

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

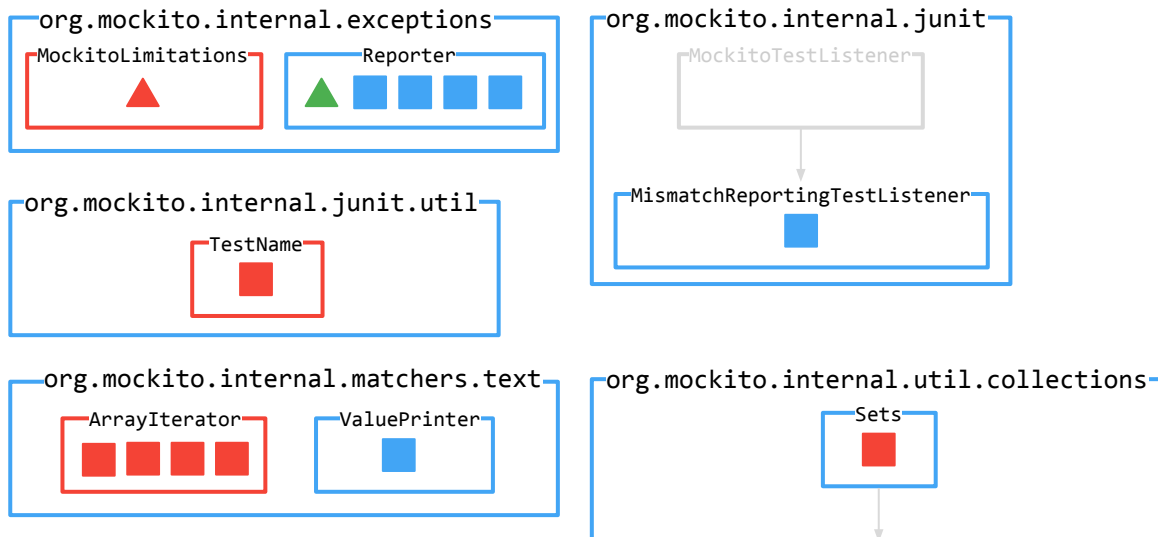
Change Summary

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

Change Details

- org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.junit.util
 - TestName
 - getTestName
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- org.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



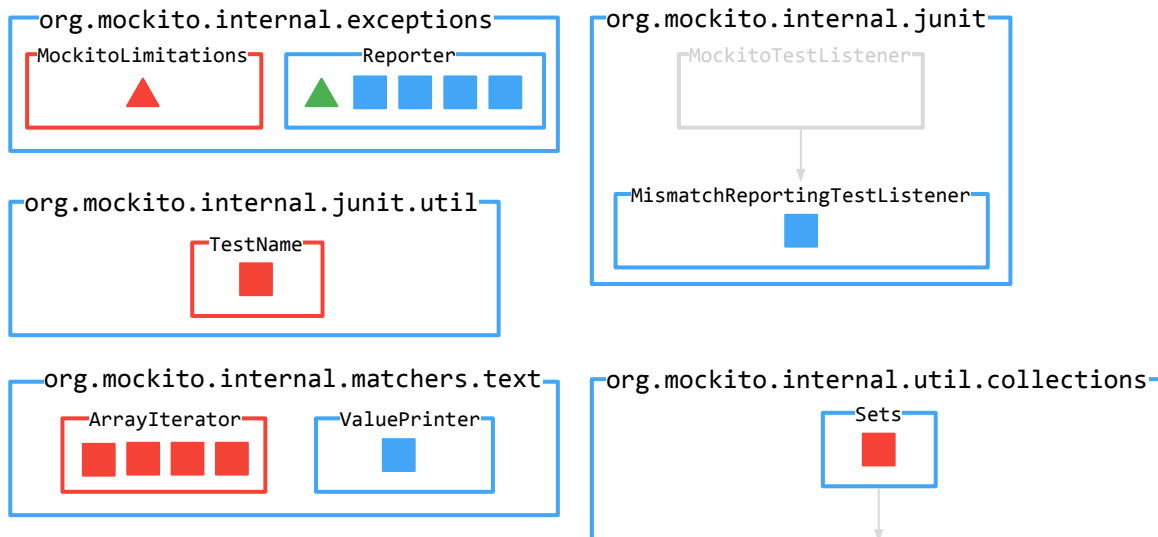
Change Summary

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

Change Details

- org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.junit.util
 - TestName
 - getTestName
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



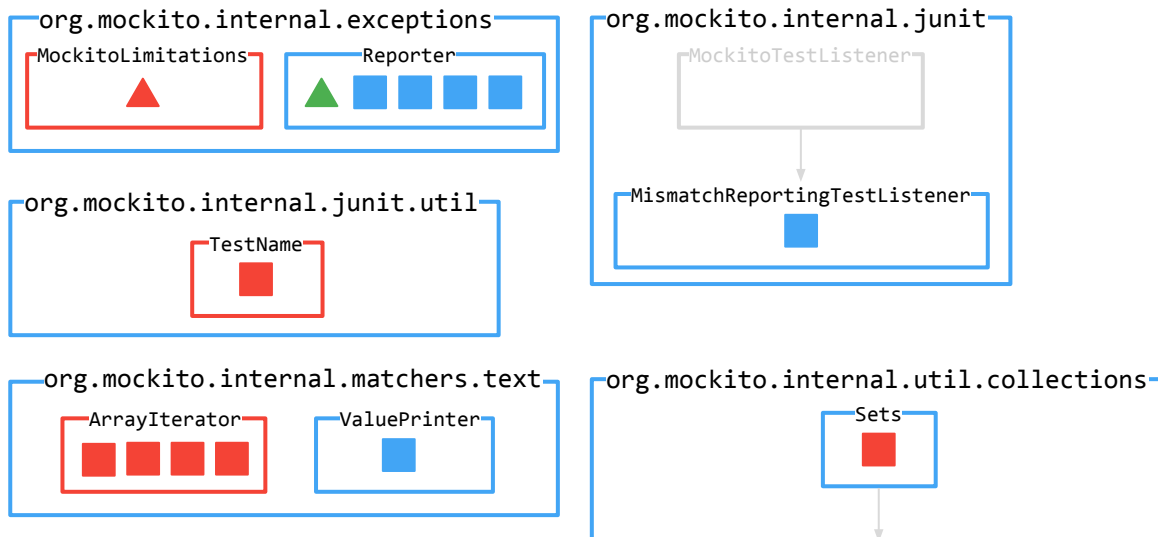
Change Summary

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

Change Details

- org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.junit.util
 - TestName
 - getTestName
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- org.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



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="73 128 359 322"><div data-bbox="73 128 359 158">> Packages (0+, 0-, 5 🛡️)</div><div data-bbox="102 158 241 187">(+) Added: 0</div><div data-bbox="102 187 270 218">(-) Removed: 0</div><div data-bbox="102 218 280 247">(🛡️) Modified: 5</div><div data-bbox="73 247 338 277">> Classes (+, 3-, 4 🛡️)</div><div data-bbox="73 277 351 322">> Methods (+, 6-, 6 🛡️)</div></div>	
Change Details	

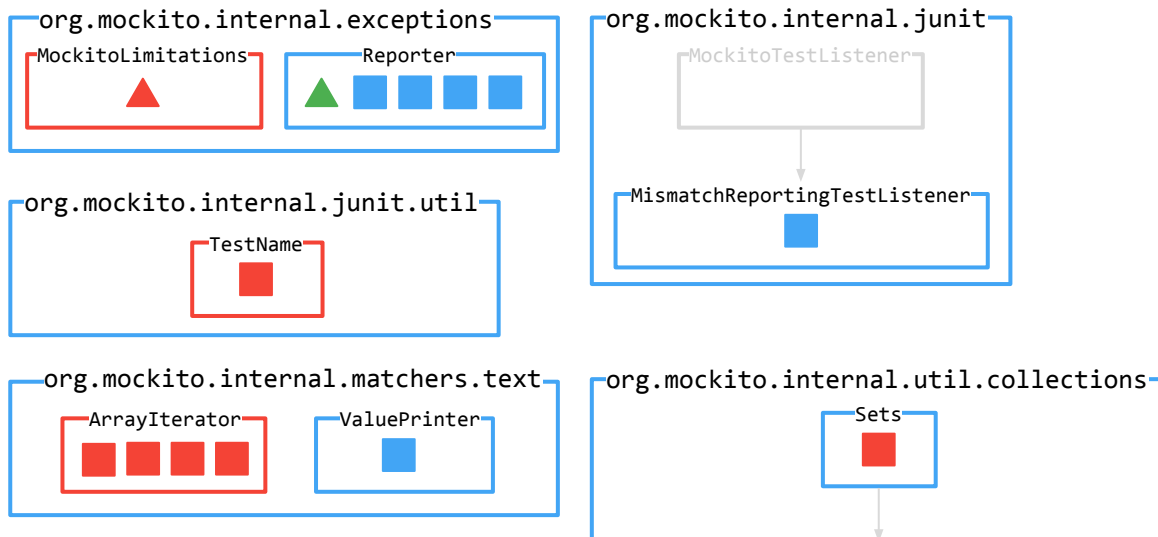
Change Summary

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

Change Details

- 🔒 org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- 🔒 org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- 🔒 org.mockito.internal.junit.util
 - TestName
 - getTestName
- 🔒 org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- 🔒 org.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



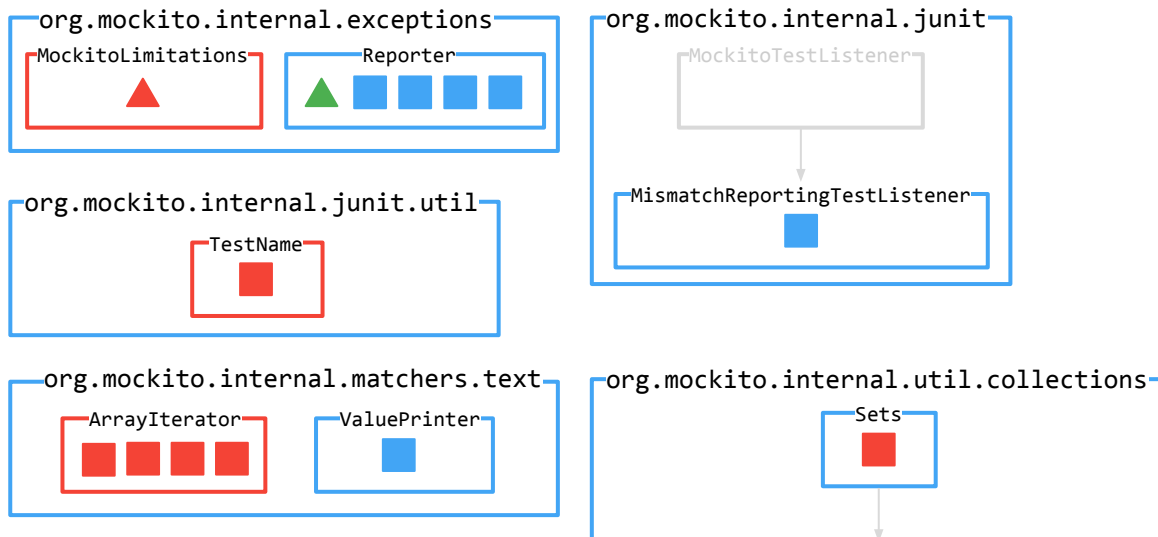
Change Summary

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

Change Details

- org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.junit.util
 - TestName
 - getTestName
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



