

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

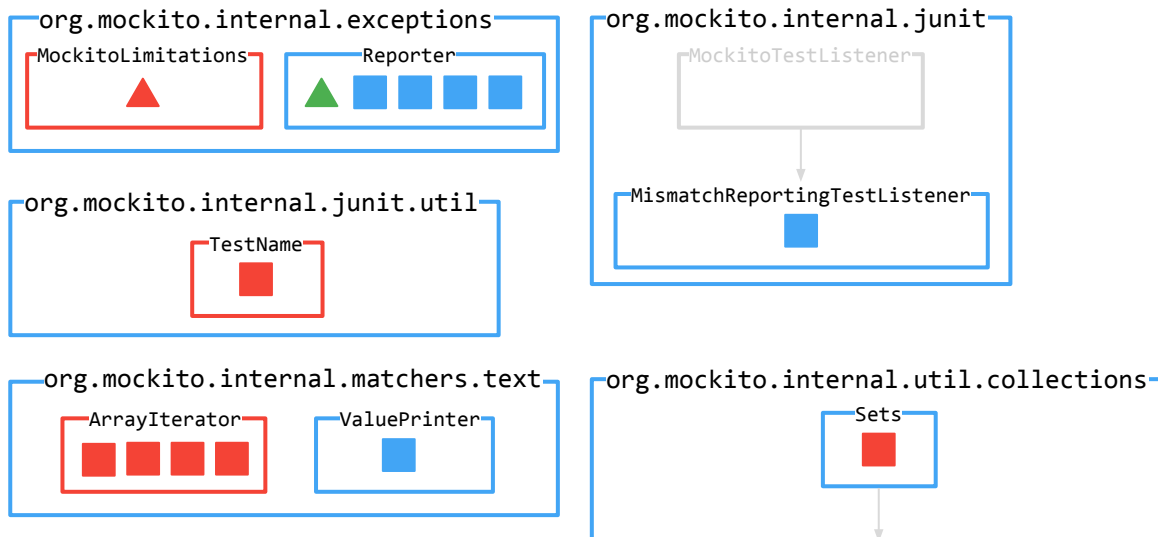
Change Summary

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

Change Details

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Overview



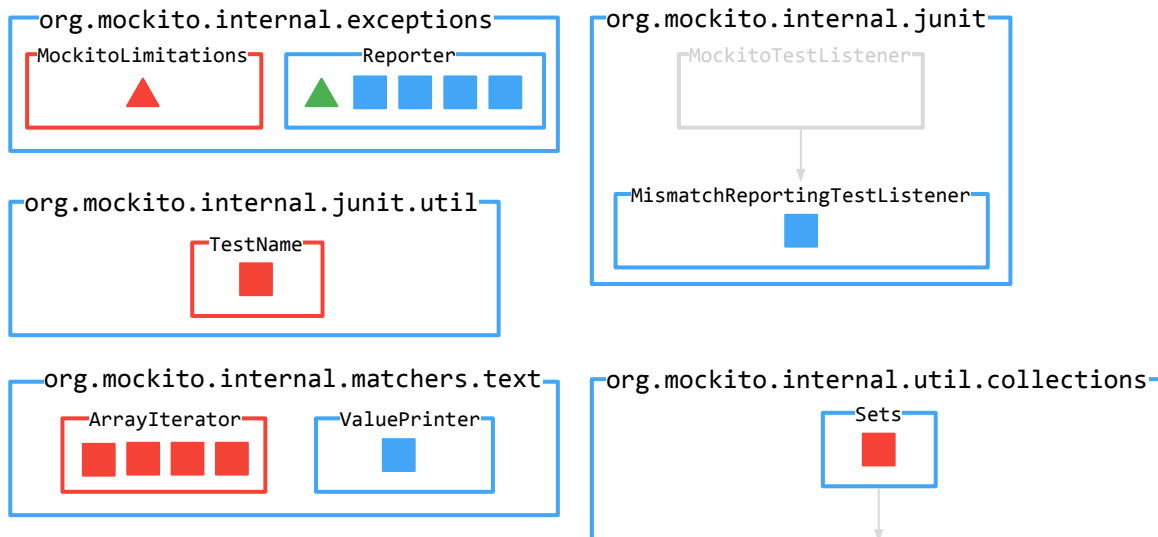
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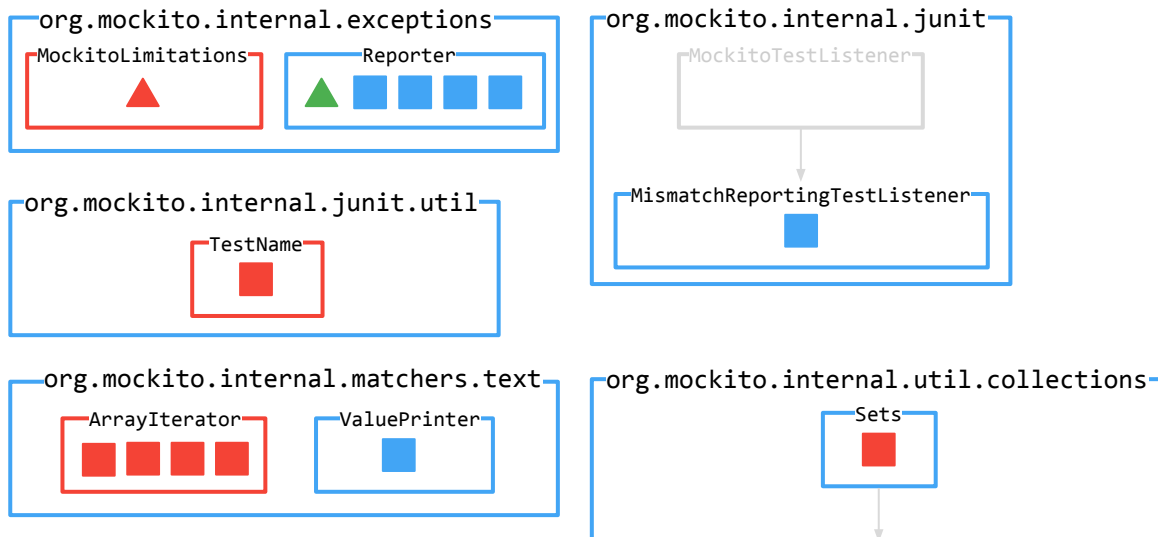
Change Summary

- Packages (0+, 0-, 5🔒)
 - (+) **Added:** 0
 - (-) **Removed:** 0
 - (🔒) **Modified:** 5
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<div data-bbox="79 128 359 321"><div data-bbox="79 128 359 158">> Packages (0+, 0-, 5 🛡️)</div><div data-bbox="106 161 239 191">(+) Added: 0</div><div data-bbox="106 194 270 223">(-) Removed: 0</div><div data-bbox="106 227 280 256">(🛡️) Modified: 5</div><div data-bbox="79 259 336 289">> Classes (0+, 3-, 4 🛡️)</div><div data-bbox="79 292 349 321">> Methods (0+, 6-, 6 🛡️)</div></div>	
Change Details	

