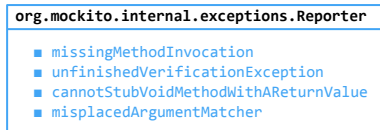


Diff

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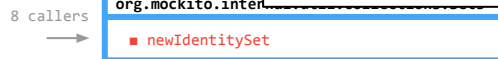
11  src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
12  @@ -1,11 +0,0 @@
13  1  /*
14  2   * Copyright (c) 2016 Mockito contributors
15  3   * This program is made available under the terms of the MIT License.
16  4   */
17  5  -package org.mockito.internal.exceptions;
18  6  -
19  7  -public class MockitoLimitations {
20  8  -
21  9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
22  10 supported.";
23  11 -
  
```

View



The method **testFinished** has 3 callers:

- org.mockito.internal.framework.DefaultMockitoSession
 - finishMocking()
- org.mockito.internal.junit.JUnitRule
 - evaluate()
- org.mockito.internal.runners.DefaultInternalRunner
 - testFinished(Description description)



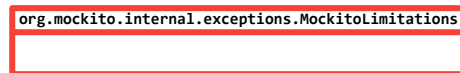
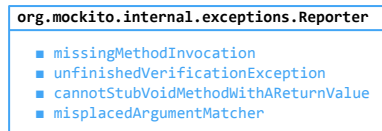
Current Zoom: 300%

Minimap



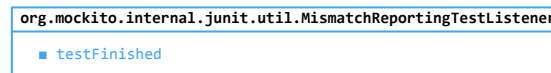
Diff

```
11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10 supported.";
11 -}
```

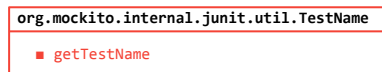



click

3 callers

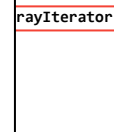


5 callees



The method **testFinished** has 3 callers:

- org.mockito.internal.framework.DefaultMockitoSession
 - finishMocking()
- org.mockito.internal.junit.JUnitRule
 - evaluate()
- org.mockito.internal.runners.DefaultInternalRunner
 - testFinished(Description description)



8 callers



1 subclass

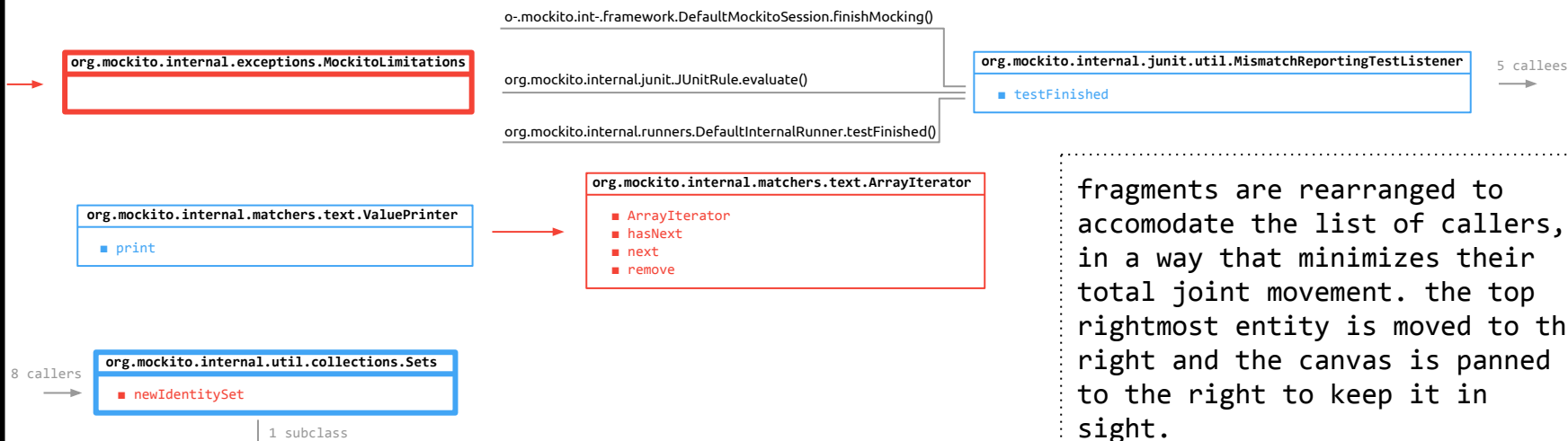
Current Zoom: 300%

Minimap



Diff