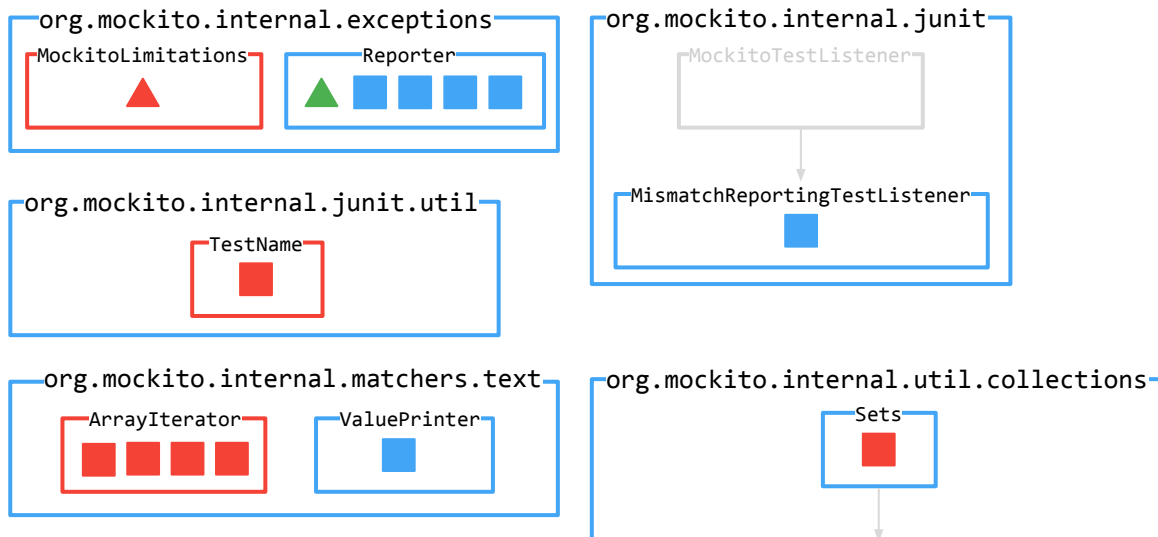
Change Summary

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

Change Details

- 🔒 org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- 🔒 org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- 🔒 org.mockito.internal.junit.util
 - TestName
 - getTestName
- 🔒 org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- 🔒 org.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



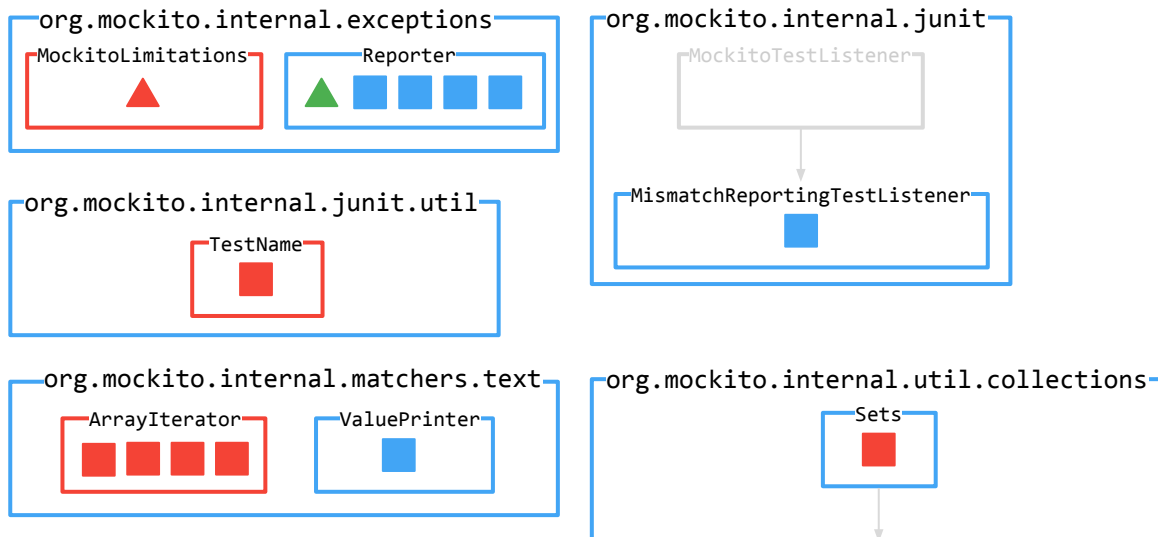
Change Summary

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

Change Details

- org.mockito.internal.exceptions
 - MockitoLimitations
 - Reported
 - missingMethodInvocation
 - unfinishedVerificationExc...
 - cannotStubVoidMethodWithA...
 - misplacedArgumentMatcher
- org.mockito.internal.junit
 - MismatchReportingTestListener
 - testFinished
- org.mockito.internal.junit.util
 - TestName
 - getTestName
- org.mockito.internal.matchers.text
 - ValuePrinter
 - print
 - ArrayIterator
 - ArrayIterator
 - hasNext
 - next
 - remove
- org.mockito.internal.util.collections
 - Sets
 - newIdentitySet

Overview



Change Summary	Overview
<div data-bbox="79 128 359 319"><div>➤ Packages (0+, 0-, 5🔗)</div><div>➤ Classes (0+, 3-, 4🔗)</div><div>(+) Added: 0</div><div>(-) Removed: 3</div><div>(🔗) Modified: 4</div><div>➤ Methods (0+, 6-, 6🔗)</div></div>	<div data-bbox="463 136 983 279"><div>org.mockito.internal.exceptions</div><div>MockitoLimitations</div><div>▲</div></div> <div data-bbox="1010 136 1503 279"><div>org.mockito.internal.junit.util</div><div>TestName</div><div>■</div></div> <div data-bbox="463 321 1016 461"><div>org.mockito.internal.matchers.text</div><div>ArrayIterator</div><div>■ ■ ■ ■</div></div>

Change Summary	Overview
<div><div>> Packages (0+, 0-, 5🔒)</div><div>> Classes (0+, 3-, 4🔒)</div><div>(+) Added: 0</div><div>(-) Removed: 3</div><div>(🔒) Modified: 4</div><div>> Methods 6-, 6🔒</div></div>	<div><div>org.mockito.internal.exceptions<div>MockitoLimitations<div>▲</div></div></div><div>org.mockito.internal.junit.util<div>TestName<div>■</div></div></div><div>org.mockito.internal.matchers.text<div>ArrayIterator<div>■ ■ ■ ■</div></div></div></div>
Change Details	
<div><div>org.mockito.internal.exceptions<div>MockitoLimitations</div></div><div>org.mockito.internal.junit.util<div>TestName<div>getTestName</div></div></div><div>org.mockito.internal.matchers.text<div>ArrayIterator<div>hasNext</div><div>next</div><div>remove</div></div></div></div>	

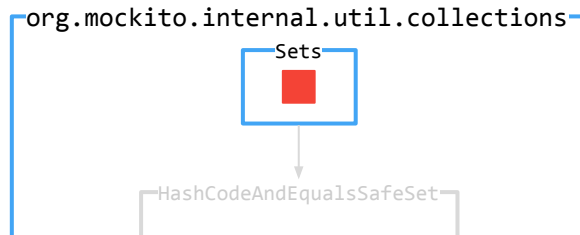
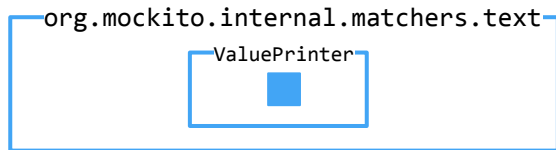
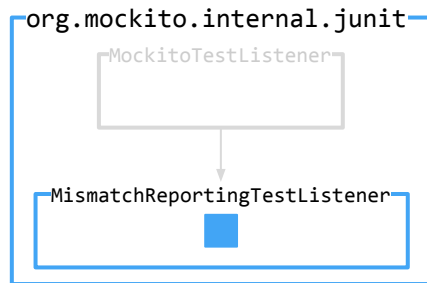
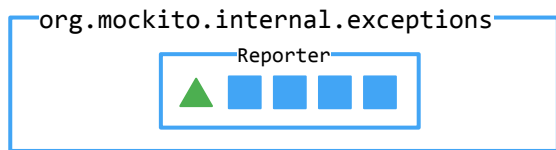
Change Summary

- 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.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



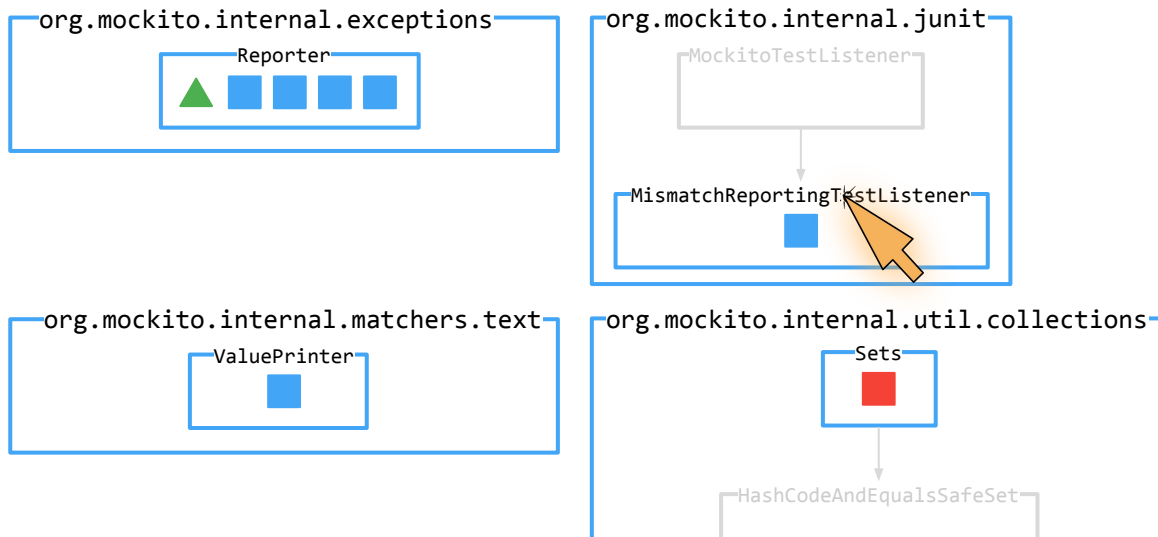
Change Summary

- 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.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