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<div data-bbox="73 128 359 323"><div data-bbox="73 128 359 159">> Packages (0+, 0-, 5)</div><div data-bbox="104 159 239 190">(+) Added: 0</div><div data-bbox="104 190 270 220">(-) Removed: 0</div><div data-bbox="104 220 280 251">(🔒) Modified: 5</div><div data-bbox="73 251 336 281">> Classes (0+, 3-, 4)</div><div data-bbox="73 281 349 312">> Methods (0+, 6-, 6)</div></div>	
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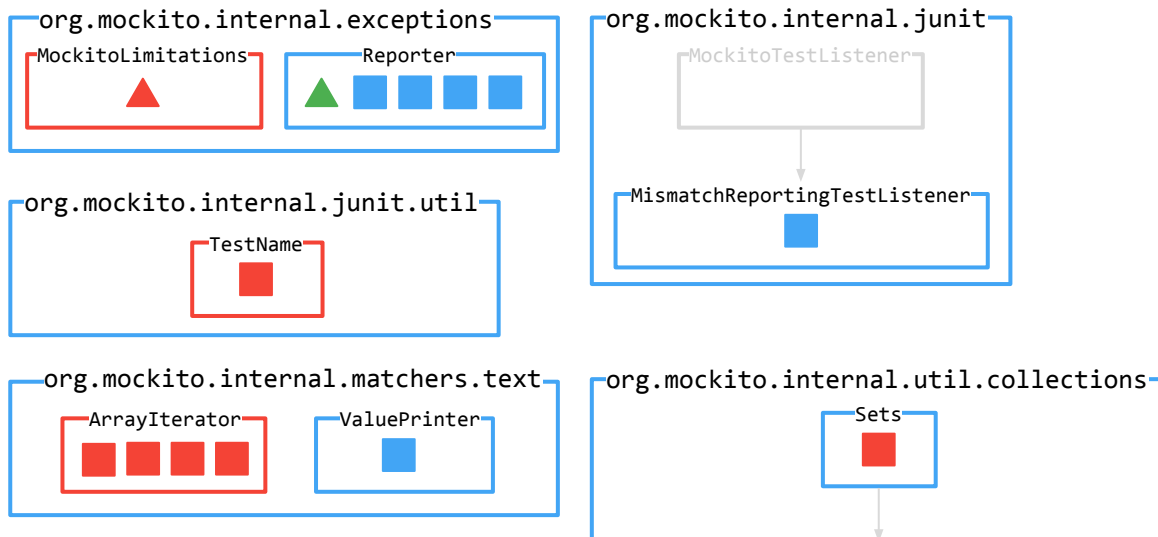
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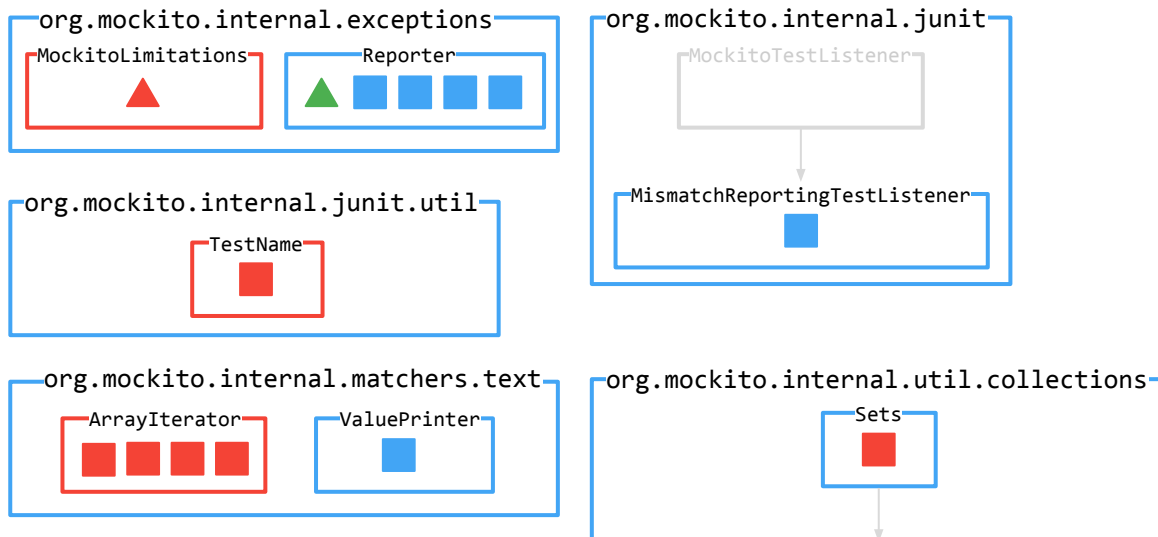
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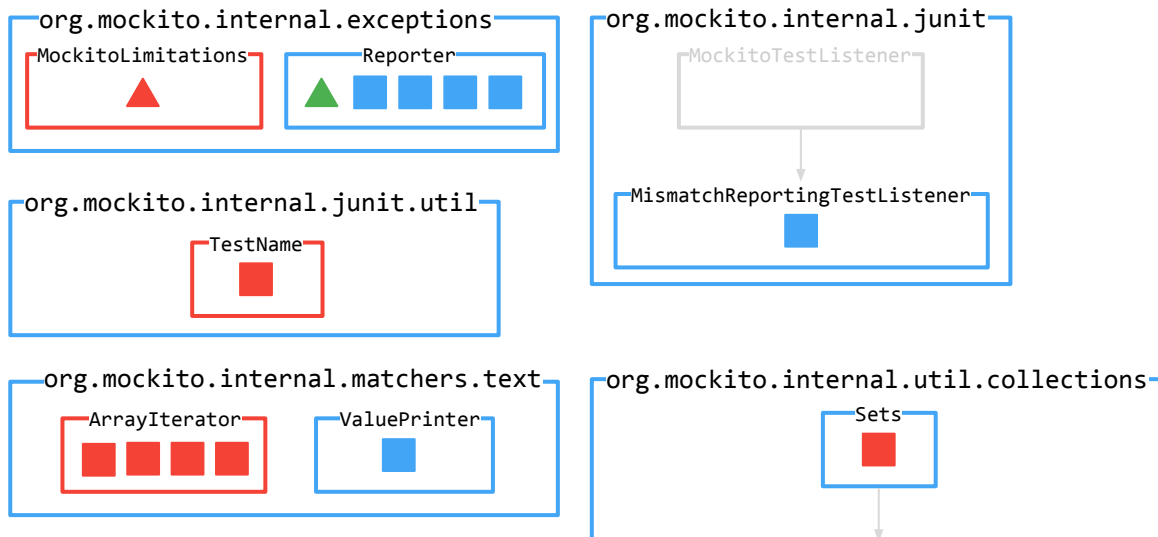
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- Classes (0+, 3-, 4🔒)
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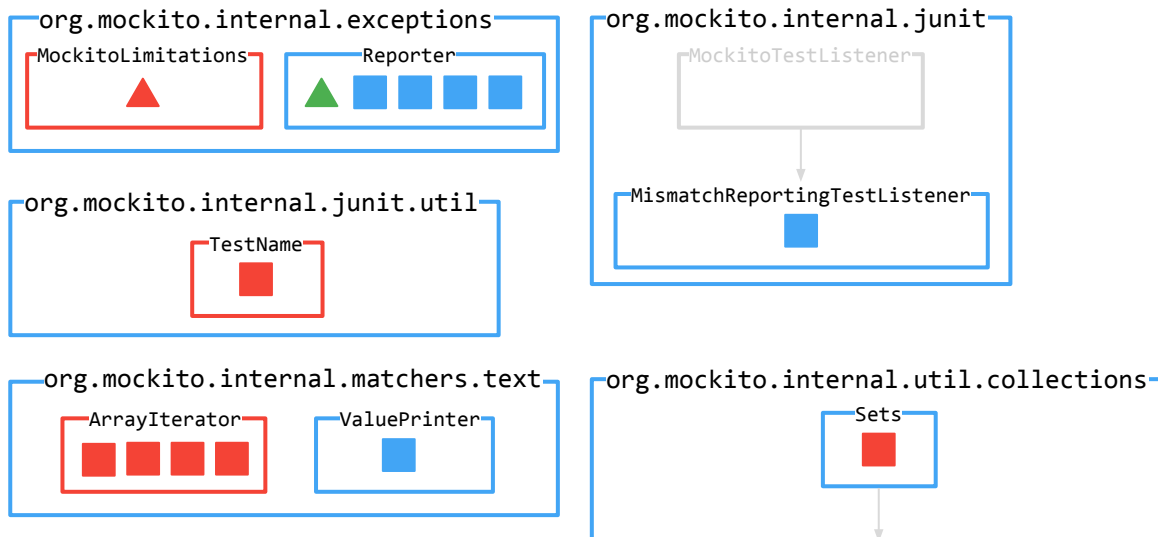
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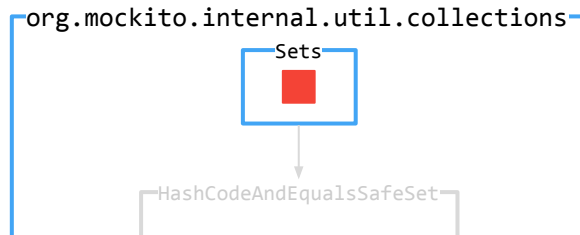
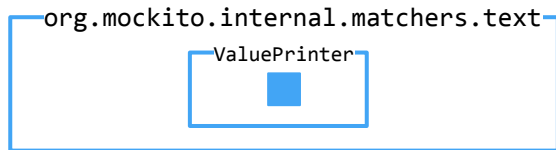
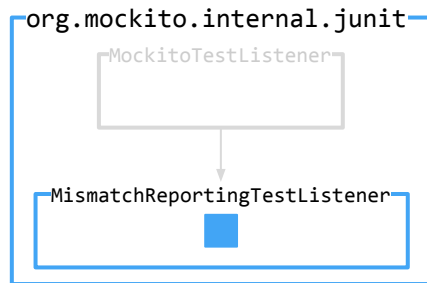
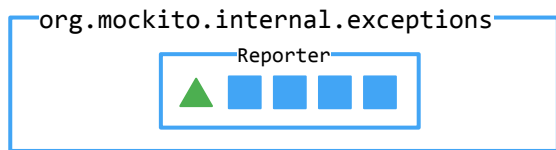
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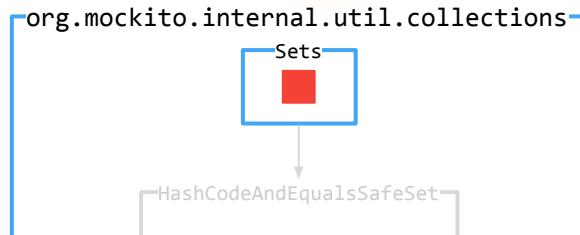
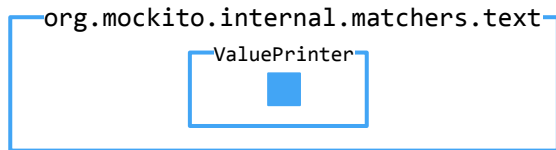
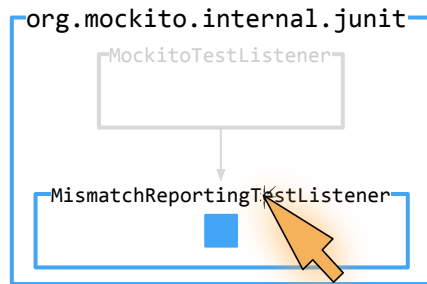
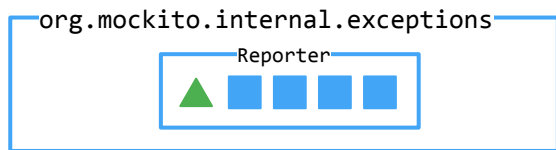
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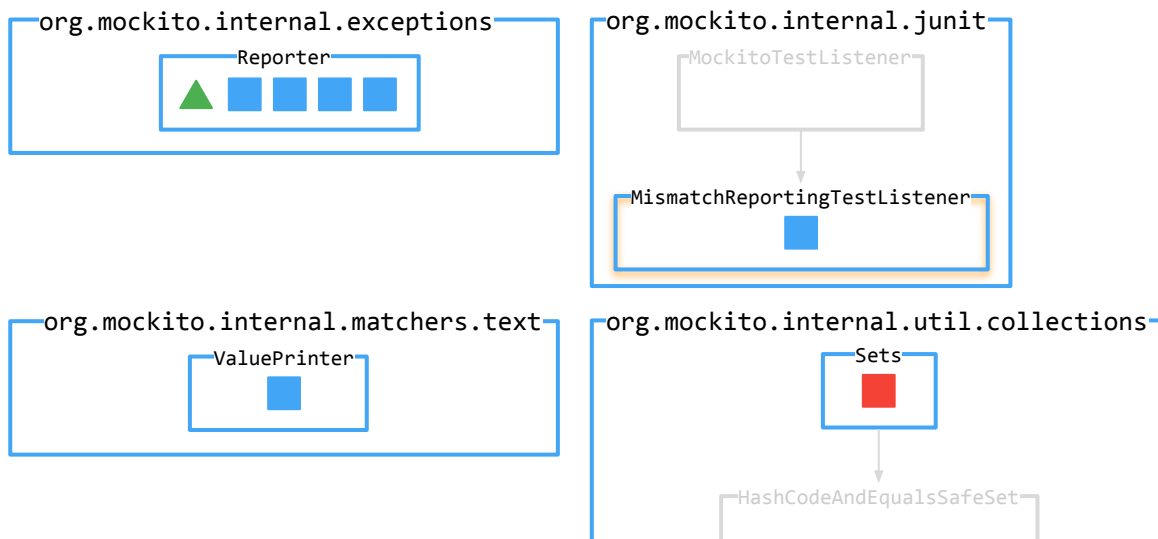
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Overview



```
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  @00 -30,7 +29,7 @@ public void testFinished(TestFinishedEvent event) {
12  30 //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  31 - 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  29 //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
22   nobody will read, it's also duplicated
23   mocks = new LinkedList<Object>();
24
25  32 + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
26   if (event.getFailure() != null) {
27   //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
