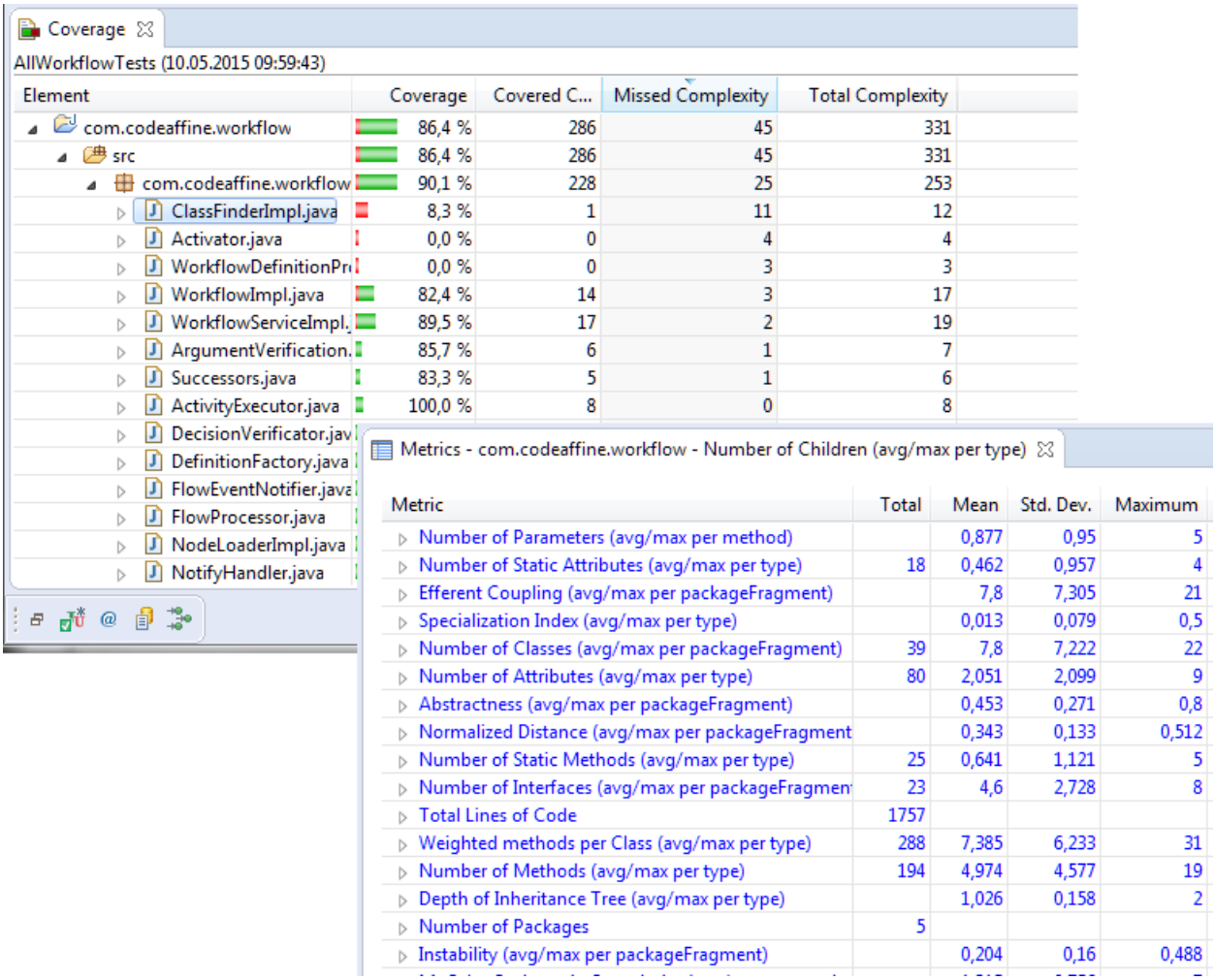
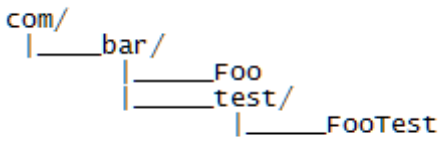
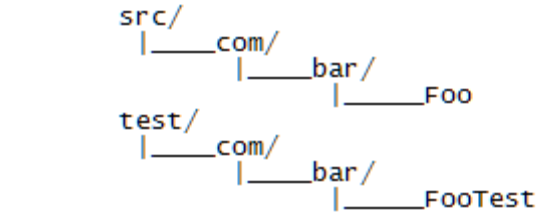
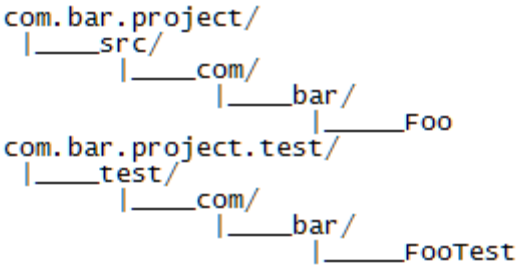
Chapter 1: Getting Started

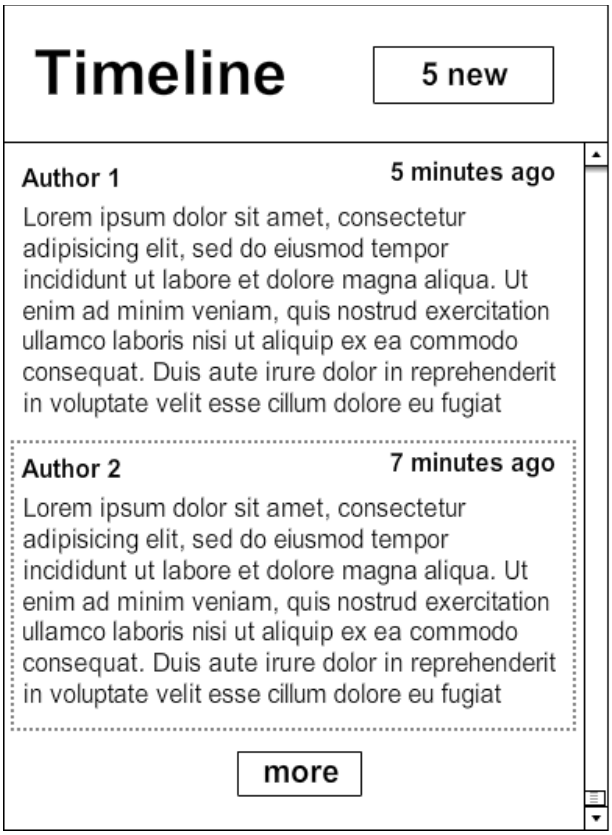



```
com/
  |____bar/
         |_____Foo
         |_____FooTest
```


com/
bar/
Foo
test/
FooTest


src/
com/
bar/
Foo
test/
com/
bar/
FooTest


com.bar.project/
src/
com/
bar/
Foo
com.bar.project.test/
test/
com/
bar/
FooTest