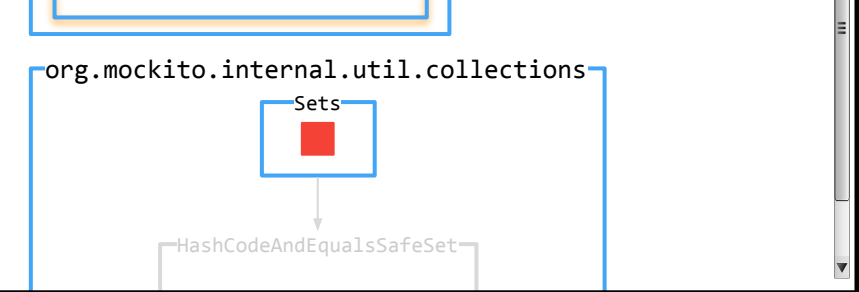
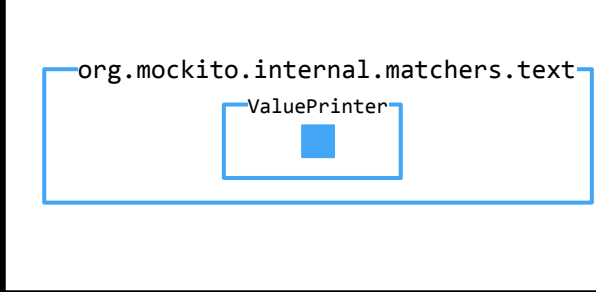
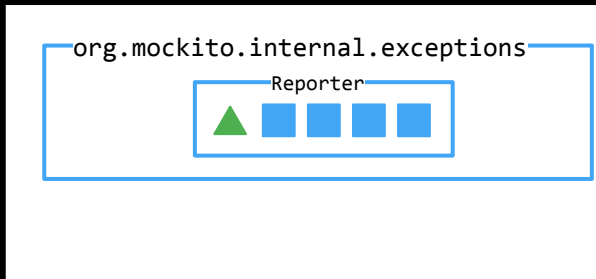
Change Summary

- 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.m-.internal.util.collections
 - Sets
 - newIdentitySet

Overview



```

3 ■■■■ src/main/java/org/mockito/internal/unit/MismatchReportingTestListener.java
❏ @@ -4,7 +4,6 @@
4 */
5 package org.mockito.internal.junit;
6
7 -import org.mockito.internal.junit.util.TestName;
8 import org.mockito.internal.util.MockLogger;
9 import org.mockito.mock.MockCreationSettings;
10
11 ❏ @@ -30,7 +29,7 @@ public void testFinished(TestFinishedEvent event) {
12 //TOTO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
nobody will read, it's also duplicated
13     mocks = new LinkedList<Object>();
14
15 - String testName = TestName.getTestName(event);
16 if (event.getFailure() != null) {
17     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
18     new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
19 }
20
21 */
22
23 */
24 package org.mockito.internal.junit;
25
26 import org.mockito.internal.util.MockLogger;
27 import org.mockito.mock.MockCreationSettings;
28
29 //TOTO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
nobody will read, it's also duplicated
30     mocks = new LinkedList<Object>();
31
32 + String testName = event.getClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
33 if (event.getFailure() != null) {
34     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
35     new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);

```

```

3  ■■■■■ src/main/java/org/mockito/INTERNAL/junit/MismatchReportingTestListener.java
4
5  *
6  package org.mockito.internal.junit;
7
8  -import org.mockito.internal.junit.util.TestName;
9  import org.mockito.internal.util.MockitoLogger;
10 import org.mockito.mock.MockCreationSettings;
11
12
13 * @ -30,7 +29,7 @@ public void testFinished(TestFinishedEvent event) {
14
15 //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
16 nobody will read, it's also duplicated
17 mocks = new LinkedList<Object>();
18
19
20 - String testName = TestName.getTestName(event);
21 if (event.getFailure() != null) {
22 //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
23 new ArgMismatchFinder().getStubbingArgMismatchatches(createdMocks).format(testName, logger);
24
25
26 *

```

```

4  */
5  package org.mockito.internal.junit;
6
7  import org.mockito.internal.util.MockitLogger;
8  import org.mockito.mock.MockCreationSettings;
9
29 //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
    nobody will read, it's also duplicated
30     mocks = new LinkedList<Object>();
31
32 +    String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
33     if (event.getFailure() != null) {
34         //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
35         new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);

```

Change Summary

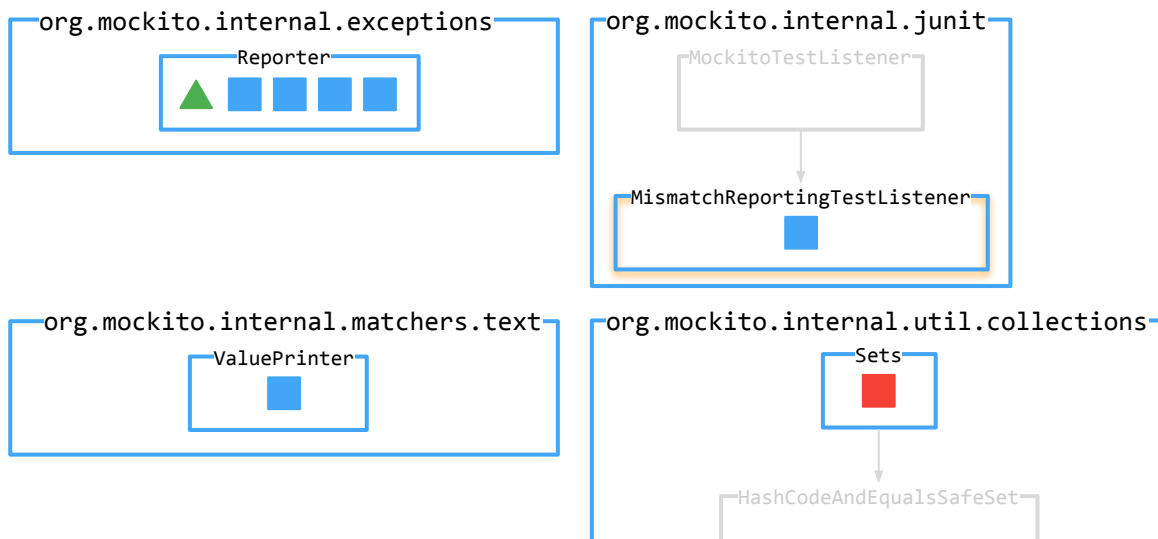
- Packages (0+, 0-, 5🔗)
- Classes (0+, 3-, 4🔗)
 - (+) **Added:** 0
 - (-) **Removed:** 3
 - (🔗) **Modified:** 4
- Methods (0+, 6-, 6🔗)

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

CTRL + click to
select multiple
entities

Overview



```
3  src/main/java/org/mockito/internal/junit/MismatchReportingTestListener.java
4  package org.mockito.internal.junit;
5
6  -import org.mockito.internal.junit.util.TestName;
7  import org.mockito.internal.util.MockitoLogger;
8  import org.mockito.mock.MockCreationSettings;
9
10  @00 -30,7 +29,7 @@ public void testFinished(TestFinishedEvent event) {
11  //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
12  nobody will read, it's also duplicated
13  mocks = new LinkedList<Object>();
14
15  - String testName = TestName.getTestName(event);
16  if (event.getFailure() != null) {
17  //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
18  new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
19
20  //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
21  nobody will read, it's also duplicated
22  mocks = new LinkedList<Object>();
23
24  + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
25  if (event.getFailure() != null) {
26  //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
27  new ArgMismatchFinder().getStubbingArgMatches(createdMocks).format(testName, logger);
28  }
```

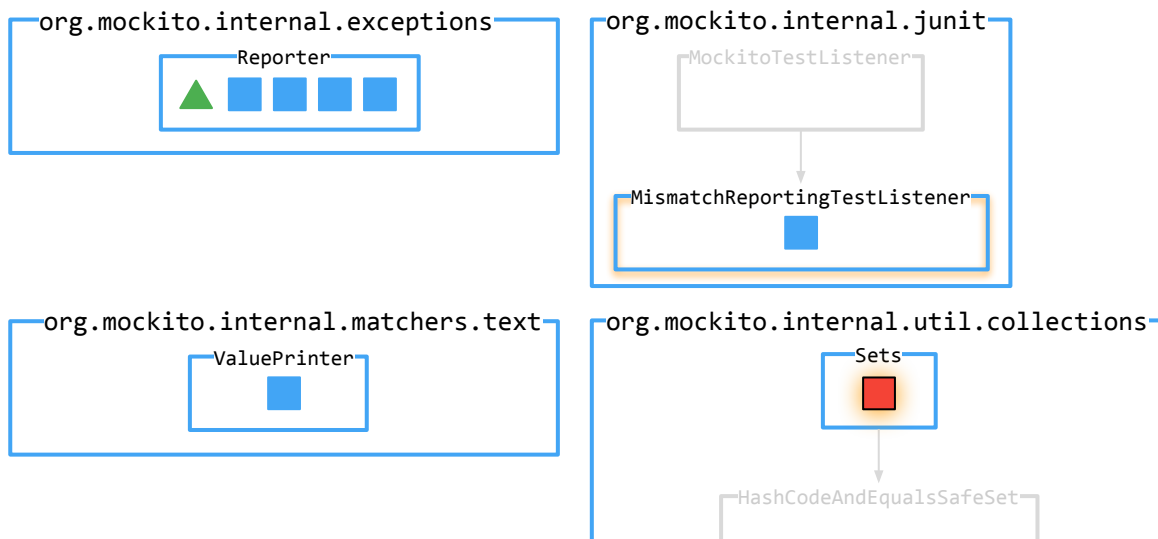
Change Summary

- 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



```
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  * //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
12  * nobody will read, it's also duplicated
13  * mocks = new LinkedList<Object>();
14  *
15  * String testName = TestName.getTestName(event);
16  * if (event.getFailure() != null) {
17  *     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
18  *     new ArgMismatchFinder().getStubbingArgMismatchMatches(createdMocks).format(testName, logger);
19  * }
20  *
21  * /**
22  * package org.mockito.internal.junit;
23  *
24  * import org.mockito.internal.util.MockitoLogger;
25  * import org.mockito.mock.MockCreationSettings;
26  *
27  * //TODO make it better, it's easy to forget to clean up mocks and we still create new instance of list that
28  * nobody will read, it's also duplicated
29  * mocks = new LinkedList<Object>();
30  *
31  * String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
32  * if (event.getFailure() != null) {
33  *     //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
34  *     new ArgMismatchFinder().getStubbingArgMismatchMatches(createdMocks).format(testName, logger);
35  * }
```