28   new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
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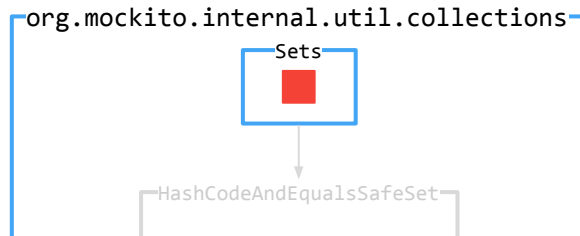
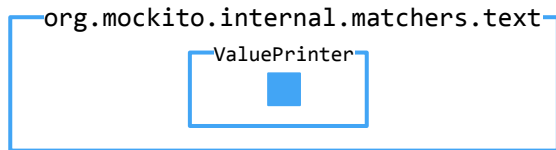
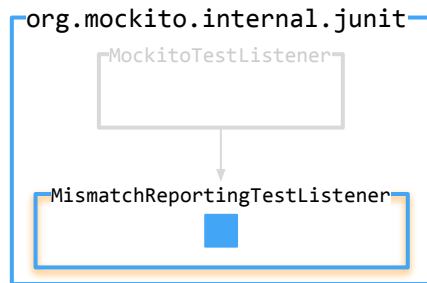
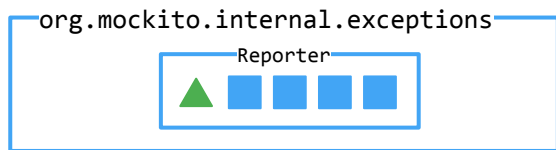
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Overview



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  * 00 -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  * 31 - 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  * }
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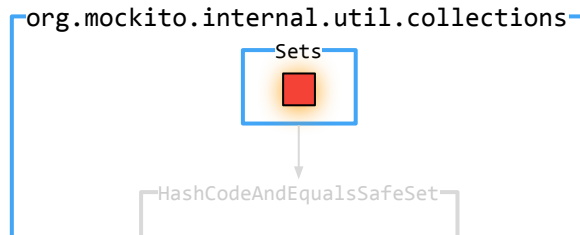
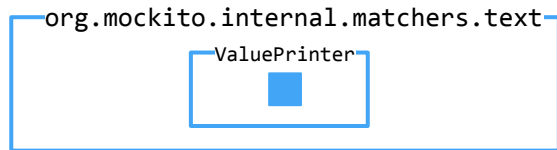
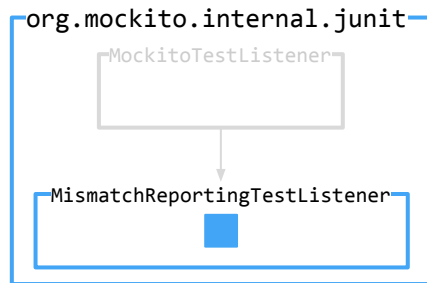
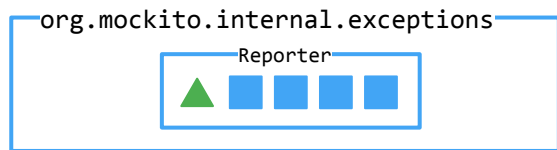
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Overview



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

18 return HashCodeAndEqualsSafeSet.of(mock);

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 }

30 }

18 return HashCodeAndEqualsSafeSet.of(mock);

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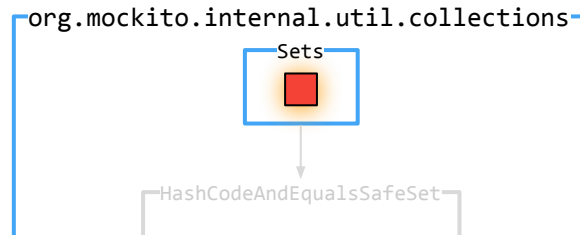
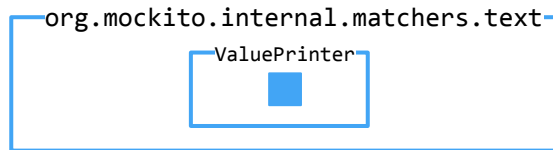
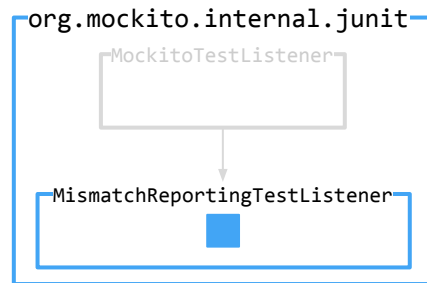
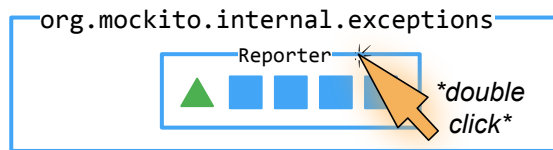
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25 }

26 }

27 }

28 }

29 }

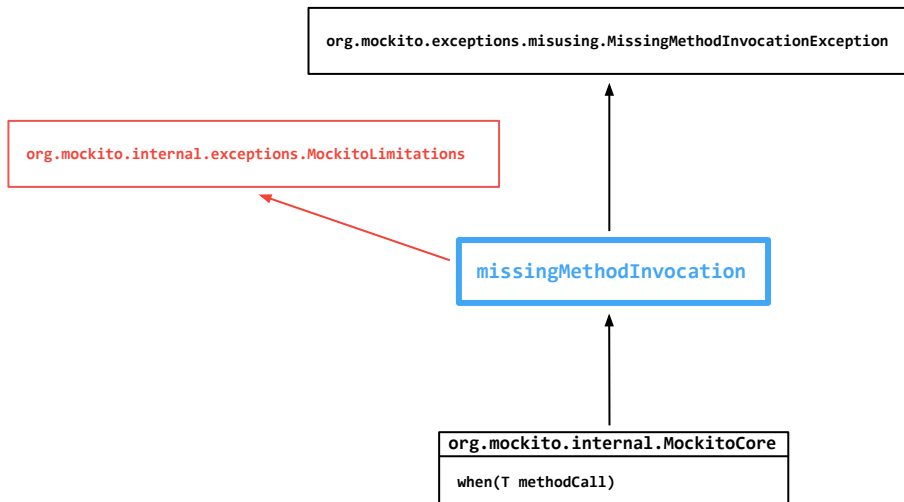
30 }

Callees

- Of [missingMethodInvocation](#):
 - `org.mockito.internal.exceptions.MockitoLimitations`
 - `org.mockito.internal.exceptions.MissingMethodInvocationException`
- Of [unfinishedVerificationException](#):
 - `org.mockito.internal.exceptions.MockitoLimitations`
 - `org.mockito.internal.exceptions.UnfinishedVerificationException`
- Of [cannotStubVoidMethodWithAReturnValue](#):
 - `org.mockito.internal.exceptions.MockitoLimitations`
 - `org.mockito.internal.exceptions.CannotStubVoidMethodWithReturn-`
- Of [misplacedArgumentMatcher](#):
 - `org.mockito.internal.exceptions.MockitoLimitations`
 - `org.mockito.internal.exceptions.InvalidUseOfMatchersException`