```
11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2016 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10     supported.";
11     -
12 }
```



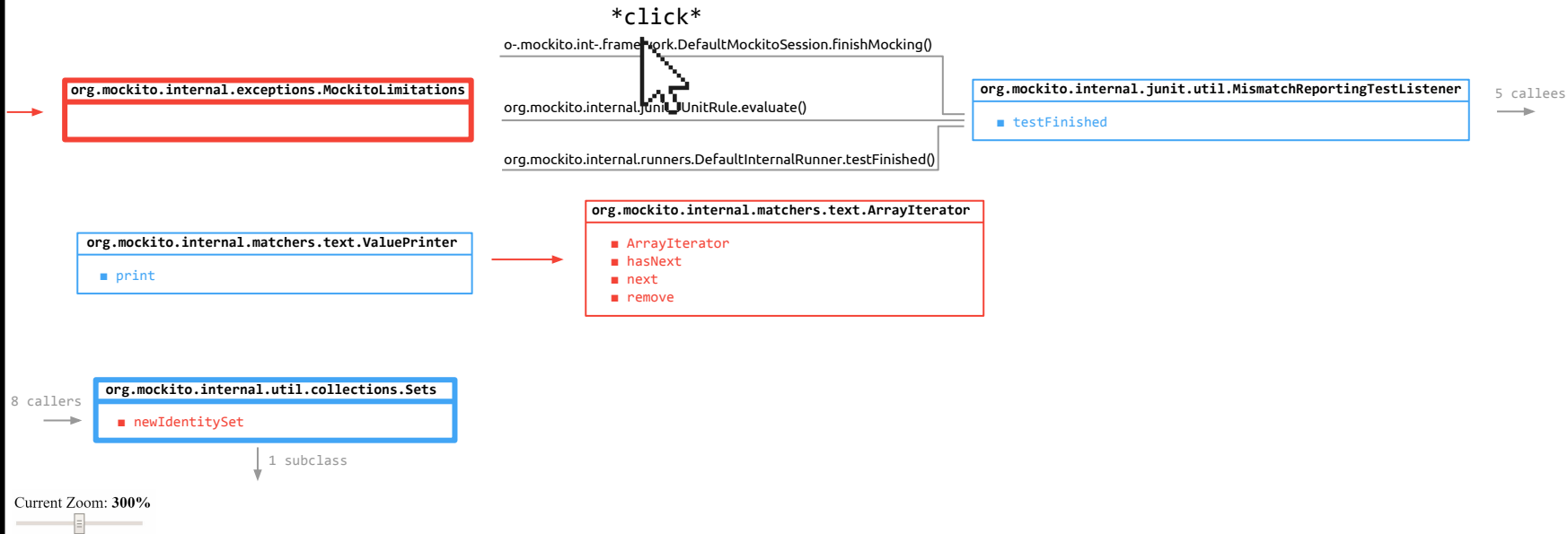
fragments are rearranged to accommodate the list of callers, in a way that minimizes their total joint movement. the top rightmost entity is moved to the right and the canvas is panned to the right to keep it in sight.

Minimap



Diff