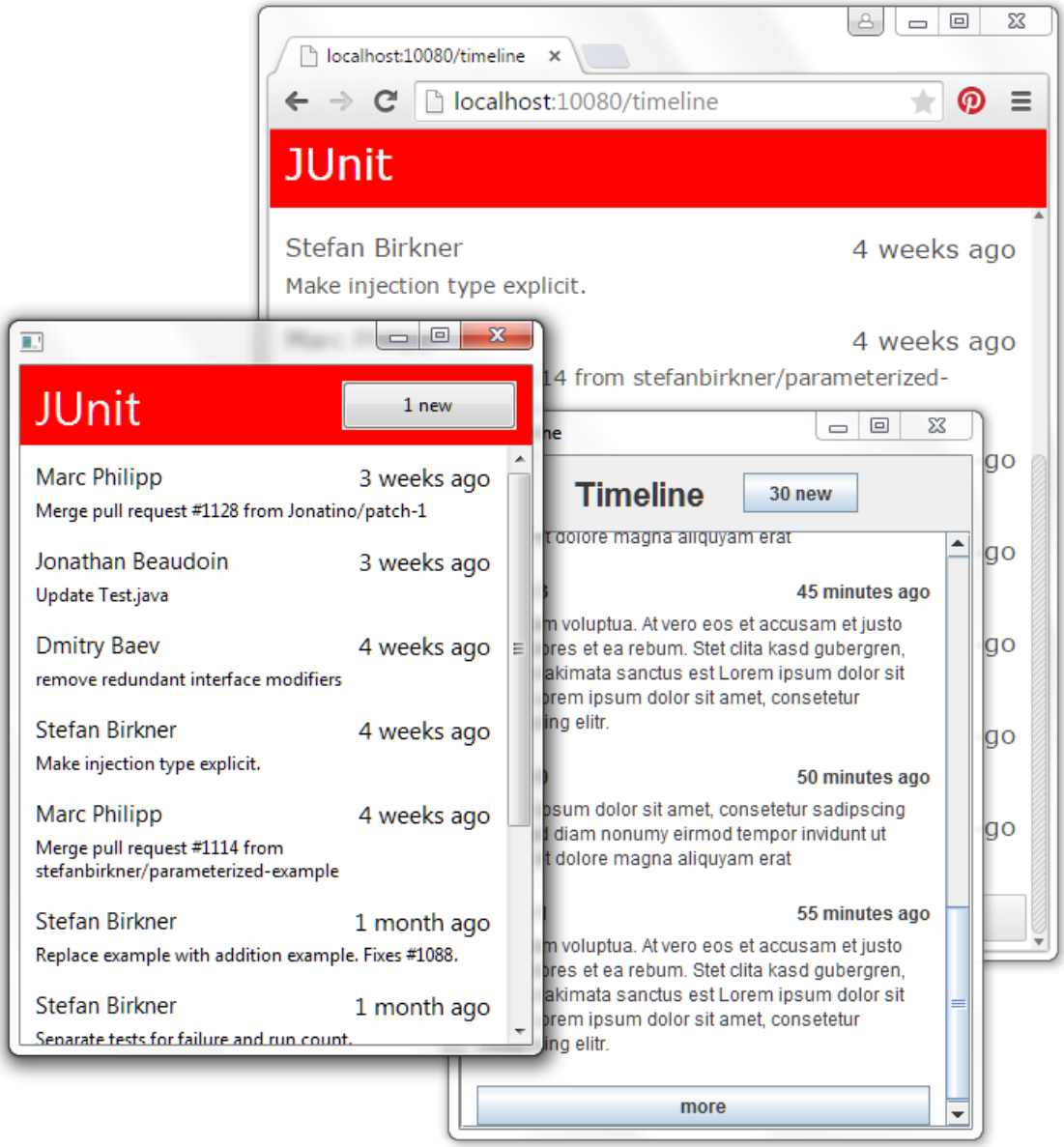


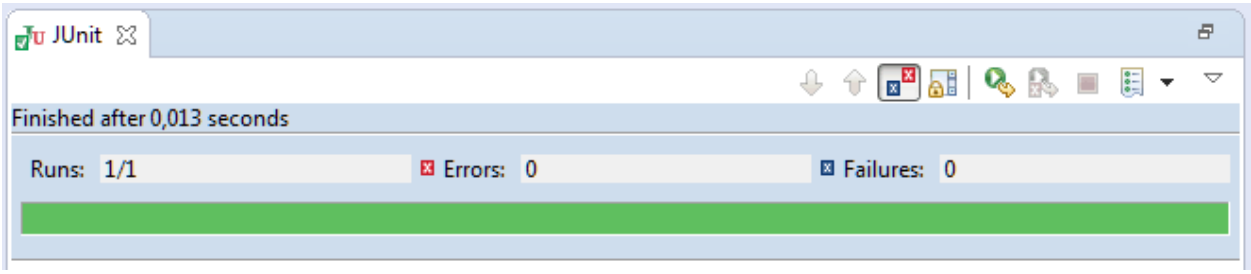
→ The header section provides a button that allows to fetch new items and insert those at the beginning of the list section

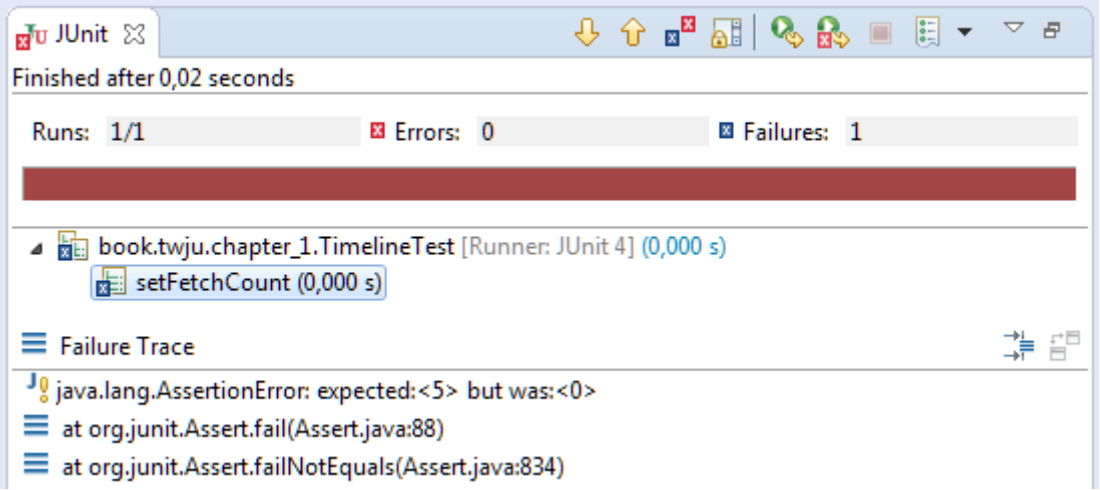
→ List section displaying items in chronological order. If the items exceed the visible content area a scroll bar can be used to browse through the items

→ An Item can be comprised of an author label, the mandatory time stamp and further text or image content depending on the item source

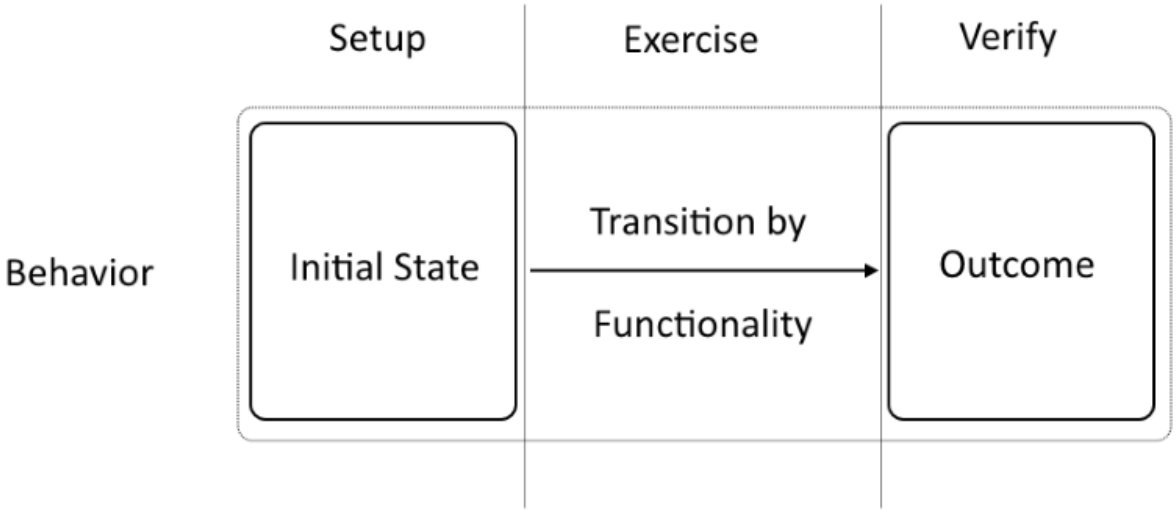
→ The timeline supports pagination via a button to fetch older item entries


localhost:10080/timeline
localhost:10080/timeline
JUnit
Stefan Birkner
4 weeks ago
Make injection type explicit.
4 weeks ago
14 from stefanbirkner/parameterized-
JUnit
1 new
Marc Philipp
3 weeks ago
Merge pull request #1128 from Jonatino/patch-1
Jonathan Beaudoin
3 weeks ago
Update Test.java
Dmitry Baev
4 weeks ago
remove redundant interface modifiers
Stefan Birkner
4 weeks ago
Make injection type explicit.
Marc Philipp
4 weeks ago
Merge pull request #1114 from stefanbirkner/parameterized-example
Stefan Birkner
1 month ago
Replace example with addition example. Fixes #1088.
Stefan Birkner
1 month ago
Timeline
30 new
45 minutes ago
50 minutes ago
55 minutes ago
more