Callers

- Of [missingMethodInvocation](#):
 - `org.mockito.internal.MockitoCore`
 - `when(T methodCall)`
- Of [unfinishedVerificationException](#):
 - `org.mockito.internal.progress.MockingProgressImpl`
 - `validateMostStuff()`
- Of [cannotStubVoidMethodWithAReturnValue](#):
 - `org.mockito.internal.stubbing.answers`
 - `validateFor(InvocationOnMock invocation)`
- Of [misplacedArgumentMatcher](#):
 - `org.mockito.internal.progress`
 - `validateState()`

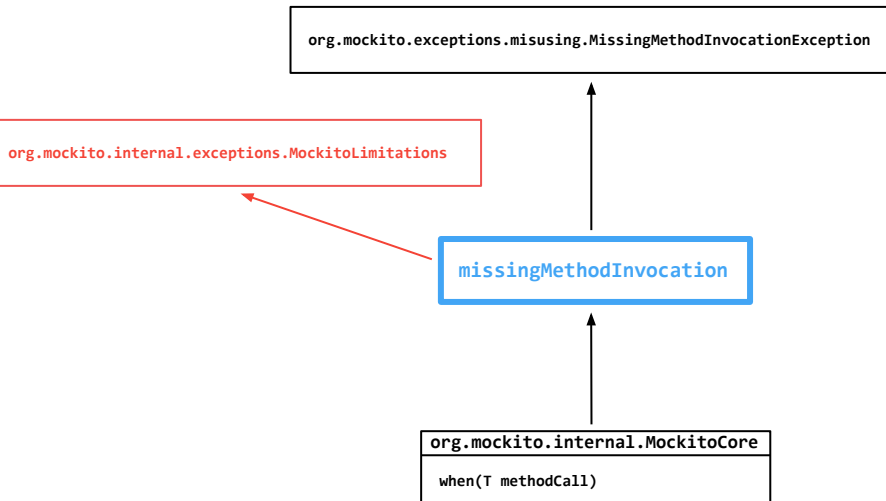


Callees

- Of [missingMethodInvocation](#):
 - org.mockito.internal.exceptions.MockitoLimitations
 - org.mockito.exceptions.misusing.MissingMethodInvocationException
- Of [unfinishedVerificationException](#):
 - org.mockito.internal.exceptions.MockitoLimitations
 - org.mockito.exceptions.misusing.UnfinishedVerificationException
- Of [cannotStubVoidMethodWithAReturnValue](#):
 - org.mockito.internal.exceptions.MockitoLimitations
 - org.mockito.exceptions.misusing.CannotStubVoidMethodWithReturn-
- Of [misplacedArgumentMatcher](#):
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 - org.mockito.exceptions.misusing.InvalidUseOfMatchersException

Callers

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- Of [cannotStubVoidMethodWithAReturnValue](#):
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- Of [misplacedArgumentMatcher](#):
 - org.mockito.internal.progress
 - validateState()



Callees

- Of [missingMethodInvocation](#):
 - [org.mockito.internal.exceptions.MockitoLimitations](#)
 - [org.mockito.exceptions.misusing.MissingMethodInvocationException](#)
- Of [unfinishedVerificationException](#):
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Callers

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 - [org.mockito.internal.progress](#)
 - [validateState\(\)](#)

[org.mockito.internal.exceptions.MockitoLimitations](#)[org.mockito.exceptions.misusing.UnfinishedVerificationException](#)[unfinishedVerificationException](#)[org.mockito.internal.progress.MockingProgressImpl](#)[validateMostStuff\(\)](#)