```
11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
... @@ -1,11 +0,0 @@
1  -/*
2  - * Copyright (c) 2010 Mockito contributors
3  - * This program is made available under the terms of the MIT License.
4  - */
5  -package org.mockito.internal.exceptions;
6  -
7  -public class MockitoLimitations {
8  -
9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10 supported.";
11 -}
```

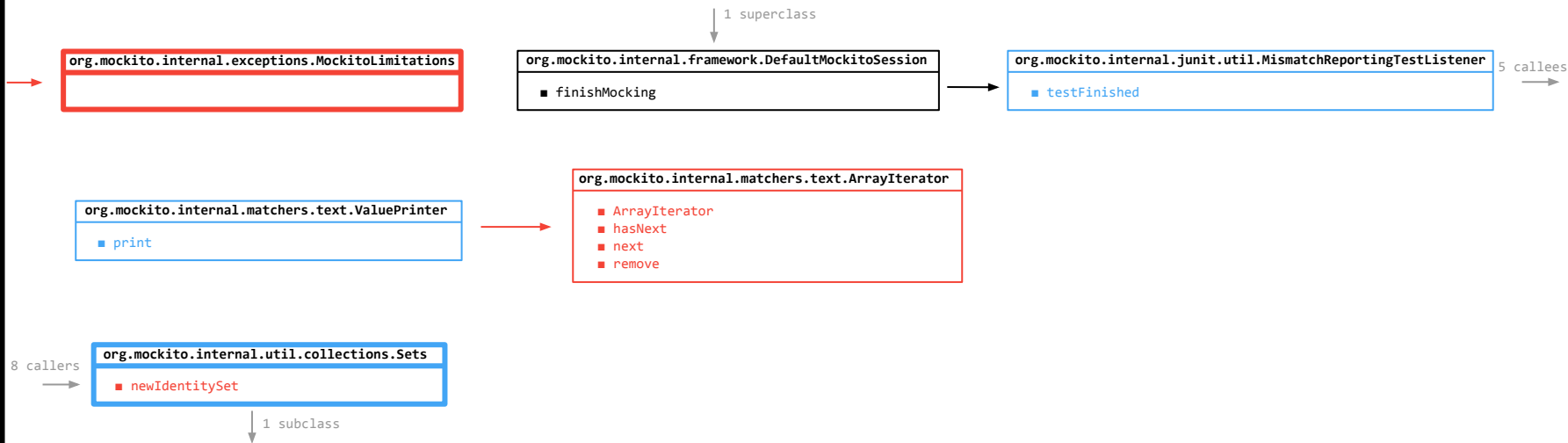


Minimap



Diff

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11 ##### src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java