JUnit
Finished after 0,013 seconds
Runs: 1/1
Errors: 0
Failures: 0

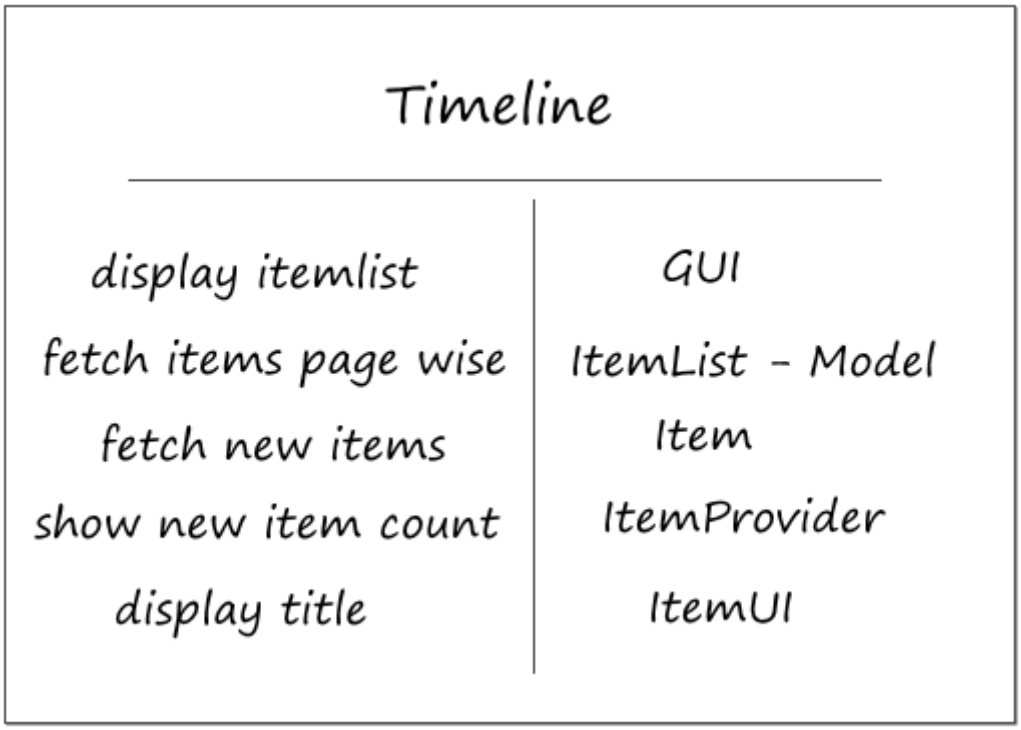


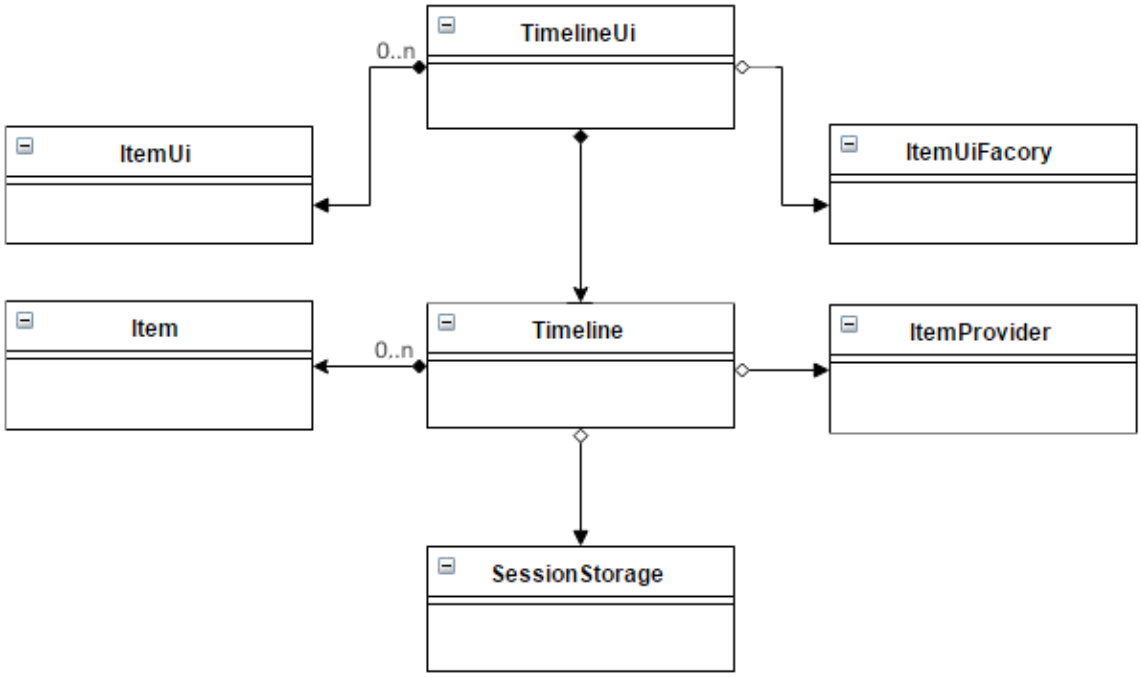
Chapter 2: Writing Well-structured Tests

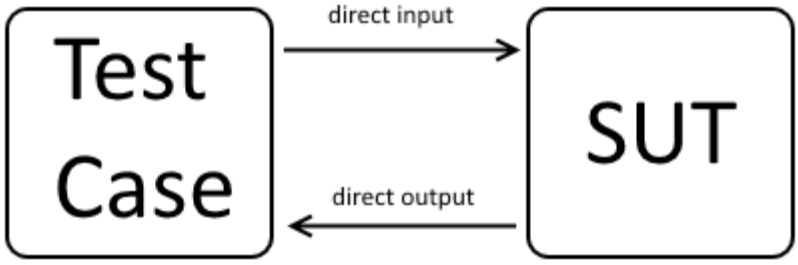


```
public class Timeline {

  public static final int FETCH_COUNT_LOWER_BOUND = 1;
  public static final int FETCH_COUNT_UPPER_BOUND = 20;

  private static final int DEFAULT_FETCH_COUNT = 10;

  private int fetchCount;

  public Timeline() {
    fetchCount = DEFAULT_FETCH_COUNT;
  }

  public void setFetchCount( int fetchCount ) {
    if(    fetchCount >= FETCH_COUNT_LOWER_BOUND
        && fetchCount <= FETCH_COUNT_UPPER_BOUND )
    {
      this.fetchCount = fetchCount;
    }
  }

  public int getFetchCount() {
    return fetchCount;
  }
}
```

Chapter 3: Developing Independently Testable Units


Timeline
display itemlist
fetch items page wise
fetch new items
show new item count
display title
GUI
ItemList - Model
Item
ItemProvider
ItemUI