< Back

org.mockito.internal.exceptions.Reporter

Callees

- Of [missingMethodInvocation](#):
 - org.mockito.internal.exceptions.MockitoLimitations
 - org.mockito.exceptions.misusing.MissingMethodInvocationException
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 - org.mockito.internal.exceptions.MockitoLimitations
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- Of [cannotStubVoidMethodWithAReturnValue](#):
 - org.mockito.internal.exceptions.MockitoLimitations
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- Of [misplacedArgumentMatcher](#):
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Callers

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 - org.mockito.internal.stubbing.answers
 - validateFor(InvocationOnMock invocation)
- Of [misplacedArgumentMatcher](#):
 - org.mockito.internal.progress
 - validateState()

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.exceptions.misusing.UnfinishedVerificationException

unfinishedVerificationException

org.mockito.internal.progress.MockingProgressImpl

validateMostStuff()

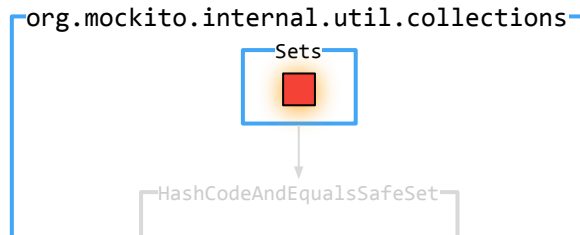
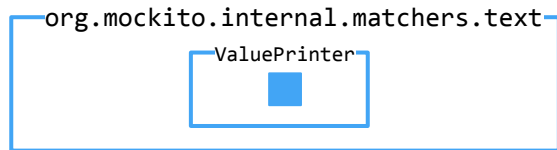
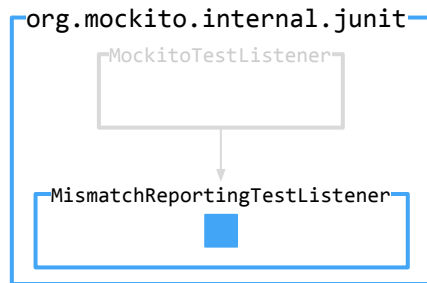
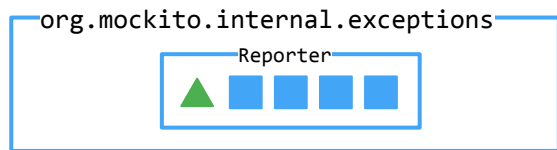
Change Summary

- 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
 - print
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



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

18 return hashCodeAndEqualsSafeSet.of(mock);

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 }

30 }

18 return hashCodeAndEqualsSafeSet.of(mock);

19 }

20 }

21 public static <T> Set<T> newSet(T ... elements) {

22 if (elements == null) {

23 throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");

24 }

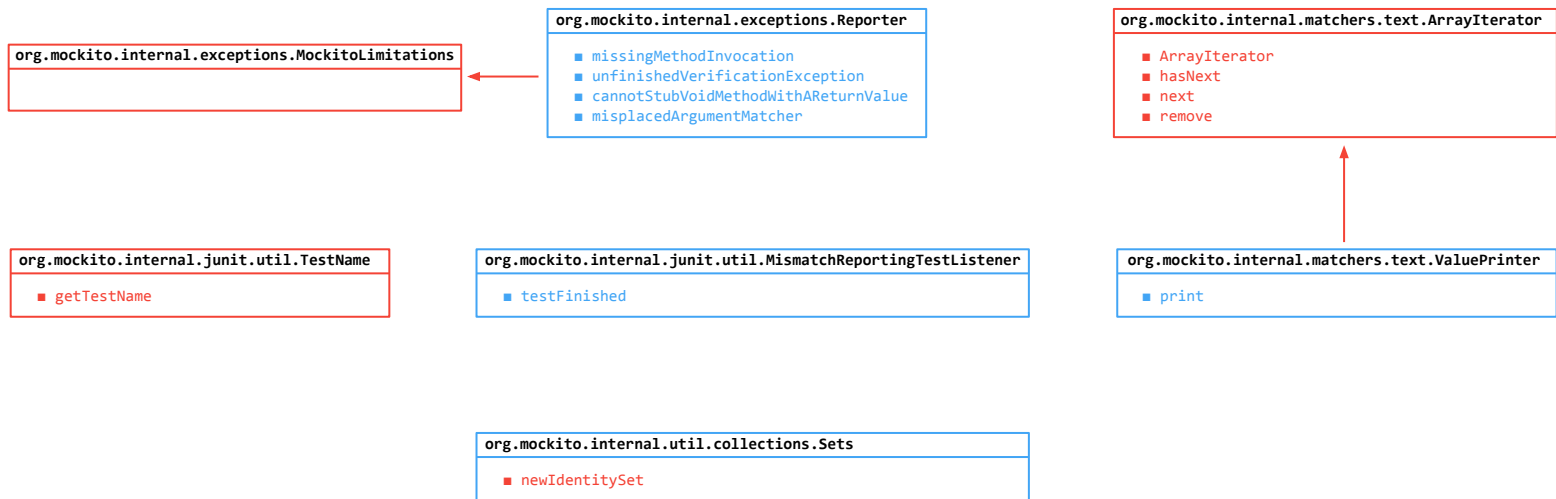
25 }

26 }

27 }

Prototype 2

infinite canvas



Current Zoom: 300%



org.mockito.internal.exceptions.MockitoLimitations

click

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit

- getTestName