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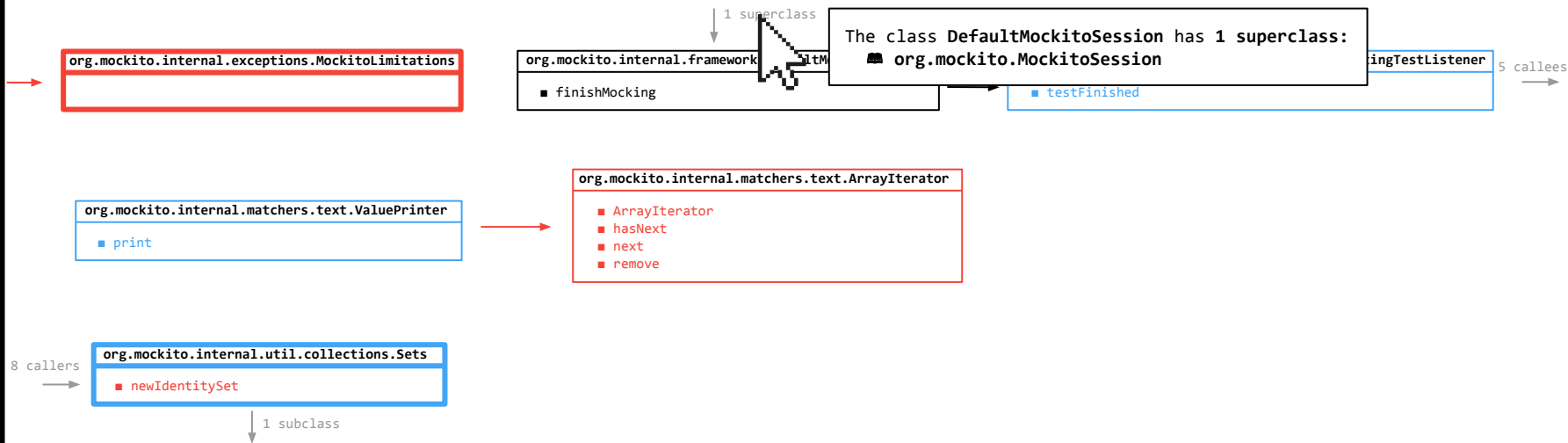
Current Zoom: 300%

Minimap



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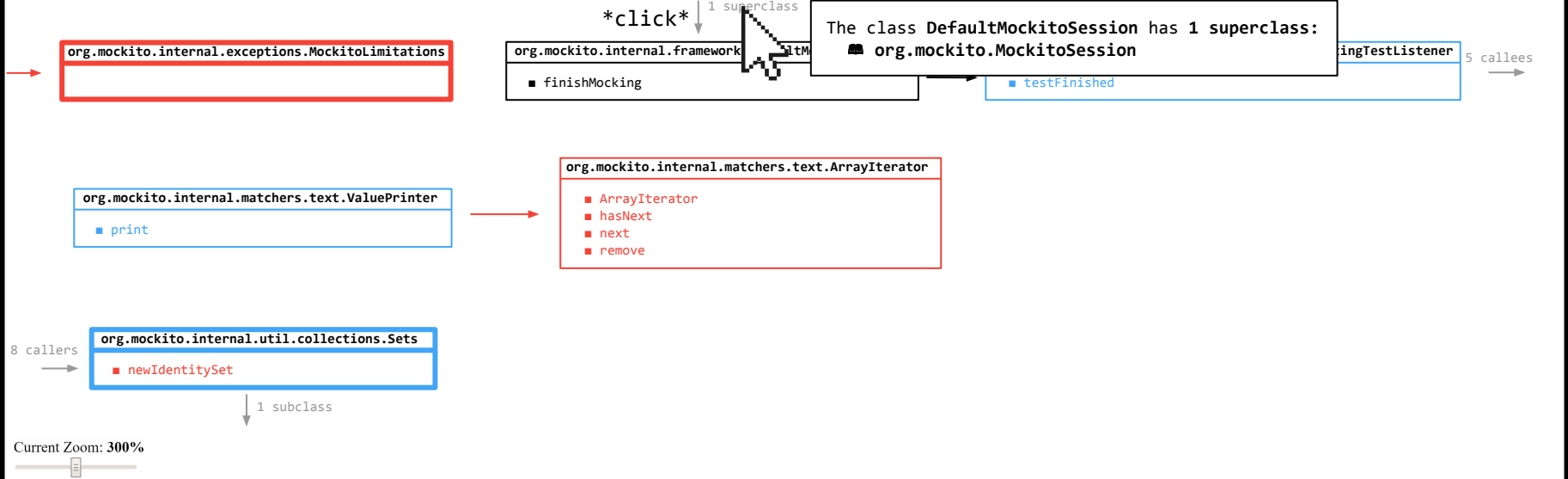
Current Zoom: 300%

Minimap



Diff

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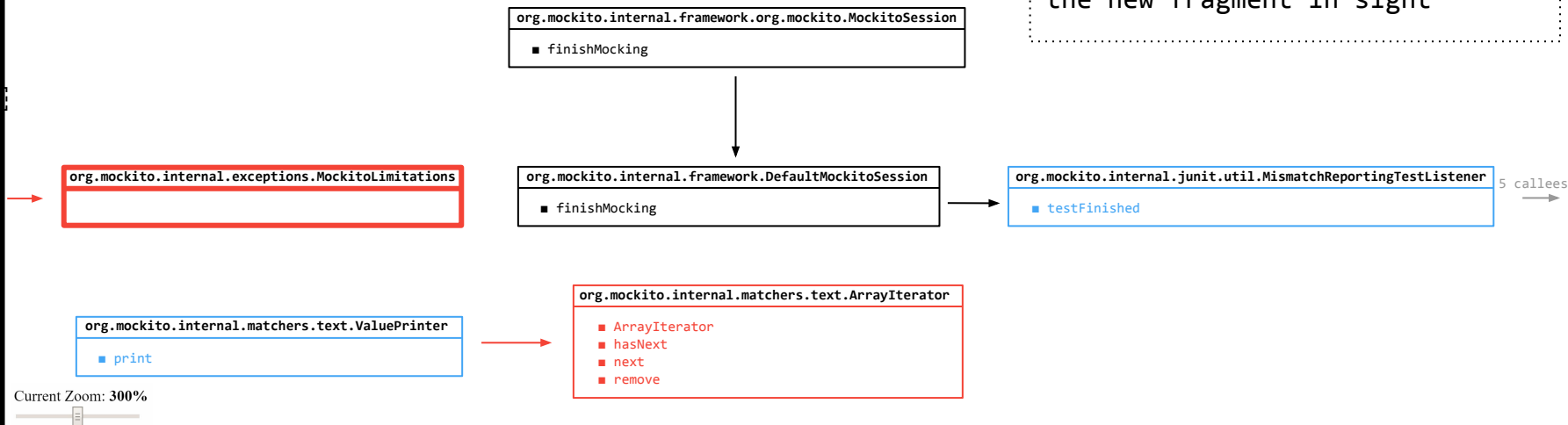


Minimap

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canvas is panned to the top keep
the new fragment in sight



Minimap



Diff

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9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
10 -supported.";
11 -}
```