diffs are shown one
above the other,
with scroll

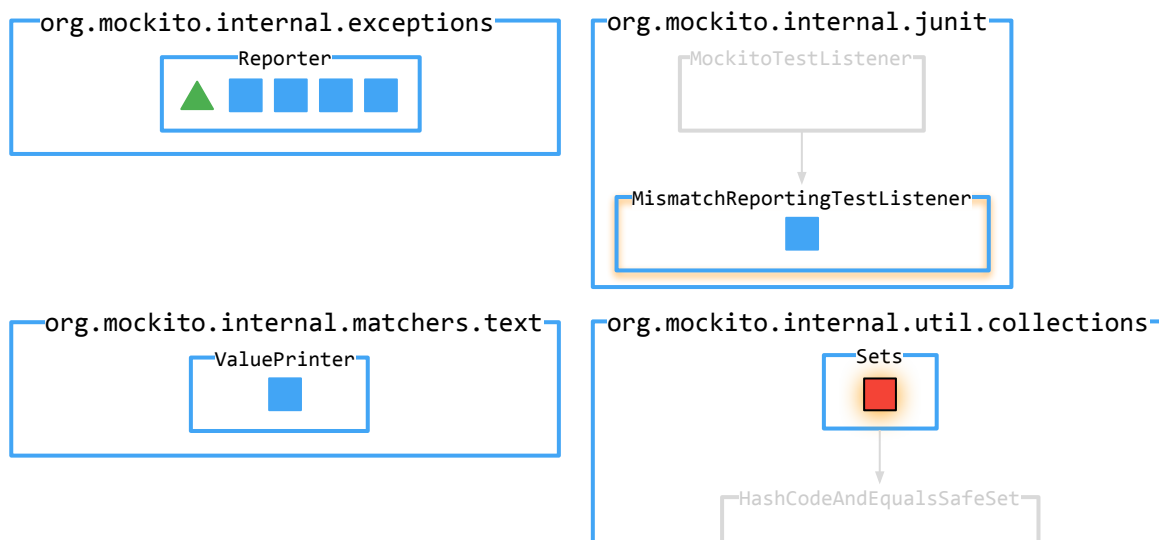
Change Summary

- 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 }
39
40 4 src/main/java/org/mockito/internal/util/collections/Sets.java
41 @@ -18,18 +18,6 @@
42 18     return HashCodeAndEqualsSafeSet.of(mocks);
43 19 }
44 20
45 21 public static IdentitySet newIdentitySet() {
46 22     return new IdentitySet();
47 23 }
48 24
49 25 public static <T> Set<T> newSet(T ... elements) {
50 26     if (elements == null) {
51 27         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
52 28     }
53 29
54 21 public static <T> Set<T> newSet(T ... elements) {
55 22     if (elements == null) {
56 23         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
57 24     }
58 25 }
```

scroll

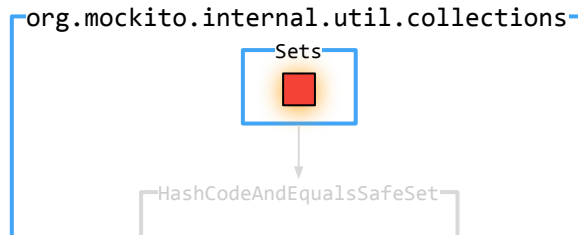
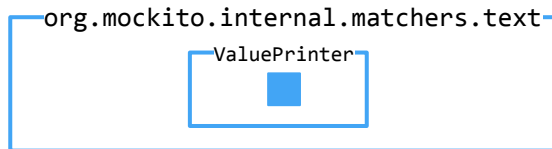
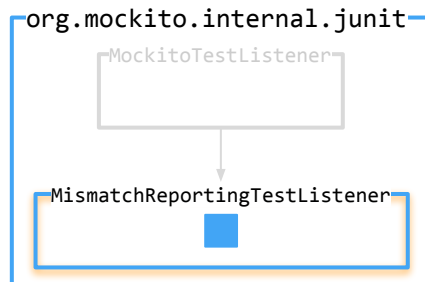
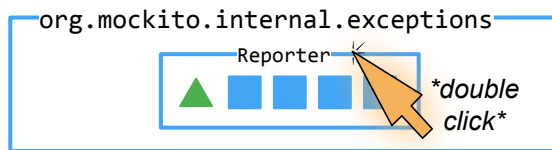
Change Summary

- 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 }
39
40
41
42 + String testName = event.getTestClassInstance().getClass().getSimpleName() + "." + event.getTestMethodName();
43   if (event.getFailure() != null) {
44       //print unused stubbings only when test succeeds to avoid reporting multiple problems and confusing users
45       new ArgMismatchFinder().getStubbingArgMismatches(createdMocks).format(testName, logger);
46   }
47 }
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
```

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 }
38
39 public static <T> Set<T> newSet(T ... elements) {
40     if (elements == null) {
41         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
42     }
43     return HashCodeAndEqualsSafeSet.of(mocks);
44 }
45
46 public static <T> Set<T> newSet(T ... elements) {
47     if (elements == null) {
48         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
49     }
50     return HashCodeAndEqualsSafeSet.of(mocks);
51 }
52
53 public static <T> Set<T> newSet(T ... elements) {
54     if (elements == null) {
55         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
56     }
57     return HashCodeAndEqualsSafeSet.of(mocks);
58 }
59
60 public static <T> Set<T> newSet(T ... elements) {
61     if (elements == null) {
62         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
63     }
64     return HashCodeAndEqualsSafeSet.of(mocks);
65 }
66
67 public static <T> Set<T> newSet(T ... elements) {
68     if (elements == null) {
69         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
70     }
71     return HashCodeAndEqualsSafeSet.of(mocks);
72 }
73
74 public static <T> Set<T> newSet(T ... elements) {
75     if (elements == null) {
76         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
77     }
78     return HashCodeAndEqualsSafeSet.of(mocks);
79 }
80
81 public static <T> Set<T> newSet(T ... elements) {
82     if (elements == null) {
83         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
84     }
85     return HashCodeAndEqualsSafeSet.of(mocks);
86 }
87
88 public static <T> Set<T> newSet(T ... elements) {
89     if (elements == null) {
90         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
91     }
92     return HashCodeAndEqualsSafeSet.of(mocks);
93 }
94
95 public static <T> Set<T> newSet(T ... elements) {
96     if (elements == null) {
97         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
98     }
99     return HashCodeAndEqualsSafeSet.of(mocks);
100 }
```

scroll

Focus method

■ [missingMethodInvocation](#)

Callers

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

Callees

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

■ [unfinishedVerificationException](#)

Callers

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

Callees

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

■ [cannotStubVoidMethodWithAReturnValue](#)

Callers

- `org.mockito.internal.exceptions.MockitoLimitations`
- `org.mockito.internal.exceptions.misusing.CannotStubVoidMethodWithReturnValueException`

Callees

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

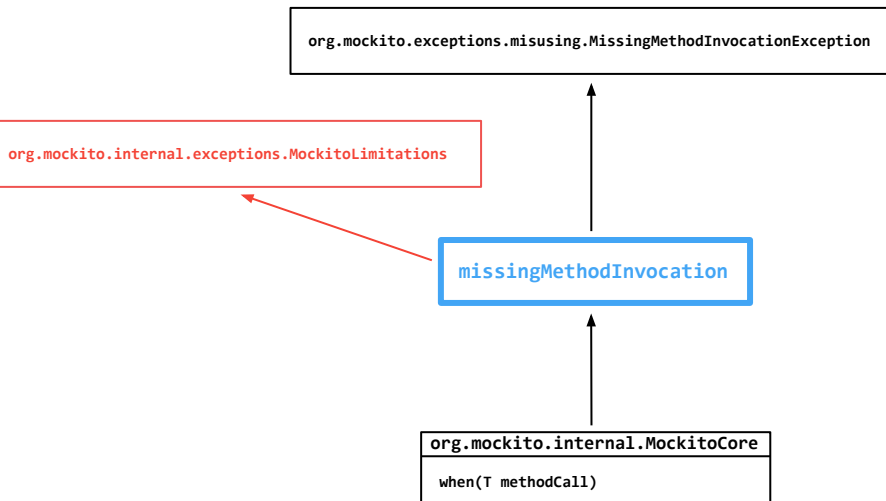
■ [misplacedArgumentMatcher](#)

Callers

- `org.mockito.internal.exceptions.MockitoLimitations`
- `org.mockito.internal.exceptions.misusing.InvalidUseOfMatchersException`

Callees

- `org.mockito.internal.progress`
 - `validateState()`



Focus method

■ [missingMethodInvocation](#)

Callers

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

Callees

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

■ [unfinishedVerificationException](#)

Callers

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

Callees

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

■ [cannotStubVoidMethodWithAReturnValue](#)

Callers

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

Callees

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

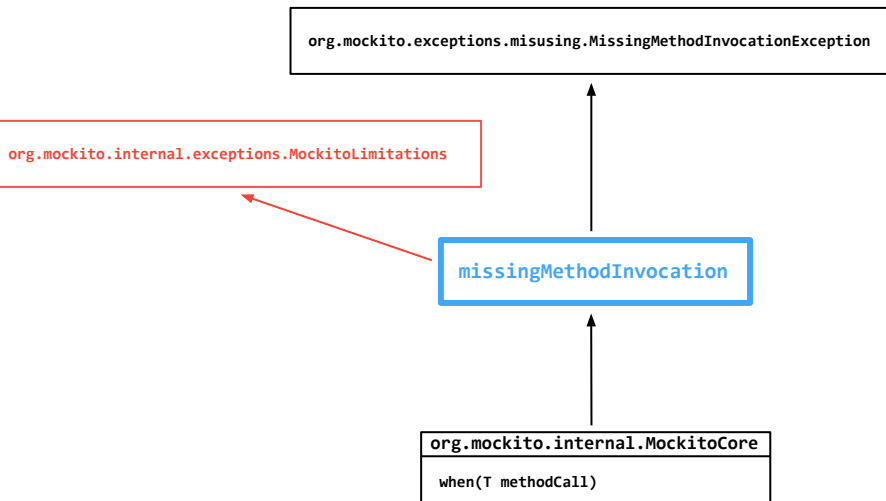
■ [misplacedArgumentMatcher](#)

Callers

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

Callees

- org.mockito.internal.progress
 - validateState()



Focus method

■ [missingMethodInvocation](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.MissingMethodInvocationException](#)

Callees

- [org.mockito.internal.MockitoCore](#)
 - [when\(T methodCall\)](#)

■ [unfinishedVerificationException](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.UnfinishedVerificationException](#)

Callees

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

■ [cannotStubVoidMethodWithAReturnValue](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.CannotStubVoidMethodWithReturnValueException](#)

Callees

- [org.mockito.internal.stubbing.answers](#)
 - [validateFor\(InvocationOnMock invocation\)](#)

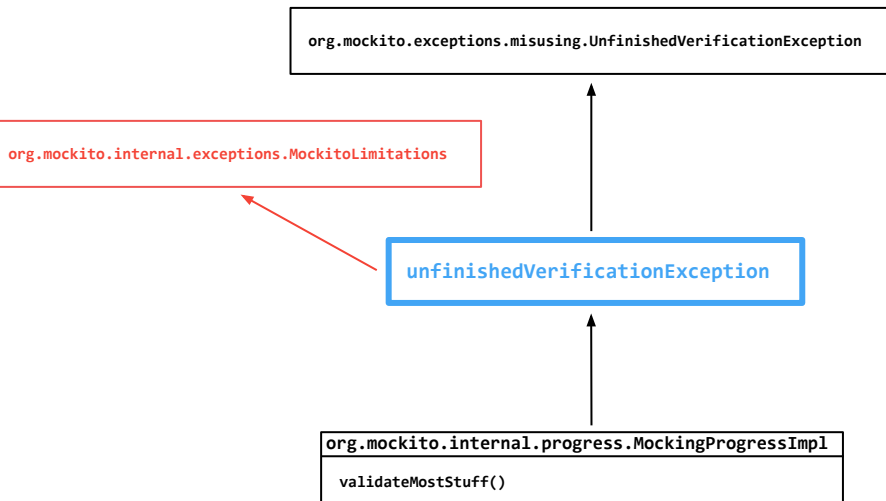
■ [misplacedArgumentMatcher](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.InvalidUseOfMatchersException](#)

Callees

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



Focus method

■ [missingMethodInvocation](#)

Callers

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

Callees

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

■ [unfinishedVerificationException](#)

Callers

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

Callees

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

■ [cannotStubVoidMethodWithAReturnValue](#)

Callers

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

Callees

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

■ [misplacedArgumentMatcher](#)

Callers

- `org.mockito.internal.exceptions.MockitoLimitations`
- `org.mockito.internal.exceptions.misusing.InvalidUseOfMatchersException`

Callees

- `org.mockito.internal.progress`
 - `validateState()`

`org.mockito.internal.exceptions.MockitoLimitations``org.mockito.exceptions.misusing.UnfinishedVerificationException``unfinishedVerificationException``org.mockito.internal.``validateMostStuff()`