```
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 -}
```

org.mockito.internal.matchers.text.ValuePrinter

- print

Current Zoom: 300%

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getName

org.mockito.internal.junit.util.MismatchReportingTestListener

- testFinished

org.mockito.internal.matchers.text.ValuePrinter

- print

org.mockito.internal.util.collections.Sets

- newIdentitySet

Current Zoom: 300%

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

... 00 -1,11 +0,0 00

```
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 -}
```

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.T

- getTestName

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

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

internal.matchers.text.ValuePrinter

org.mockito.internal.util.collections.Sets

- newIdentitySet

Current Zoom: 300%

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

```
... 00 -1,11 +0,0 00
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 ~}
```

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getName

org.mockito.internal

- testFinished

org.mockito.internal

- newIdentitySet

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

```
18 return hashCodeAndEqualsSafeSet.of(mock);
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 }
```

Current Zoom: 300%

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

```
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 -}
```


org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getName

org.mockito.internal

- testFinished

org.mockito.internal

- newIdentitySet

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

18 ■■■■■ junit.util.MismatchReportingTestListener

18 ■■■■■ 00 -18,10 +18,6 00

18 ■■■■■ return hashCodeAndEqualsSafeSet.of(mock);

19 ■■■■■ }

20 ■■■■■

21 ■■■■■ - public static IdentitySet newIdentitySet() {

22 ■■■■■ - return new IdentitySet();

23 ■■■■■ - }

24 ■■■■■

25 ■■■■■ util.collections.Sets

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 ■■■■■ }

Current Zoom: 300%

click

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

... 00 -1,11 +0,0 00

1 ■■■■■

2 ■■■■■ -/*

3 ■■■■■ - * Copyright (c) 2016 Mockito contributors

4 ■■■■■ - * This program is made available under the terms of the MIT License.

5 ■■■■■ - */

6 ■■■■■ -package org.mockito.internal.exceptions;

7 ■■■■■ -

8 ■■■■■ -public class MockitoLimitations {

9 ■■■■■ -

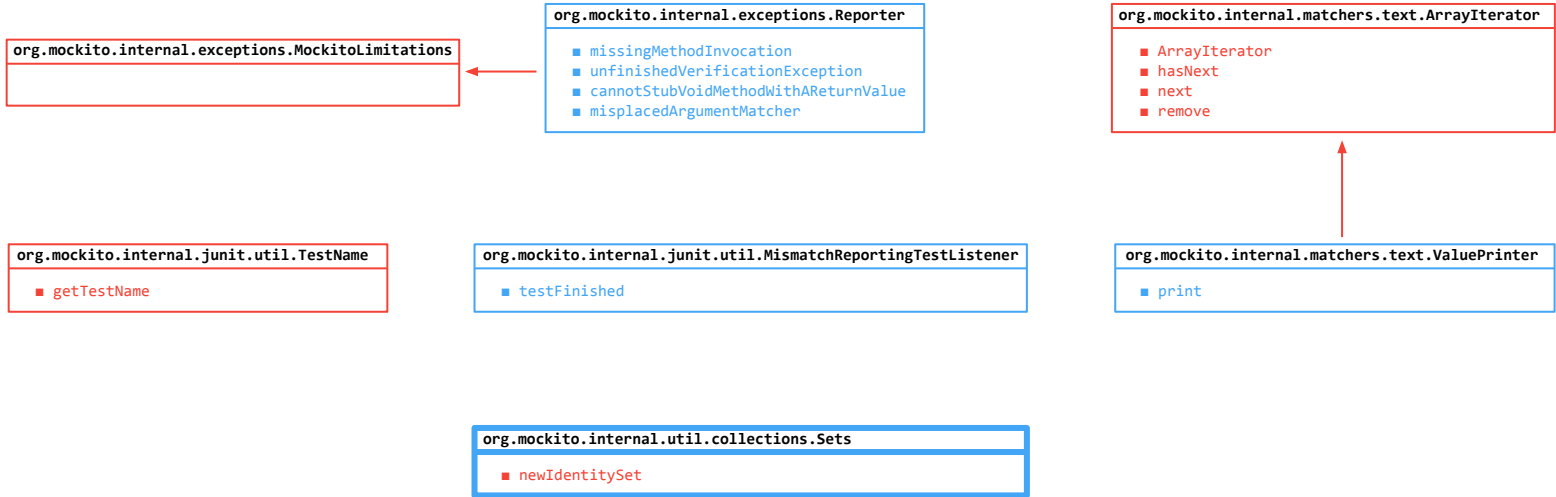
10 ■■■■■ - public final static String NON_PUBLIC_PARENT = "Mocking methods declared on non-public parent classes is not

11 ■■■■■ supported.";

12 ■■■■■ -

13 ■■■■■ -}

View



Current Zoom: 300%

```
4 src/main/java/org/mockito/internal/util/collections/Sets.java
18 return hashCodeAndEqualsSafeSet.of(mock);
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(mock);
30 }
```

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions.Reporter

- missingMethodInvocation
- unfinishedVerificationException
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getName

org.mockito.internal.junit.util.MismatchReportingTestListener

- testFinished

org.mockito.internal.matchers.text.ValuePrinter

- print

org.mockito.internal.util.collections.Sets

- newIdentitySet

Current Zoom: 300%

double click



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

View ▾

☒ -18,10 +18,6 @@