org.mockito.in

■ finishMock

org.mockito.i

■ finishMock

```
1  @Incubating
2  public interface MockitoSession {
3
4      /**
5       * Must be invoked when the user is done with mocking for given session (test method).
6       * It detects unused stubbings and may throw {@link UnnecessaryStubbingException}
7       * or emit warnings ({@link MockitoHint}) depending on the {@link Strictness} level.
8       * The method also detects incorrect Mockito usage via {@link Mockito#validateMockitoUsage()}.
9       * <p>
10      * In order to implement {@link Strictness} Mockito session keeps track of mocking using {@link MockitoListener}.
11      * This method cleans up the listeners and ensures there is no leftover state after the session finishes.
12      * It is necessary to invoke this method to conclude mocking session.
13      * For more information about session lifecycle see {@link MockitoSessionBuilder#startMocking()}.
14      * <p>
15      * This method is intended to be used in your test framework's 'tear down' method.
16      * In the case of JUnit it is the "&#064;After" method.
17      * <p>
18      * For example, see javadoc for {@link MockitoSession}.
19      *
20      * @since 2.7.0
21      */
22      @Incubating
23      void finishMocking();
24  }
```

matchReportingTestListener

5 callees

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.matchers.text.ValuePrinter

■ print

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

Current Zoom: 300%

Minimap

Diff

11 src/main/java/org/mockito/internal/exceptions/MockitoLimitations.java

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1  ... @@ -1,11 +0,0 @@
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6   5  -package org.mockito.internal.exceptions;
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9   8  -
10  9  -    public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not
11  10 supported.";
12  11 -}
```


Prototype 3

Callers

Base view

Callees

```

56 +
57 +         public boolean hasNext() {
58 +             return currentIndex < Array.getLength(value);
59 +         }
60 +
61 +         public Object next() {
62 +             return Array.get(value, currentIndex++);
63 +         }
64 +
65 +         public void remove() {
66 +             throw new UnsupportedOperationException("cannot remove items from an array");
67 +         }
68 +     });

```

```

54 69    }
55 70    if (value instanceof FormattedText) {
56 71        return (((FormattedText) value).getText());

```



4 ■■■■■ src/main/java/org/mockito/internal/util/collections/Sets.java

View

... ... @@ -1,27 +1,23 @@

```

1 1  /*
2 2  * Copyright (c) 2007 Mockito contributors
3 3  * This program is made available under the terms of the MIT License.
4 4  */
5 5  package org.mockito.internal.util.collections;
6 6
7 7  import java.util.LinkedHashSet;
8 8  import java.util.Set;
9 9
10 10 import static java.util.Arrays.asList;
11 11
12 12 public abstract class Sets {
13 13     public static Set<Object> newMockSafeHashSet(Iterable<Object> mocks) {
14 14         return HashCodeAndEqualsSafeSet.of(mocks);
15 15     }
16 16
17 17     public static Set<Object> newMockSafeHashSet(Object... mocks) {
18 18         return HashCodeAndEqualsSafeSet.of(mocks);
19 19     }
20 20

```