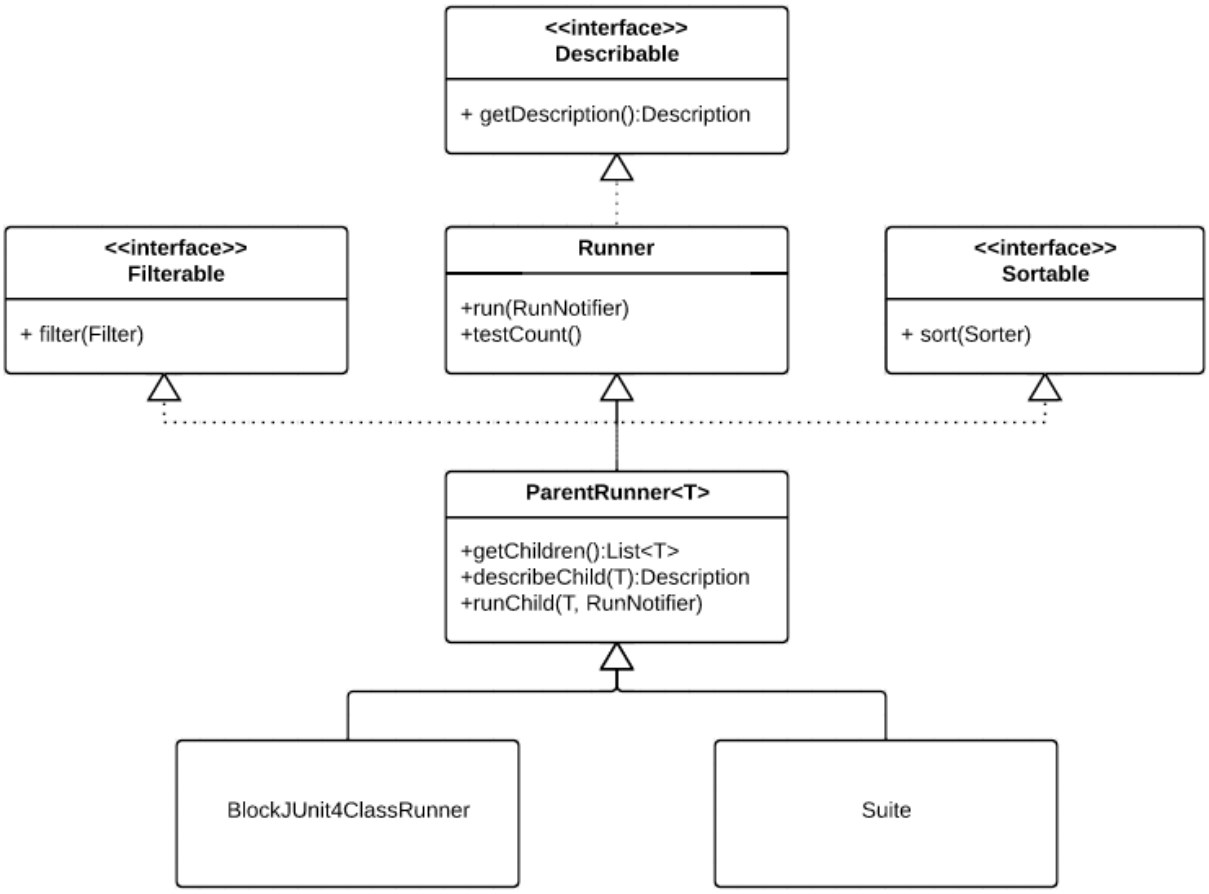

TimelineUi
0..n
ItemUi
ItemUiFacory
Item
0..n
Timeline
ItemProvider
SessionStorage