```
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,
        ""
    ));
}
```

< Back

org.mockito.internal.exceptions.Reporter

Focus method

■ [missingMethodInvocation](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.MissingMethodInvocationException](#)

Callees

- [org.mockito.internal.MockitoCore](#)
 - [when\(T methodCall\)](#)

■ [unfinishedVerificationException](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.UnfinishedVerificationException](#)

Callees

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

■ [cannotStubVoidMethodWithAReturnValue](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.CannotStubVoidMethodWithReturnValueException](#)

Callees

- [org.mockito.internal.stubbing.answers](#)
 - [validateFor\(InvocationOnMock invocation\)](#)

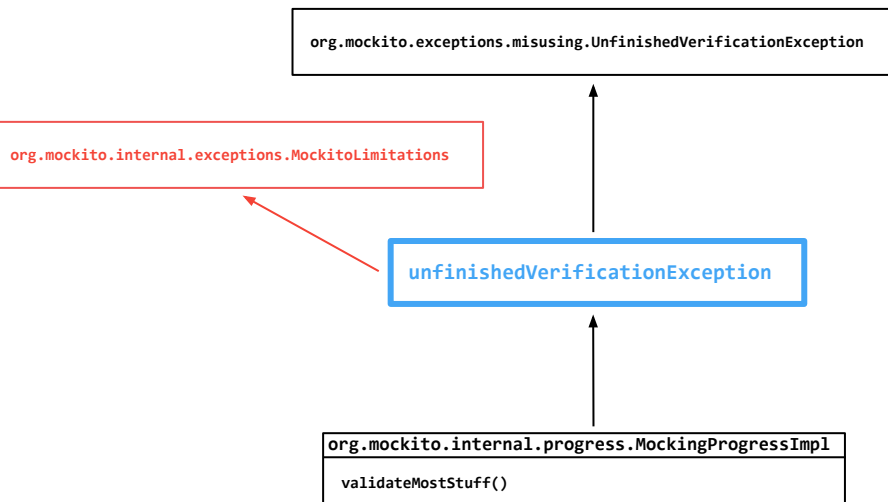
■ [misplacedArgumentMatcher](#)

Callers

- [org.mockito.internal.exceptions.MockitoLimitations](#)
- [org.mockito.internal.exceptions.InvalidUseOfMatchersException](#)

Callees

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



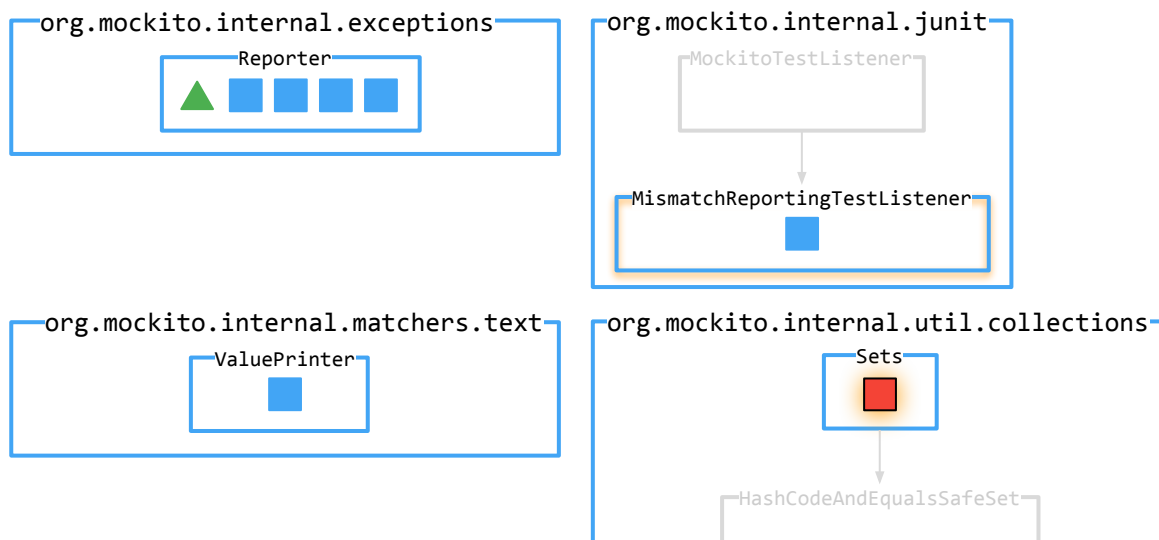
Change Summary

- 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

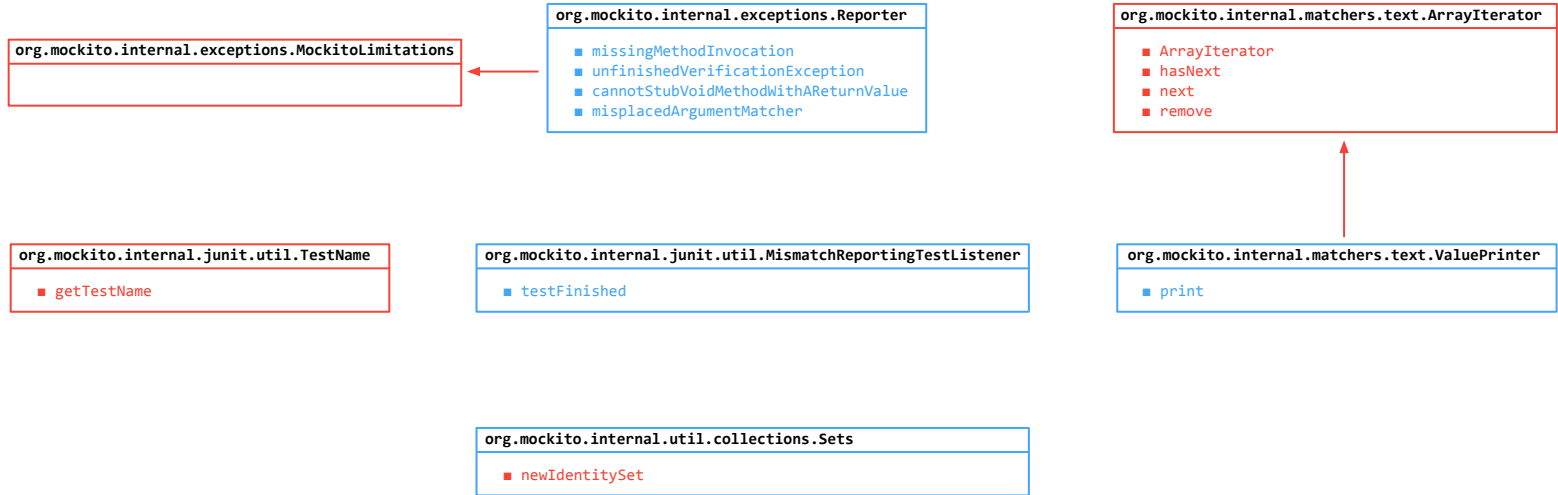
Overview