```

21 -     public static IdentitySet newIdentitySet() {
22 -         return new IdentitySet();
23 -     }
24 -
25 21     public static <T> Set<T> newSet(T ... elements) {
26 22         if (elements == null) {
27 23             throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");

```



8 callers of newMockSafeHashSet



o-.m-.int-.conf-.InjectAnnotat.



Callers	Base view	Callees
	<div><div><div>56 + 57 + 58 + 59 + 60 + 61 + 62 + 63 + 64 + 65 + 66 + 67 + 68 +</div><div><pre>public boolean hasNext() { return currentIndex < Array.getLength(value); } public Object next() { return Array.get(value, currentIndex++); } public void remove() { throw new UnsupportedOperationException("cannot remove items from an array"); } });</pre></div></div><div><div>54 69 55 70 56 71</div><div><pre>} if (value instanceof FormattedText) { return (((FormattedText) value).getText()); }</pre></div></div><div><div>4 ■■■■■ src/main/java/org/mockito/internal/util/collections/Sets.java</div><div><div>View ▾</div><div>... ... @@ -1,27 +1,23 @@</div><div><pre>1 1 /* 2 2 * Copyright (c) 2007 Mockito contributors 3 3 * This program is made available under the terms of the MIT License. 4 4 */ 5 5 package org.mockito.internal.util.collections; 6 6 7 7 import java.util.LinkedHashSet; 8 8 import java.util.Set; 9 9 10 10 import static java.util.Arrays.asList; 11 11 12 12 public abstract class Sets { 13 13 public static Set<Object> newMockSafeHashSet(Iterable<Object> mocks) { 14 14 return HashCodeAndEqualsSafeSet.of(mocks); 15 15 } 16 16 17 17 public static Set<Object> newMockSafeHashSet(Object... mocks) { 18 18 return HashCodeAndEqualsSafeSet.of(mocks); 19 19 } 20 20 21 21 - public static IdentitySet newIdentitySet() { 22 22 - return new IdentitySet(); 23 23 - } 24 24 - 25 25 public static <T> Set<T> newSet(T ... elements) { 26 26 if (elements == null) { 27 27 throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null."); 28 28 } 29 29 } 30 30 }</pre></div></div></div><div>8 callers of newMockSafeHashSet</div><div>◀ o-.m-.int-.conf-.InjectAnnotat. ▶</div></div>	

Callers	Base view	Callees
	<pre>40 40 41 41 /** 42 42 * Reports verification and misusing errors. 43 43 * <p> 44 44 * One of the key points of mocking library is proper verification/exception 45 45 * messages. All messages in one place makes it easier to tune and amend them. 46 46 * <p> 47 47 * Reporter can be injected and therefore is easily testable. 48 48 * <p> 49 49 * Generally, exception messages are full of line breaks to make them easy to 50 50 * read (xunit plugins take only fraction of screen on modern IDEs). 51 51 */ 52 52 public class Reporter { 53 53 54 54 + private final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not supported."; 55 55 + 56 56 private Reporter() { 57 57 } 58 58 59 59 60 60 61 61 62 62 63 63 64 64 65 65 66 66 67 67 68 68 69 69 } 70 70 71 71 72 72 public static MockitoException unfinishedStubbing(Location location) { 73 73 return new UnfinishedStubbingException(join(74 74 "Unfinished stubbing detected here:", 75 75 location, 76 76 "", 77 77 "E.g. thenReturn() may be missing.", 78 78 "Examples of correct stubbing:", 79 79 " when(mock.isOk()).thenReturn(true);", 80 80 " when(mock.isOk()).thenThrow(exception);", 81 81 " doThrow(exception).when(mock).someVoidMethod();", 82 82 "Hints:", 83 83 " 1. missing thenReturn()", 84 84 " 2. you are trying to stub a final method, which is not supported", 85 85 " 3: you are stubbing the behaviour of another mock inside before 'thenReturn' instruction if completed", 86 86 "" 87 87)); 88 88 } 89 89 90 90 91 91 public static MockitoException incorrectUseOfApi() { 92 92 return new MockitoException(join(93 93 "Incorrect use of API detected here:", 94 94 new LocationImpl(), 95 95 "", 96 96 "You probably stored a reference to OngoingStubbing returned by when() and called stubbing methods like thenReturn() on this refe", 97 97 "Examples of correct usage:", 98 98 " when(mock.isOk()).thenReturn(true).thenReturn(false).thenThrow(exception);", 99 99 " when(mock.isOk()).thenReturn(true, false).thenThrow(exception);", 100 100 "" 101 101)); 102 102 } 103 103 104 104 public static MockitoException missingMethodInvocation() {</pre>	<p>1 callee of unfinishedStubbing</p> <p>← org.m-.int-.util.StringUtil.join →</p>

Callers	Base view	Callees
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Callers	Base view [X]	<i>org.mockito.internal.util.StringUtil</i> [X]	Callees