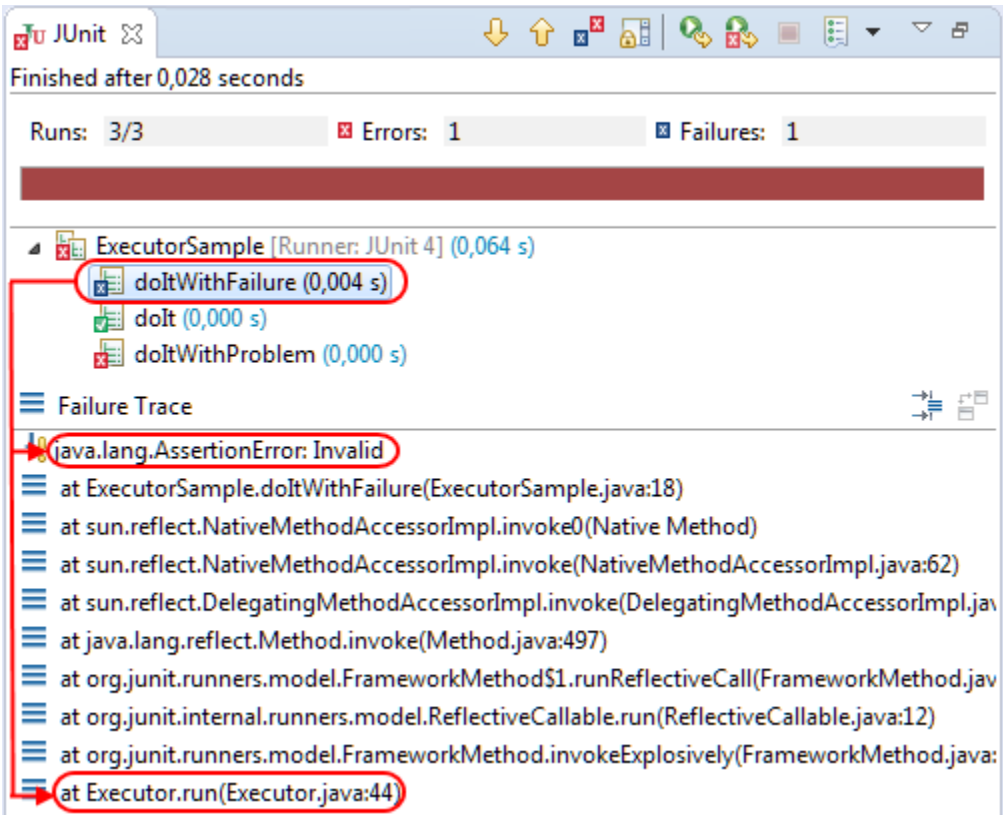

Test Case
direct input
direct output
SUT

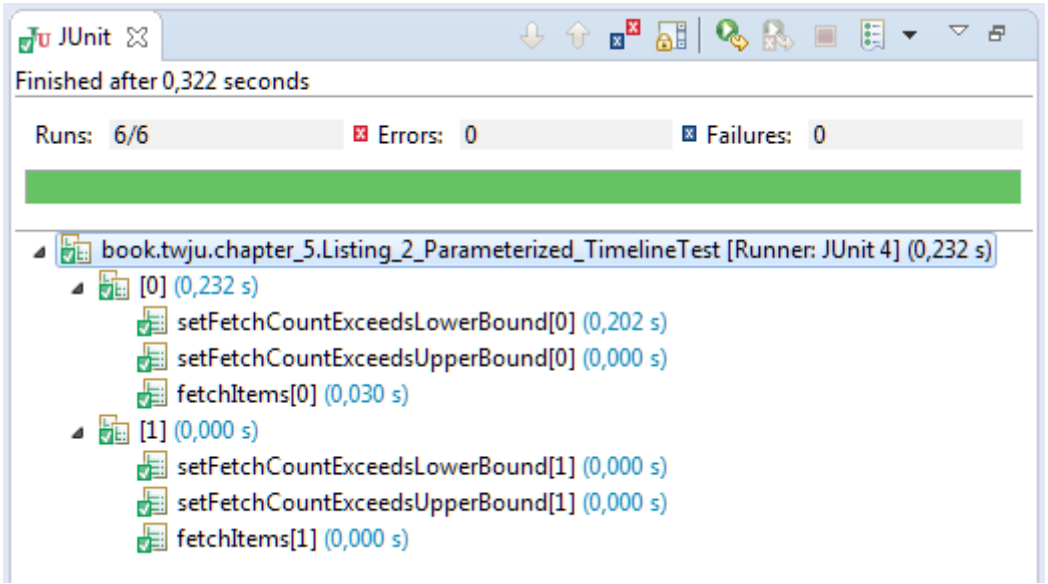
Chapter 4: Testing Exceptional Flow

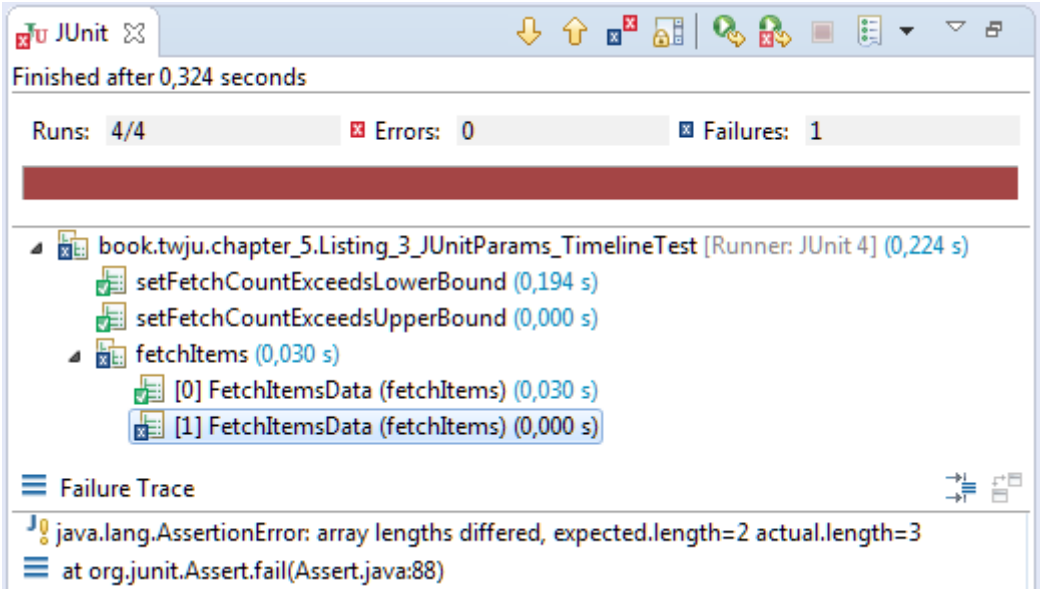
There are no images in this chapter.

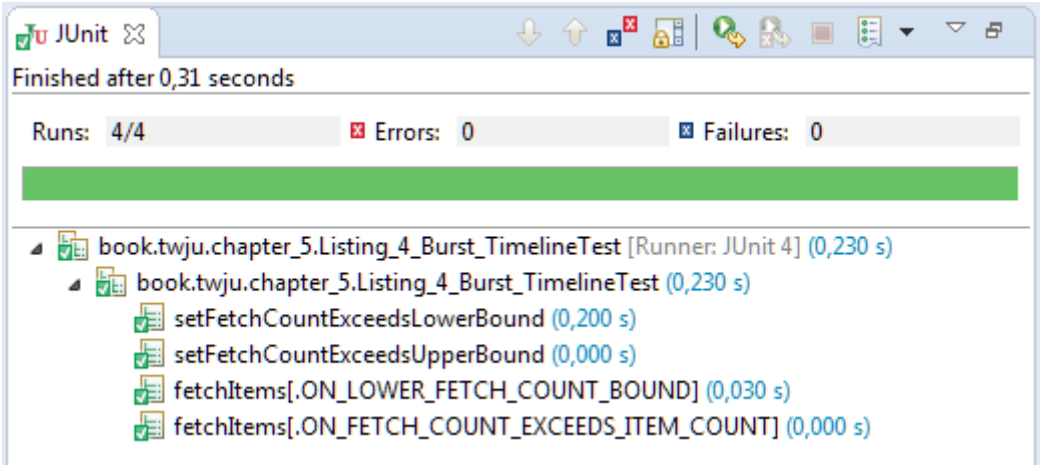
Chapter 5: Using Runners for Particular Testing Purposes


<<interface>>
Describable
+ getDescription():Description
<<interface>>
Filterable
+ filter(Filter)
Runner
+run(RunNotifier)
+testCount()
<<interface>>
Sortable
+ sort(Sorter)
ParentRunner<T>
+getChildren():List<T>
+describeChild(T):Description
+runChild(T, RunNotifier)
BlockJUnit4ClassRunner
Suite

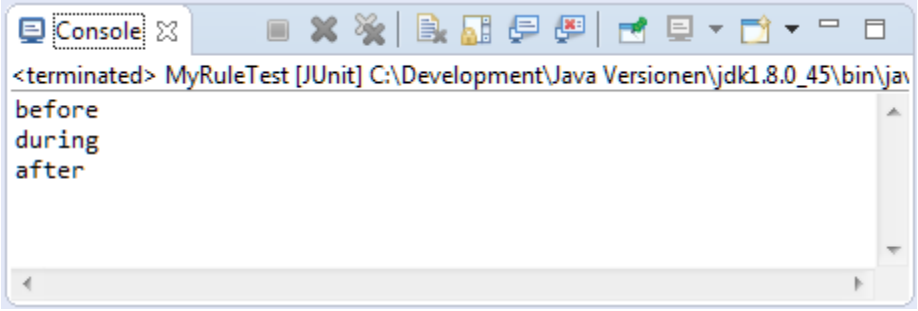

JUnit
Finished after 0,028 seconds
Runs: 3/3
Errors: 1
Failures: 1
ExecutorSample [Runner: JUnit 4] (0,064 s)
doItWithFailure (0,004 s)
doIt (0,000 s)
doItWithProblem (0,000 s)
Failure Trace
java.lang.AssertionError: Invalid
at ExecutorSample.doItWithFailure(ExecutorSample.java:18)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.jav
at java.lang.reflect.Method.invoke(Method.java:497)
at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.jav
at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12)
at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:
at Executor.run(Executor.java:44)

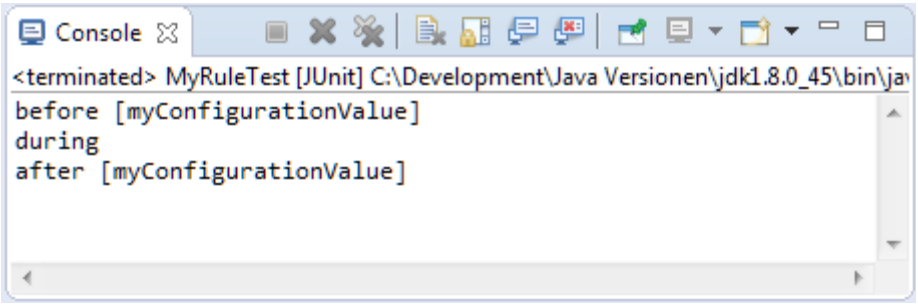

JUnit
Finished after 0,322 seconds
Runs: 6/6
Errors: 0
Failures: 0
book.twju.chapter_5.Listing_2_Parameterized_TimelineTest [Runner: JUnit 4] (0,232 s)
[0] (0,232 s)
setFetchCountExceedsLowerBound[0] (0,202 s)
setFetchCountExceedsUpperBound[0] (0,000 s)
fetchItems[0] (0,030 s)
[1] (0,000 s)
setFetchCountExceedsLowerBound[1] (0,000 s)
setFetchCountExceedsUpperBound[1] (0,000 s)
fetchItems[1] (0,000 s)