```
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 }
39
40 4 src/main/java/org/mockito/internal/util/collections/Sets.java
41 @@ -18,18 +18,6 @@
42 18     return HashCodeAndEqualsSafeSet.of(mocks);
43 19 }
44 20
45 21 public static IdentitySet newIdentitySet() {
46 22     return new IdentitySet();
47 23 }
48 24
49 25 public static <T> Set<T> newSet(T ... elements) {
50 26     if (elements == null) {
51 27         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
52 28     }
53 29
54 21 public static <T> Set<T> newSet(T ... elements) {
55 22     if (elements == null) {
56 23         throw new IllegalArgumentException("Expected an array of elements (or empty array) but received a null.");
57 24     }
58 25 }
```

Prototype 2a

infinite canvas



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
    ■ getTestName
```

```
org.mockito.internal.matchers.text.ValuePrinter
```

```
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     org.mockito.internal.util.collections.Sets
11     -}
    a. newIdentitySet
```

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    }
30  }
```

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 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%

CTRL + click
to show multiple diffs

11 ■■■■■ src/main/java/org/mockito/internal/exceptions/Reporter.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.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
supported.";
10 ~
11 ~}
```

diffs are shown one
above the other,
with scroll

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%

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

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

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

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

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

scroll

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

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

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

00 -18,10 +18,6 @@

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

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

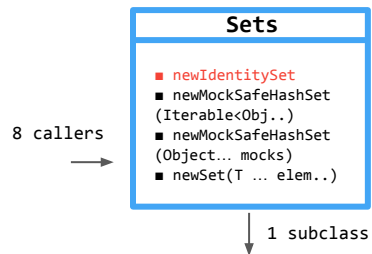
```
25     public static <T> Set<T> newSet(T ... elements) {
```

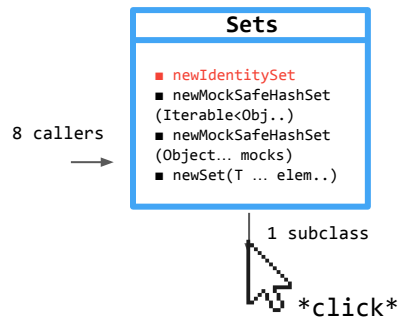
```
18     return HashCodeAndEqualsSafeSet.of(mock);
19 }
20
```

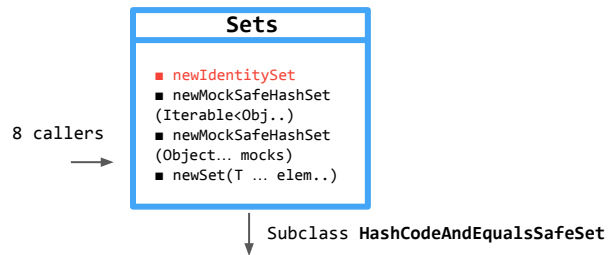
```
21     public static <T> Set<T> newSet(T ... elements) {
```

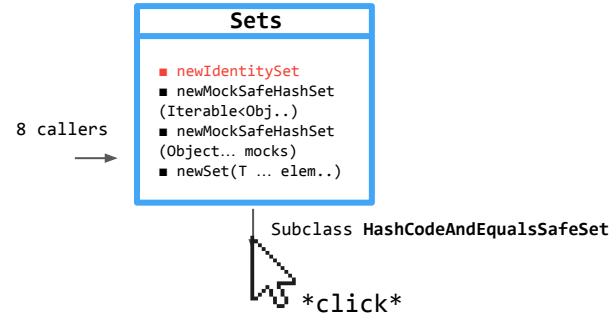
scroll

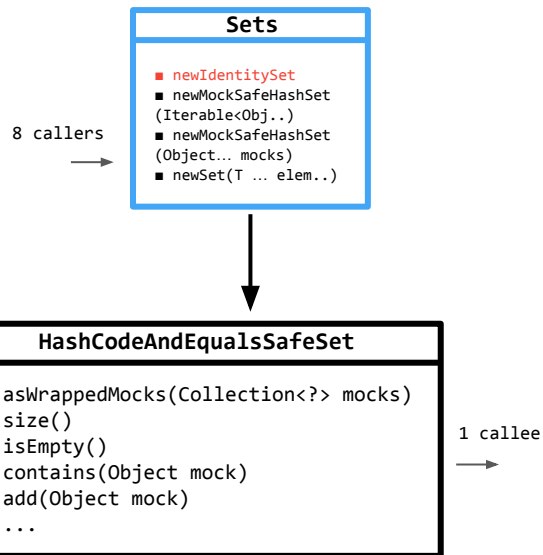
infinite canvas



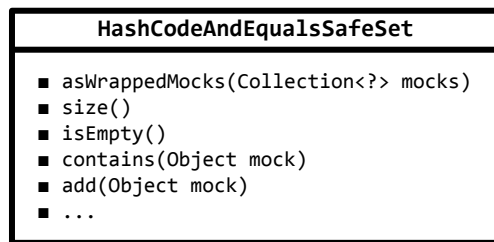
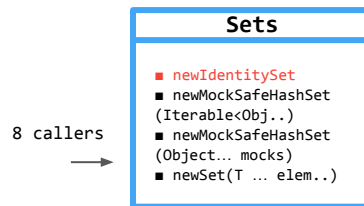






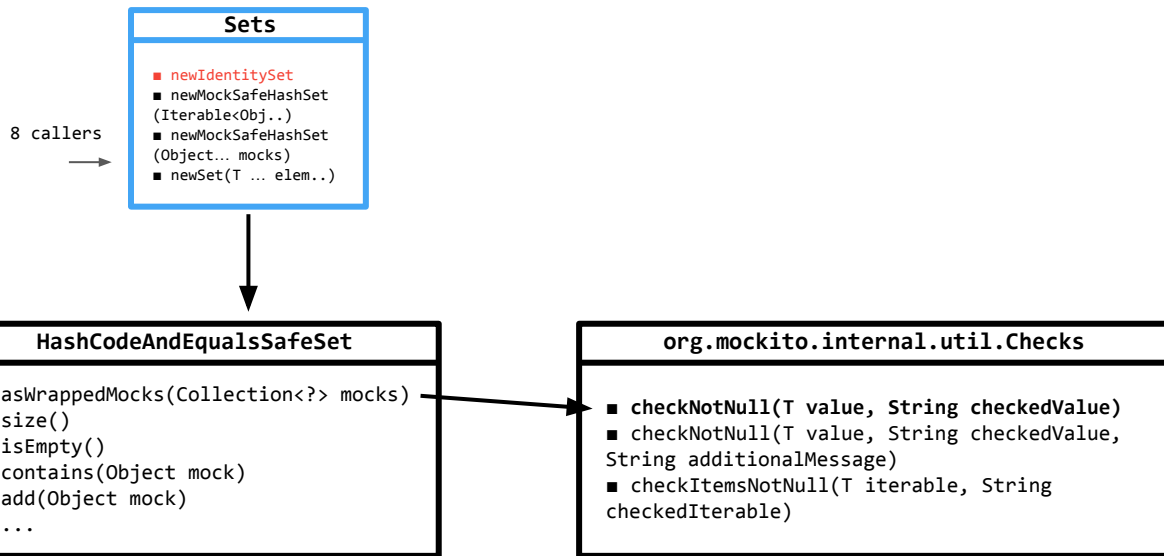


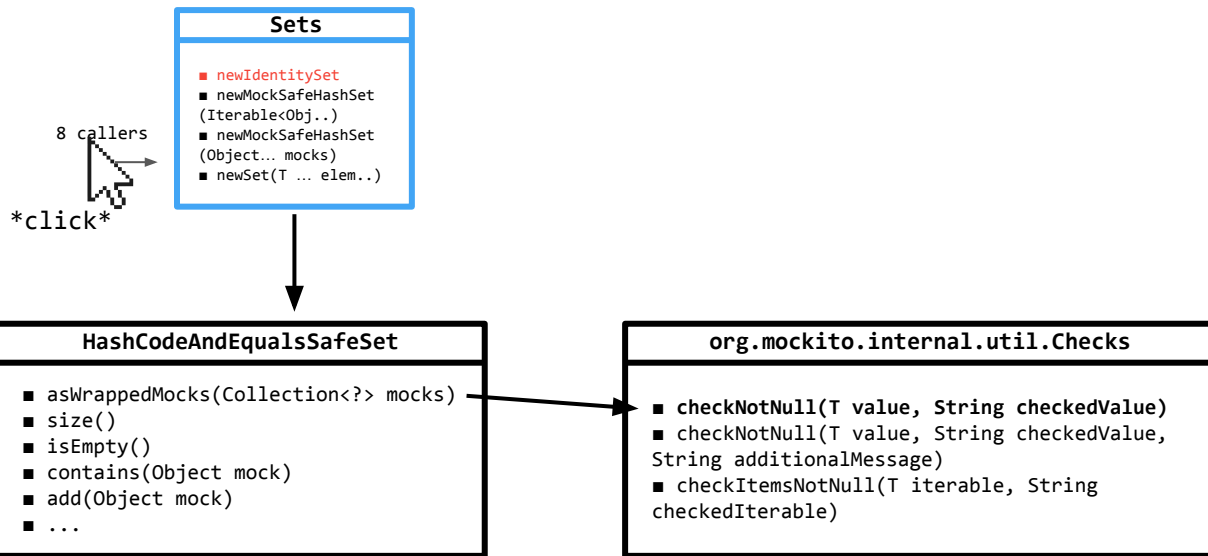




Calls `org.mockito.internal.util.Checks.checkNotNull`







`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)`
- `...`

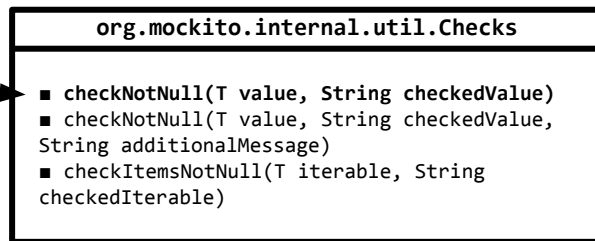
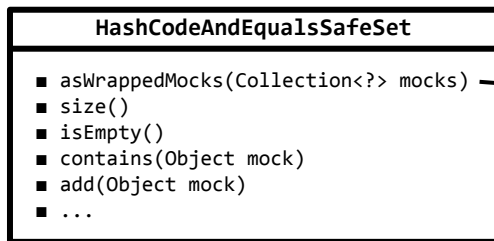
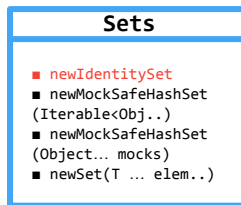
org.mockito.internal.util.Checks