		<pre> 1 /* 2 * Copyright (c) 2017 Mockito contributors 3 * This program is made available under the terms of the MIT License. 4 */ 5 package org.mockito.internal.util; 6 7 import static java.util.Arrays.asList; 8 9 import java.util.Collection; 10 import java.util.regex.Matcher; 11 import java.util.regex.Pattern; 12 13 public class StringUtil { 14 15 private static final Pattern CAPS = Pattern.compile("[A-Z\\d][^A-Z\\d]*"); 16 17 private StringUtil() {} 18 /** 19 * @param text 20 * to have the first line removed 21 * @return less first line 22 */ 23 public static String removeFirstLine(String text) { 24 return text.replaceFirst(".*?\\n", ""); 25 } 26 27 /** 28 * Joins Strings with line break character. It adds line break in front, too. 29 * This makes it something like 'format' no really 'join'. 30 */ 31 public static String join(Object ... linesToBreak) { 32 return join("\\n", asList(linesToBreak)); 33 } 34 35 /** 36 * Joins Strings with EOL character 37 * 38 * @param start the starting String 39 * @param lines collection to join 40 */ 41 public static String join(String start, Collection<?> lines) { 42 return join(start, "", lines); 43 } 44 45 /** 46 * Joins Strings with EOL character 47 * 48 * @param start the starting String 49 * @param linePrefix the prefix for each line to be joined 50 * @param lines collection to join </pre>	

Callers	Base view [X]	<i>org.mockito.internal.util.StringUtil</i> [X]	Callees
		<pre> 1 /* 2 * Copyright (c) 2017 Mockito contributors 3 * This program is made available under the terms of the MIT License. 4 */ 5 package org.mockito.internal.util; 6 7 import static java.util.Arrays.asList; 8 9 import java.util.Collection; 10 import java.util.regex.Matcher; 11 import java.util.regex.Pattern; 12 13 public class StringUtil { 14 15 private static final Pattern CAPS = Pattern.compile("[A-Z\\d][^A-Z\\d]*"); 16 17 private StringUtil() {} 18 /** 19 * @param text 20 * to have the first line removed 21 * @return less first line 22 */ 23 public static String removeFirstLine(String text) { 24 return text.replaceFirst(".*?\\n", ""); 25 } 26 27 /** 28 * Joins Strings with line break character. It adds line break in front, too. 29 * This makes it something like 'format' no really 'join'. 30 */ 31 public static String join(Object ... linesToBreak) { 32 return join("\\n", asList(linesToBreak)); 33 } 34 35 /** 36 * Joins Strings with EOL character 37 * 38 * @param start the starting String 39 * @param lines collection to join 40 */ 41 public static String join(String start, Collection<?> lines) { 42 return join(start, "", lines); 43 } 44 45 /** 46 * Joins Strings with EOL character 47 * 48 * @param start the starting String 49 * @param linePrefix the prefix for each line to be joined 50 * @param lines collection to join </pre> <p>*scroll to left*</p>	

Callers	Base view [X]	org.mockito.internal.util.StringUtil [X]	Callees
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Callers	Base view [X]	o.m-.int-.util.StringUtil [X]	Callees
	<pre> 1 exception 2 amend them. them easy to a). s declared on non-public parent classes is not supported."; ation) { };", is not supported", ck inside before 'thenReturn' instruction if completed", ng returned by when() and called stubbing methods like thenReturn() on this refe h(false).thenThrow(exception);", enThrow(exception);", </pre> <p><i>*scroll to left*</i></p>	<pre> 1 /* 2 * Copyright (c) 2017 Mockito contributors 3 * This program is made available under the terms of the MIT Li 4 */ 5 package org.mockito.internal.util; 6 7 import static java.util.Arrays.asList; 8 9 import java.util.Collection; 10 import java.util.regex.Matcher; 11 import java.util.regex.Pattern; 12 13 public class StringUtil { 14 15 private static final Pattern CAPS = Pattern.compile("[A-Z\\ 16 17 private StringUtil() {} 18 /** 19 * @param text 20 * to have the first line removed 21 * @return less first line 22 */ 23 public static String removeFirstLine(String text) { 24 return text.replaceFirst(".*?\\n", ""); 25 } 26 27 /** 28 * Joins Strings with line break character. It adds line br 29 * This makes it something like 'format' no really 'join'. 30 */ 31 public static String join(Object ... linesToBreak) { 32 return join("\\n", asList(linesToBreak)); 33 } 34 35 /** 36 * Joins Strings with EOL character 37 * 38 * @param start the starting String 39 * @param lines collection to join 40 */ 41 public static String join(String start, Collection<> lines 42 return join(start, "", lines); 43 } 44 45 /** 46 * Joins Strings with EOL character 47 * 48 * @param start the starting String 49 * @param linePrefix the prefix for each line to be joined 50 * @param lines collection to join </pre>	<p>1 callee of unfinishedStubbing</p> <p>◀ org.m-.int-.util.StringUtil.join ▶</p>

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