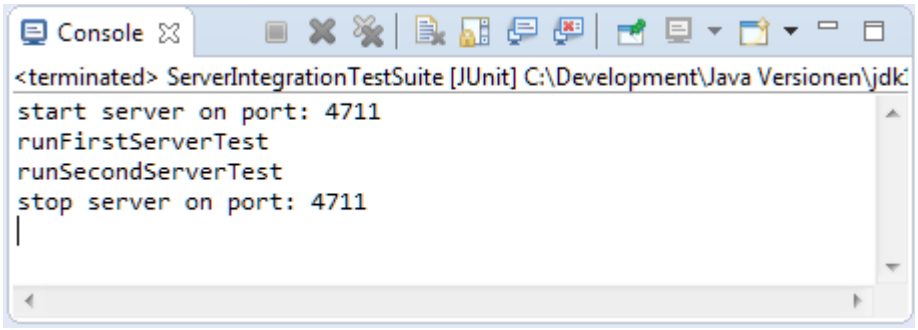


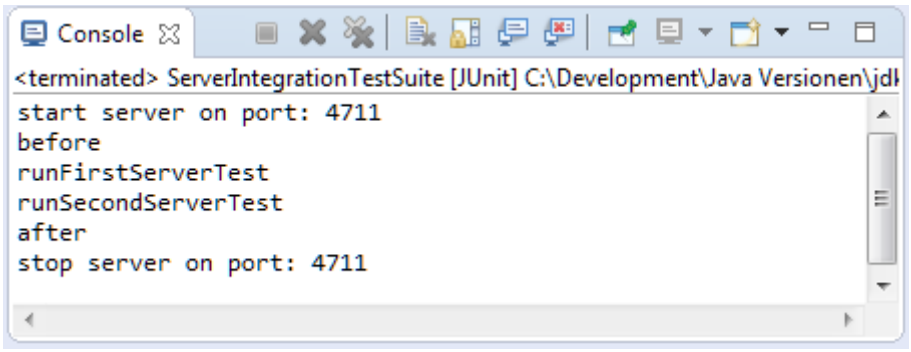


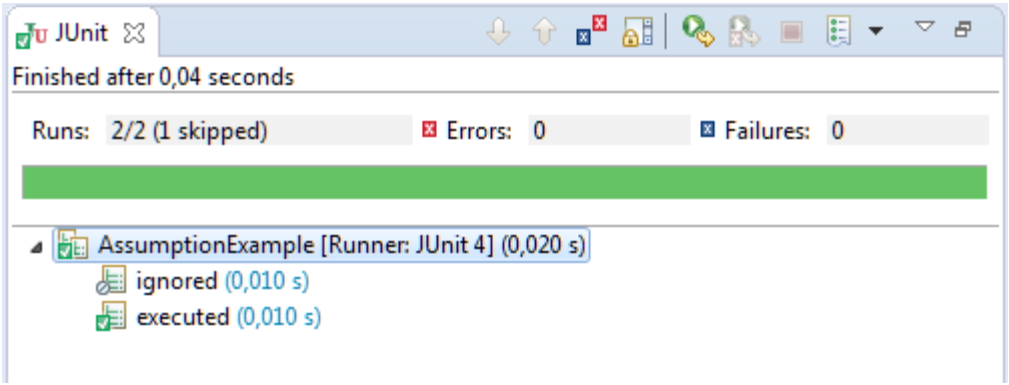
Chapter 6: Reducing Boilerplate with JUnit Rules


Console
<terminated> MyRuleTest [JUnit] C:\Development\Java Versionen\jdk1.8.0_45\bin\jav
before
during
after

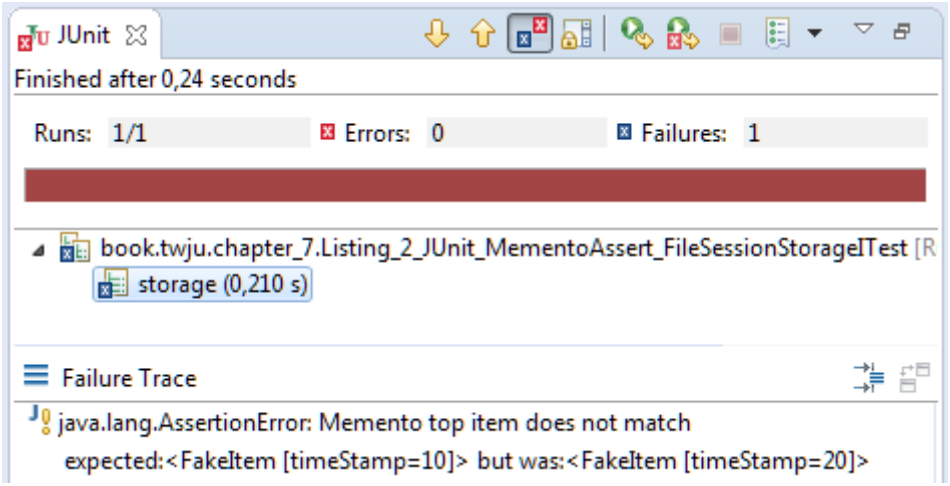

Console
<terminated> MyRuleTest [JUnit] C:\Development\Java Versionen\jdk1.8.0_45\bin\jav
before [myConfigurationValue]
during
after [myConfigurationValue]

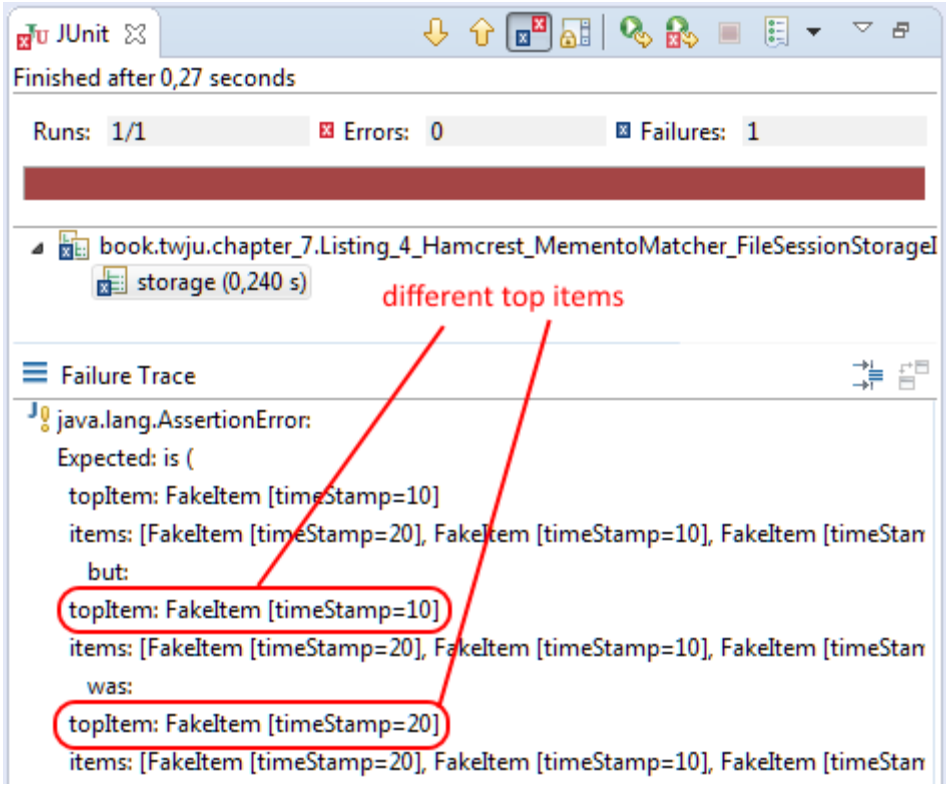

Console
<terminated> ServerIntegrationTestSuite [JUnit] C:\Development\Java Versionen\jdk
start server on port: 4711
runFirstServerTest
runSecondServerTest
stop server on port: 4711