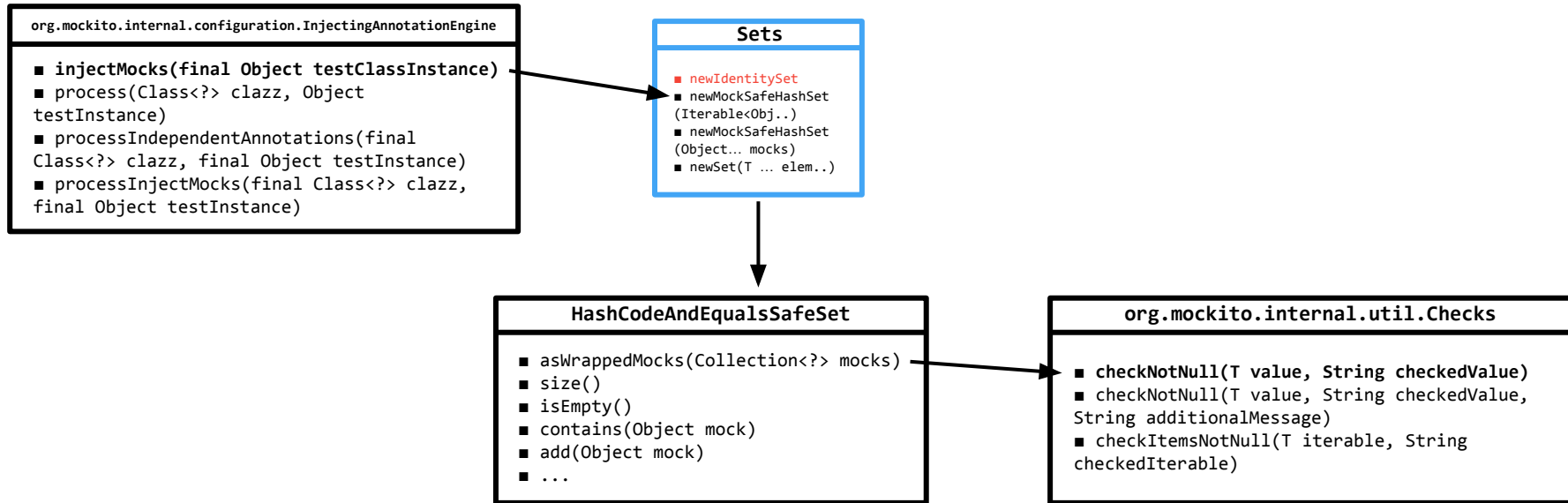
- `checkNotNull(T value, String checkedValue)`
- `checkNotNull(T value, String checkedValue, String additionalMessage)`
- `checkItemsNotNull(T iterable, String checkedIterable)`

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

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

- processIndependentAnnotations(final

Sets

- newIdentitySet
- newMockSafeHashSet
- newMockSafeHashSet
- newSet()

HashCodeAndEqualsSafeSet

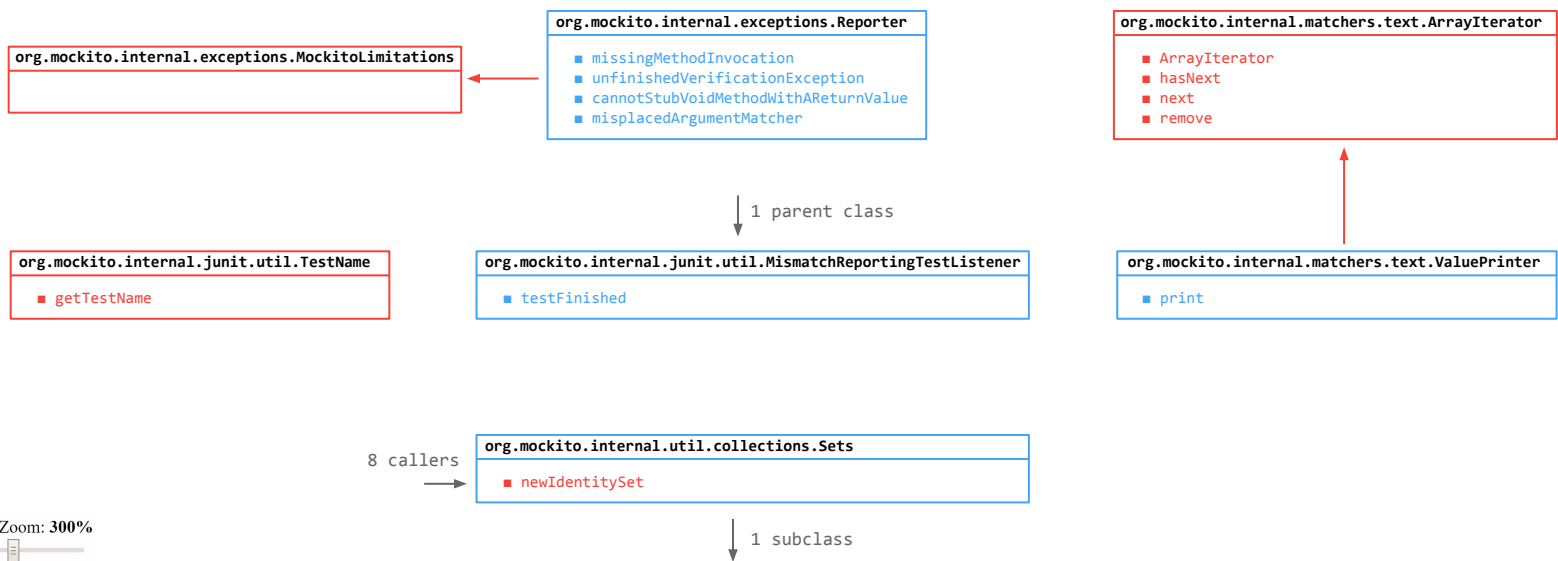
- asWrappedMocks(Collection<?> mocks)
- size()
- isEmpty()
- contains(Object mock)
- add(Object mock)

org.mockito.internal.util.Checks

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

Prototype 2b

infinite canvas



infinite canvas

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

- 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%

1 subclass

infinite canvas

```
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`

```
org.mockito.internal.matchers.text.ValuePrinter
```

- ```
■ print
```

```

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 -}

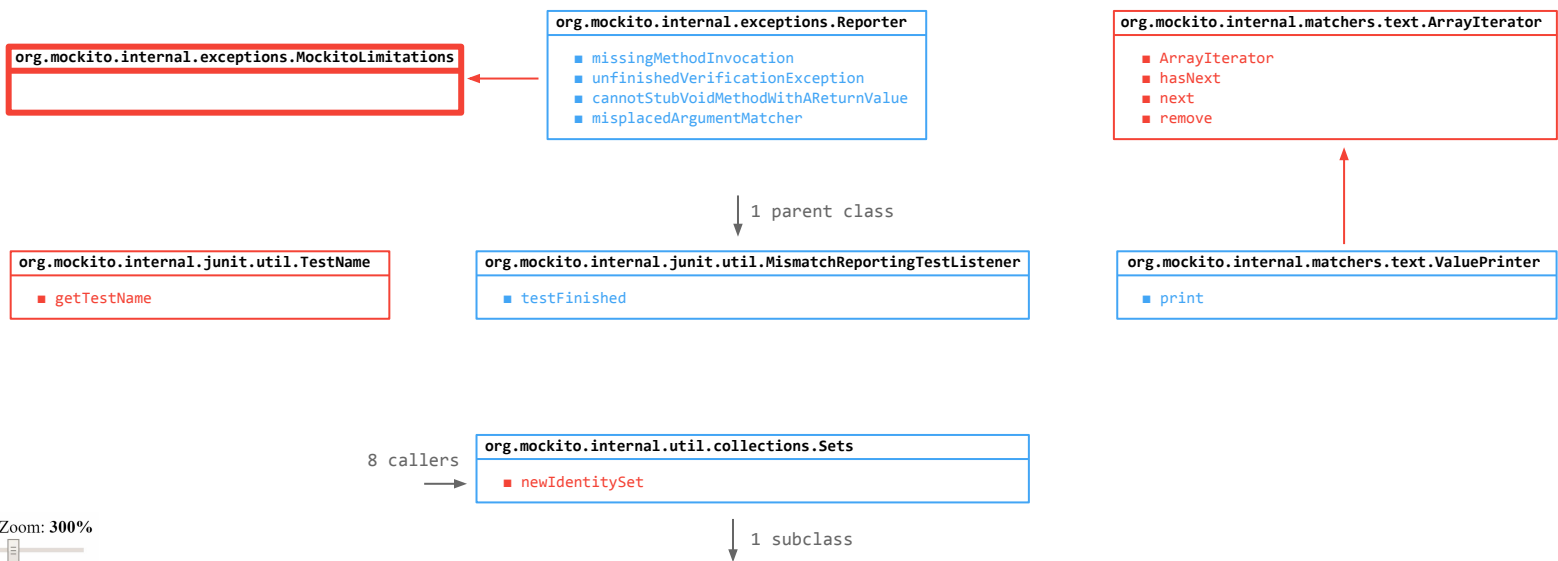
```

1 subclass

Current Zoom: 300%



## infinite canvas



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 ~}
```