```
18     return hashCodeAndEqualsSafeSet.of(mock);
19 }
20
```

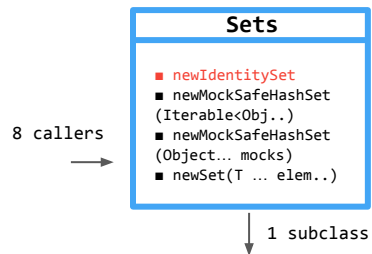
```
21 - public static IdentitySet newIdentitySet() {
22 -     return new IdentitySet();
23 - }
24 -
```

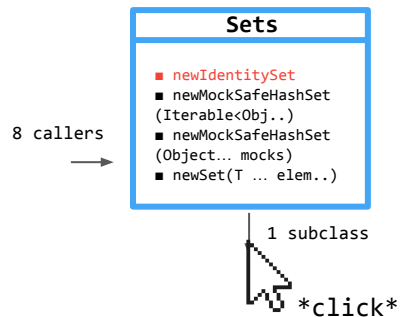
```
25 public static <T> Set<T> newSet(T ... elements) {
26     if (elements == null) {
27         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
28     }
29 }
```

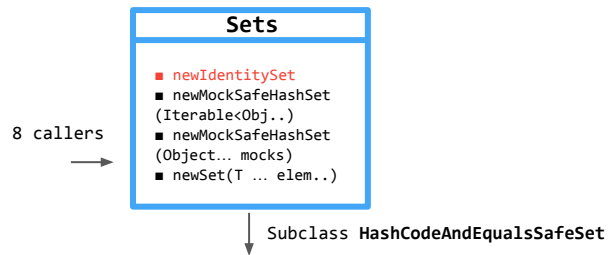
```
18     return hashCodeAndEqualsSafeSet.of(mock);
19 }
20
```

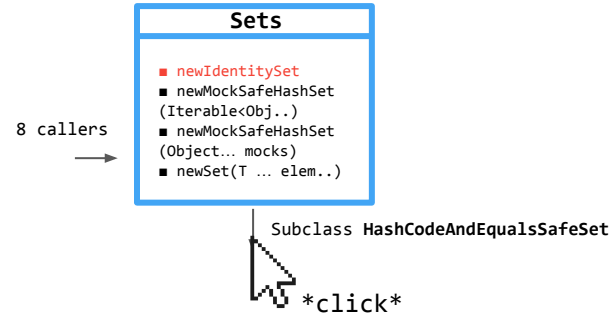
```
21 public static <T> Set<T> newSet(T ... elements) {
22     if (elements == null) {
23         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
24     }
25 }
```

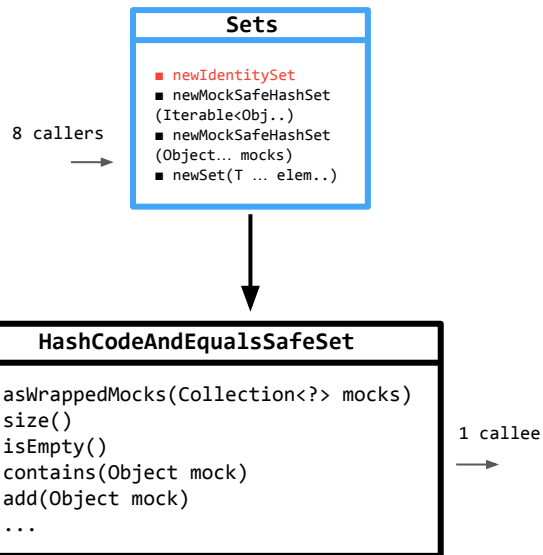
infinite canvas



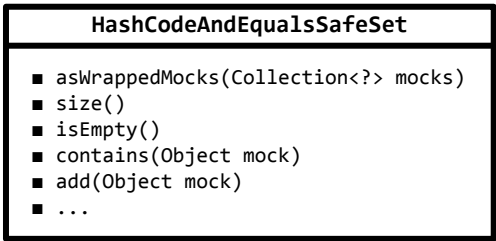
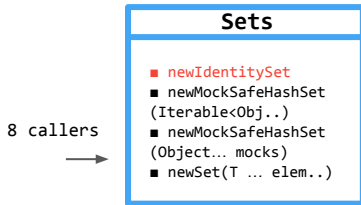






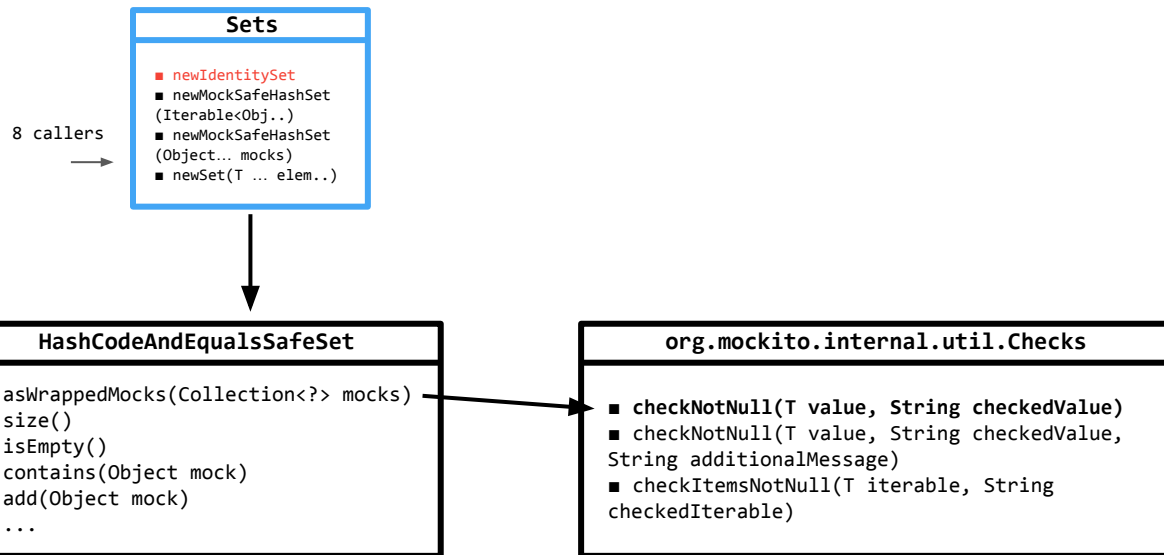


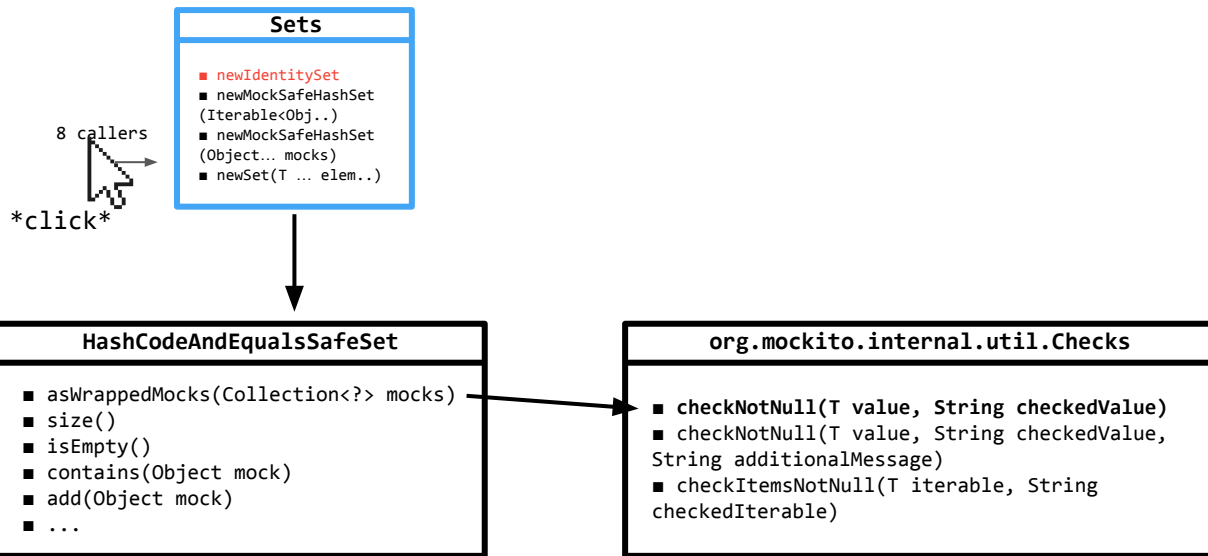




Calls `org.mockito.internal.util.Checks.checkNotNull`







org.mockito.internal.configuration.InjectingAnnotationEngine

org.mockito.internal.configuration.injection.MockInjection

.
. .
. .
. .
. .
. .

Sets

- newIdentitySet
- newMockSafeHashSet(Iterable<Obj>..)
- newMockSafeHashSet(Object... mocks)
- newSet(T ... elem..)

HashCodeAndEqualsSafeSet

- asWrappedMocks(Collection<?> mocks)
- size()
- isEmpty()
- contains(Object mock)
- add(Object mock)
- ...

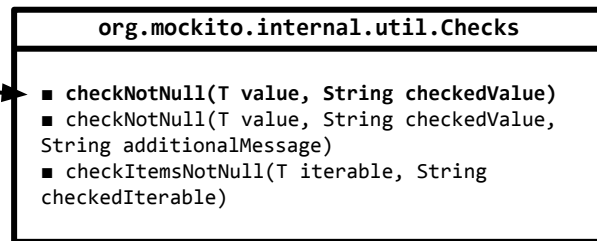
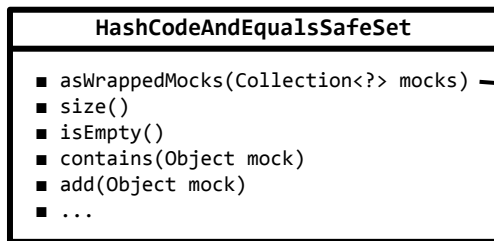
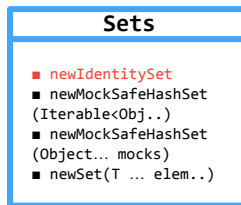
org.mockito.internal.util.Checks

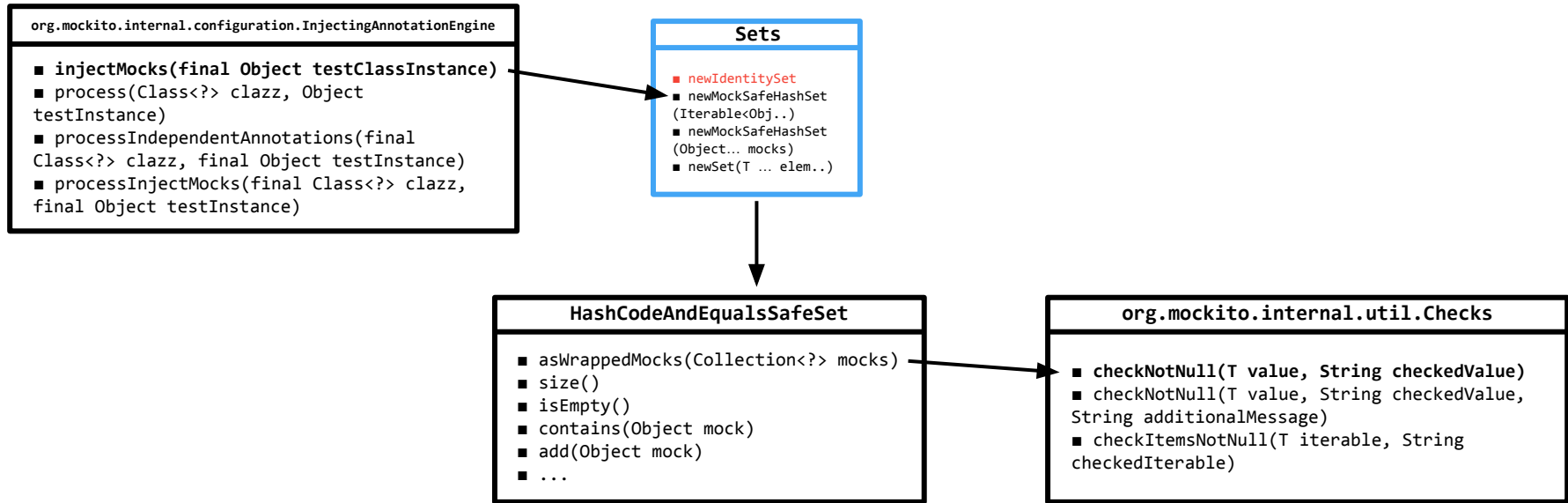
- checkNotNull(T value, String checkedValue)
- checkNotNull(T value, String checkedValue, String additionalMessage)
- checkItemsNotNull(T iterable, String checkedIterable)

org.mockito.internal.configuration.InjectingAnnotationEngine

org.mockito.internal.configuration.injection.MockInjection

click





org.mockito.internal.configuration.InjectingAnnotationEngine

- injectMocks(final Object testClassInstance)
- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

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Sets

- newIdentitySet
- newMockSafeHashSet
- newMockSafeHashSet
- newSet()

HashCodeAndEqualsSafeSet

- asWrappedMocks(Collection<?> mocks)
- size()
- isEmpty()
- contains(Object mock)
- add(Object mock)

org.mockito.internal.util.Checks

- checkNotNull(T value, String checkedValue)
- checkNotNull(T value, String checkedValue, String additionalMessage)
- checkItemsNotNull(T iterable, String checkedIterable)

Prototype 3

Callers

Callees