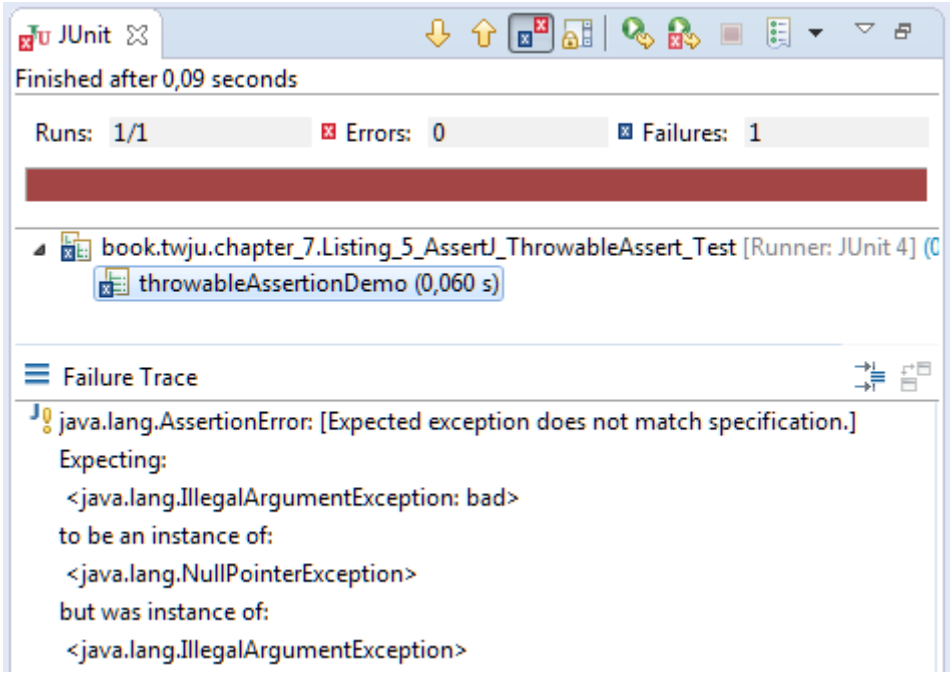


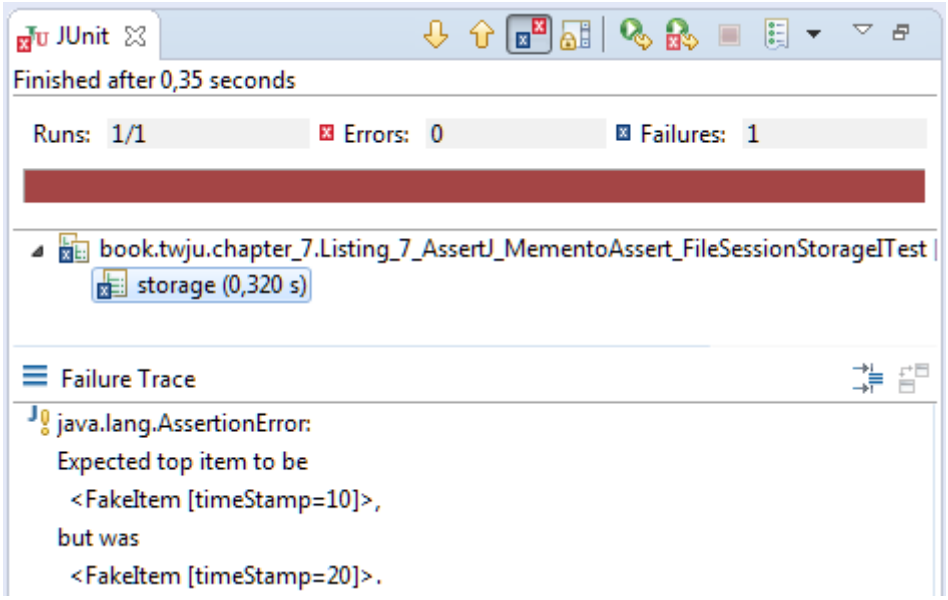


Chapter 7: Improving Readability with Custom Assertions

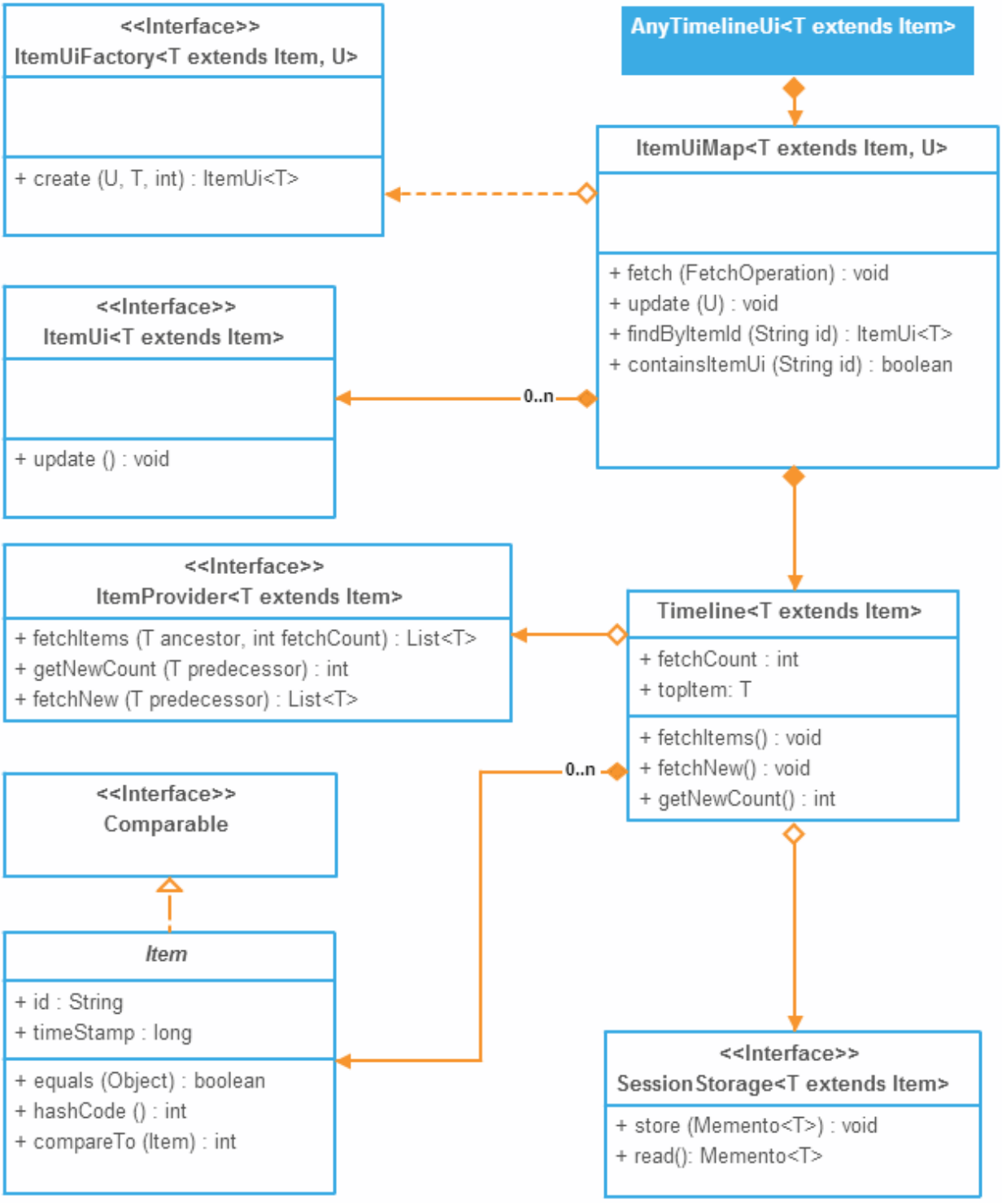

JUnit
Finished after 0,24 seconds
Runs: 1/1
Errors: 0
Failures: 1
book.twju.chapter_7.Listing_2_JUnit_MementoAssert_FileSessionStorageITest [R
storage (0,210 s)
Failure Trace
java.lang.AssertionError: Memento top item does not match
expected:<FakeItem [timeStamp=10]> but was:<FakeItem [timeStamp=20]>