# infinite canvas

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

org.mockito.internal.matchers.text.ValuePrinter

8 callers

org.mockito.internal.util.collections.Sets

- newIdentitySet

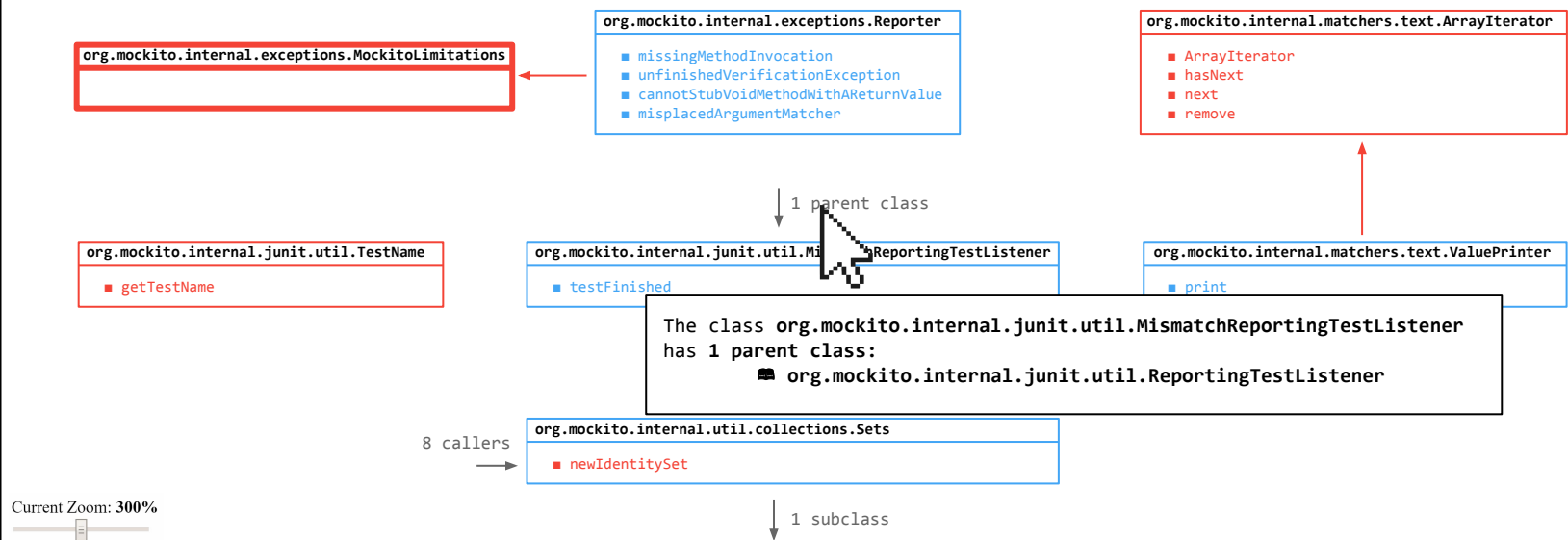
1 subclass

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 ~}
```

## infinite canvas

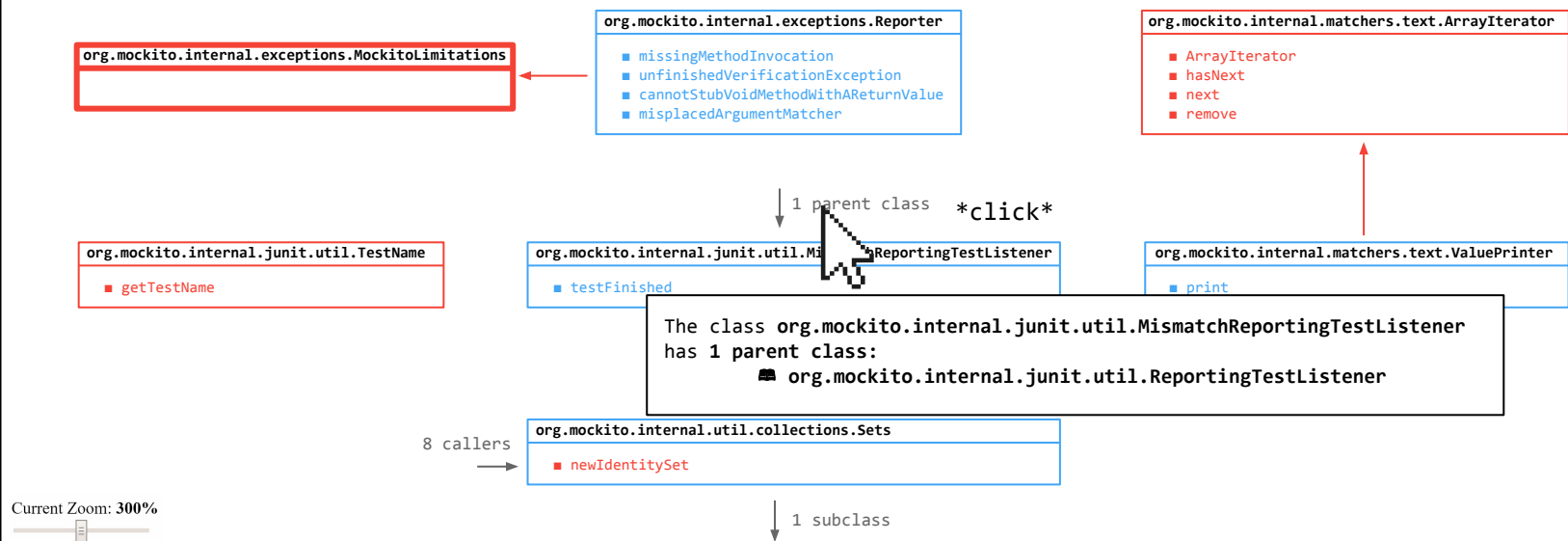


Current Zoom: 300%

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 ~}
```

# infinite canvas



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 -}
```

## infinite canvas

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.exceptions

- missingMethodInvocation
- unfinishedVerification
- cannotStubVoidMethodWithAReturnValue
- misplacedArgumentMatcher

fragments are moved  
to accommodate the  
parent class

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

8 callers

org.mockito.internal.util.collections.Sets

- newIdentitySet

1 subclass

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 ~}
```

## infinite canvas

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.junit.util.ReportingTestListener

- open
- testReportingClose
- finishedArray
- fragmentClosed
- iterate

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getTestName

org.mockito.internal.junit.util.MismatchReportingTestListener

- testFinished

org.mockito.internal.matchers.text.ValuePrinter

- print

8 callers

org.mockito.internal.util.collections.Sets

- newIdentitySet

1 subclass

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 ~}
```

View

# infinite canvas

org.mockito.internal.exceptions.MockitoLimitations

org.mockito.internal.junit.util.ReportingTestListener

- open
- testReportingClose
- finished
- fragment
- iterate

org.mockito.internal.matchers.text.ArrayIterator

- ArrayIterator
- hasNext
- next
- remove

org.mockito.internal.junit.util.TestName

- getName

org.mockito

- test

org.mockito.internal.matchers.text.ValuePrinter

- print

8 callers

org.mockito

- new

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 ~}
```

```
/**
 * Initializes mock/spies dependencies for objects annotated with
 * @InjectMocks for given testClassInstance.
 * <p>
 * See examples in javadoc for {@link MockitoAnnotations} class.
 * @param testClassInstance
 * Test class, usually <code>this</code>
 */
public void injectMocks(final Object testClassInstance) {
 Class<?> clazz = testClassInstance.getClass();
 Set<Field> mockDependentFields = new HashSet<Field>();
 Set<Object> mocks = new MockSafeHashSet();

 while (clazz != Object.class) {
 new InjectMocksScanner(clazz).addTo(mockDependentFields);
 new MockScanner(testClassInstance, clazz).addPreparedMocks(mocks);
 onInjection(testClassInstance, clazz, mockDependentFields, mocks);
 clazz = clazz.getSuperclass();
 }

 new DefaultInjectionEngine().injectMocksOnFields(mockDependentFields, mocks, testClassInstance);
}
```

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

| Callers | Base view                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Callees                                                                           |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|         | <pre> 40 40 41 41 /** 42 42  * Reports verification and misusing errors. 43 43  * &lt;p&gt; 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  * &lt;p&gt; 47 47  * Reporter can be injected and therefore is easily testable. 48 48  * &lt;p&gt; 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                                                                                          |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|         | <pre>40 40 41 41 /** 42 42  * Reports verification and misusing errors. 43 43  * &lt;p&gt; 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  * &lt;p&gt; 47 47  * Reporter can be injected and therefore is easily testable. 48 48  * &lt;p&gt; 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> <p>*click*</p> |

| 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&lt;?&gt; 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&lt;?&gt; 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 |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|         | <div>on non-public parent classes is not supported.";</div> <div>ted",<br/>pre 'thenReturn' instruction if completed",</div> <div>when() and called stubbing methods like thenReturn() on this refe<br/>throw(exception);",<br/>tion);",</div> <div>*scroll to left*</div> | <div>1 /*<br/>2  * Copyright (c) 2017 Mockito contributors<br/>3  * This program is made available under the terms of the MIT License.<br/>4  */<br/>5 package org.mockito.internal.util;<br/>6<br/>7 import static java.util.Arrays.asList;<br/>8<br/>9 import java.util.Collection;<br/>10 import java.util.regex.Matcher;<br/>11 import java.util.regex.Pattern;<br/>12<br/>13 public class StringUtil {<br/>14<br/>15     private static final Pattern CAPS = Pattern.compile("[A-Z\\d][^A-Z\\d]*");<br/>16<br/>17     private StringUtil() {}<br/>18     /**<br/>19      * @param text<br/>20      *      to have the first line removed<br/>21      * @return less first line<br/>22      */<br/>23     public static String removeFirstLine(String text) {<br/>24         return text.replaceFirst(".*?\\n", "");<br/>25     }<br/>26<br/>27     /**<br/>28      * Joins Strings with line break character. It adds line break in front, too.<br/>29      * This makes it something like 'format' no really 'join'.<br/>30      */<br/>31     public static String join(Object ... linesToBreak) {<br/>32         return join("\\n", asList(linesToBreak));<br/>33     }<br/>34<br/>35     /**<br/>36      * Joins Strings with EOL character<br/>37      *<br/>38      * @param start the starting String<br/>39      * @param lines collection to join<br/>40      */<br/>41     public static String join(String start, Collection&lt;?&gt; lines) {<br/>42         return join(start, "", lines);<br/>43     }<br/>44<br/>45     /**<br/>46      * Joins Strings with EOL character<br/>47      *<br/>48      * @param start the starting String<br/>49      * @param linePrefix the prefix for each line to be joined<br/>50      * @param lines collection to join</div> |         |

| Callers | Base view [X]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | o.m-.int-.util.StringUtil [X]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Callees                                                                           |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|         | <pre> 1  /exception 2  3 amend them. 3 4  them easy to 5  6 ). 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 </pre> <p style="text-align: center;">*scroll to left*</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&lt;&gt; 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> |

| Callers | Base view [X]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | o.m-.int-.util.StringUtil [X]                                                             | Callees |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------|
|         | <pre>40 40 41 41 /** 42 42  * Reports verification and misusing errors. 43 43  * &lt;p&gt; 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  * &lt;p&gt; 47 47  * Reporter can be injected and therefore is easily testable. 48 48  * &lt;p&gt; 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 73 73 public static MockitoException unfinishedStubbing(Location location) { 74 74     return new UnfinishedStubbingException(join( 75 75         "Unfinished stubbing detected here:", 76 76         location, 77 77         "", 78 78         "E.g. thenReturn() may be missing.", 79 79         "Examples of correct stubbing:", 80 80         "    when(mock.isOk()).thenReturn(true);", 81 81         "    when(mock.isOk()).thenThrow(exception);", 82 82         "    doThrow(exception).when(mock).someVoidMethod();", 83 83         "Hints:", 84 84         " 1. missing thenReturn()", 85 85         " 2. you are trying to stub a final method, which is not supported", 86 86         " 3: you are stubbing the behaviour of another mock inside before 'thenReturn' instruction if completed", 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</pre> | <div>1 callee of unfinishedStubbing</div> <div>← org.m-.int-.util.StringUtil.join →</div> |         |