```
53 - return printValues("[", " ", "]", new ArrayIterator(value));
54 + return printValues("[", " ", "]", new Iterator<Object>() {
55 +     private int currentIndex = 0;
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());
57 72 }
```

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 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     }
```

8 callers of newMockSafeHashSet

o-.m-.int-.conf-.InjectAnnotat. ➡

Callers

8 callers of newMockSafeHashSet

◀ o-.m-.int-.conf-.InjectAnnotat. ▶

```
53 - return printValues("[", " ", "]", new ArrayIterator(value));
54 + return printValues("[", " ", "]", new Iterator<Object>() {
55 +     private int currentIndex = 0;
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());
57 72 }
```

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 }
```

scroll

```
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.");
28 24 }
```

Callers

```
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 public static MockitoException unfinishedStubbing(Location location) {
63 63     return new UnfinishedStubbingException(join(
64 64         "Unfinished stubbing detected here:",
65 65         location,
66 66         "",
67 67         "E.g. thenReturn() may be missing.",
68 68         "Examples of correct stubbing:",
69 69         "    when(mock.isOk()).thenReturn(true);",
70 70         "    when(mock.isOk()).thenThrow(exception);",
71 71         "    doThrow(exception).when(mock).someVoidMethod();",
72 72         "Hints:",
73 73         "  1. missing thenReturn()",
74 74         "  2. you are trying to stub a final method, which is not supported",
75 75         "  3: you are stubbing the behaviour of another mock inside before 'thenReturn' instruction if completed",
76 76         ""
77 77     ));
78 78 }
79 79
80 80 public static MockitoException incorrectUseOfApi() {
81 81     return new MockitoException(join(
82 82         "Incorrect use of API detected here:",
83 83         new LocationImpl(),
84 84         "",
85 85         "You probably stored a reference to OngoingStubbing returned by when() and called stubbing methods like thenReturn() on this reference",
86 86         "Examples of correct usage:",
87 87         "    when(mock.isOk()).thenReturn(true).thenReturn(false).thenThrow(exception);",
88 88         "    when(mock.isOk()).thenReturn(true, false).thenThrow(exception);",
89 89         ""
90 90     ));
91 91 }
92 92
93 93 public static MockitoException missingMethodInvocation() {
```

Callees

1 callee of unfinishedStubbing

← org.m-.int-.util.StringUtil.join →

Callers

```
40 40
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93 93 public static MockitoException missingMethodInvocation() {
```

Callees

1 callee of unfinishedStubbing

← org.m-int-..util.StringUtil.join →

click

Callers	< Back org.mockito.internal.util.StringUtil	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>	