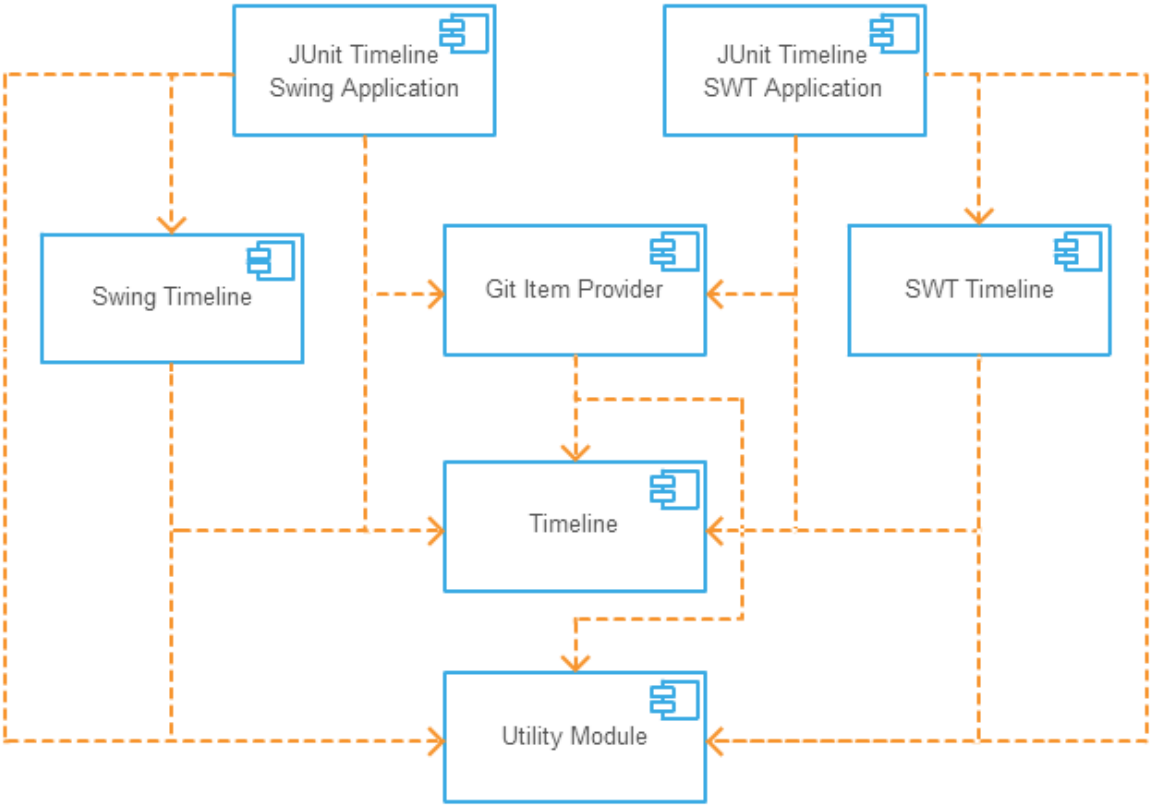

JUnit
Finished after 0,27 seconds
Runs: 1/1
Errors: 0
Failures: 1
book.twju.chapter_7.Listing_4_Hamcrest_MementoMatcher_FileSessionStorageI
storage (0,240 s)
different top items
Failure Trace
java.lang.AssertionError:
Expected: is (
topItem: FakeItem [timeStamp=10]
items: [FakeItem [timeStamp=20], FakeItem [timeStamp=10], FakeItem [timeStan
but:
topItem: FakeItem [timeStamp=10]
items: [FakeItem [timeStamp=20], FakeItem [timeStamp=10], FakeItem [timeStan
was:
topItem: FakeItem [timeStamp=20]
items: [FakeItem [timeStamp=20], FakeItem [timeStamp=10], FakeItem [timeStan

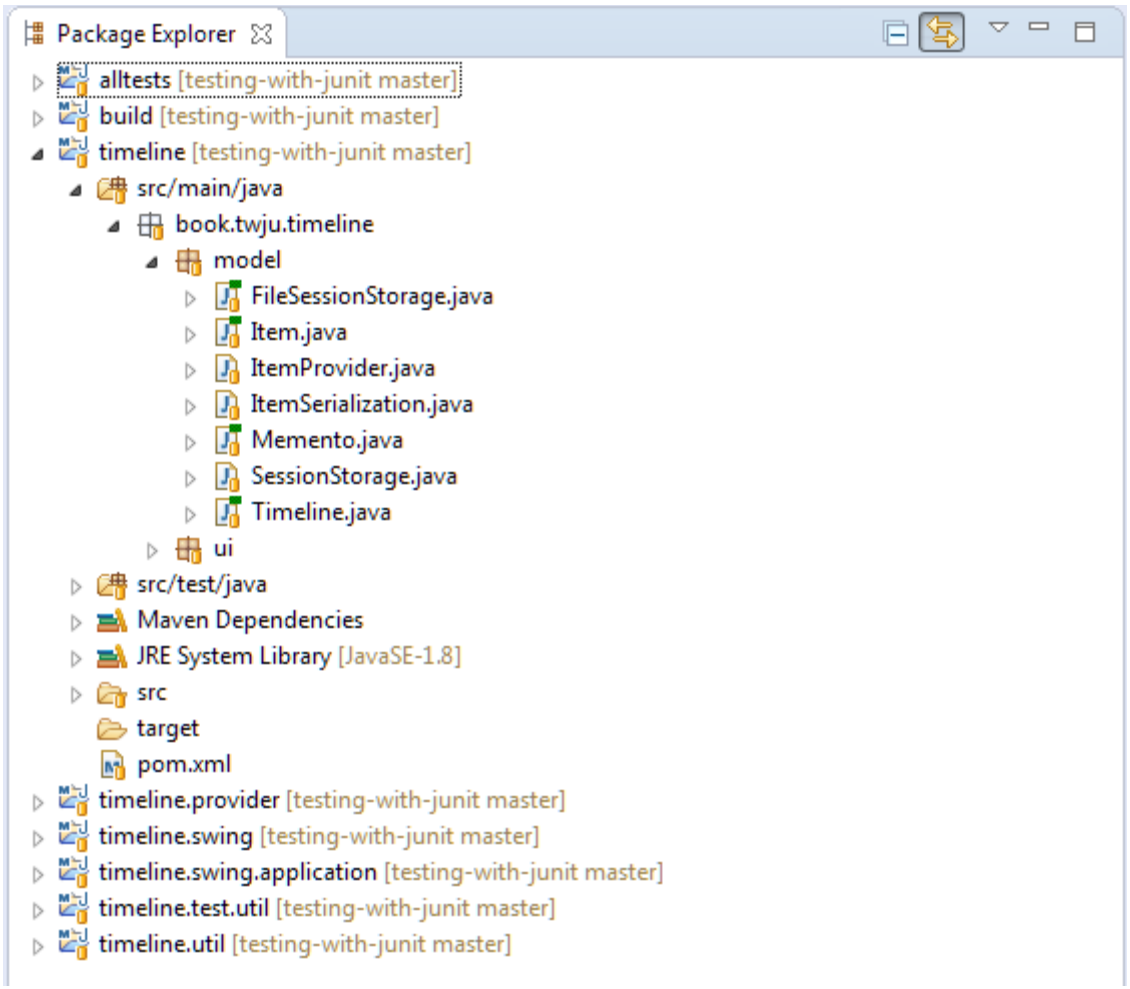

JUnit
Finished after 0,09 seconds
Runs: 1/1
Errors: 0
Failures: 1
book.twju.chapter_7.Listing_5_AssertJ_ThrowableAssert_Test [Runner: JUnit 4] (0
throwableAssertionDemo (0,060 s)
Failure Trace
java.lang.AssertionError: [Expected exception does not match specification.]
Expecting:
<java.lang.IllegalArgumentException: bad>
to be an instance of:
<java.lang.NullPointerException>
but was instance of:
<java.lang.IllegalArgumentException>

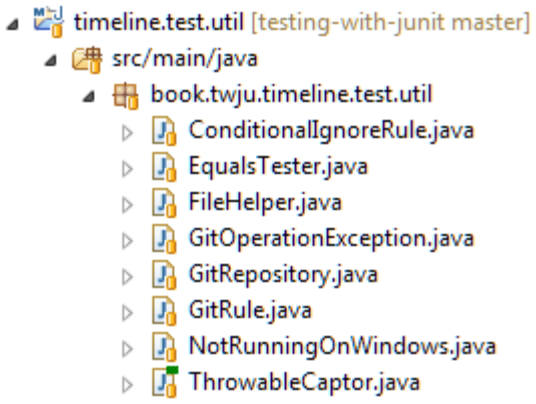

JUnit
Finished after 0,35 seconds
Runs: 1/1
Errors: 0
Failures: 1
book.twju.chapter_7.Listing_7_AssertJ_MementoAssert_FileSessionStorageITest
storage (0,320 s)
Failure Trace
java.lang.AssertionError:
Expected top item to be
<FakeItem [timeStamp=10]>,
but was
<FakeItem [timeStamp=20]>.

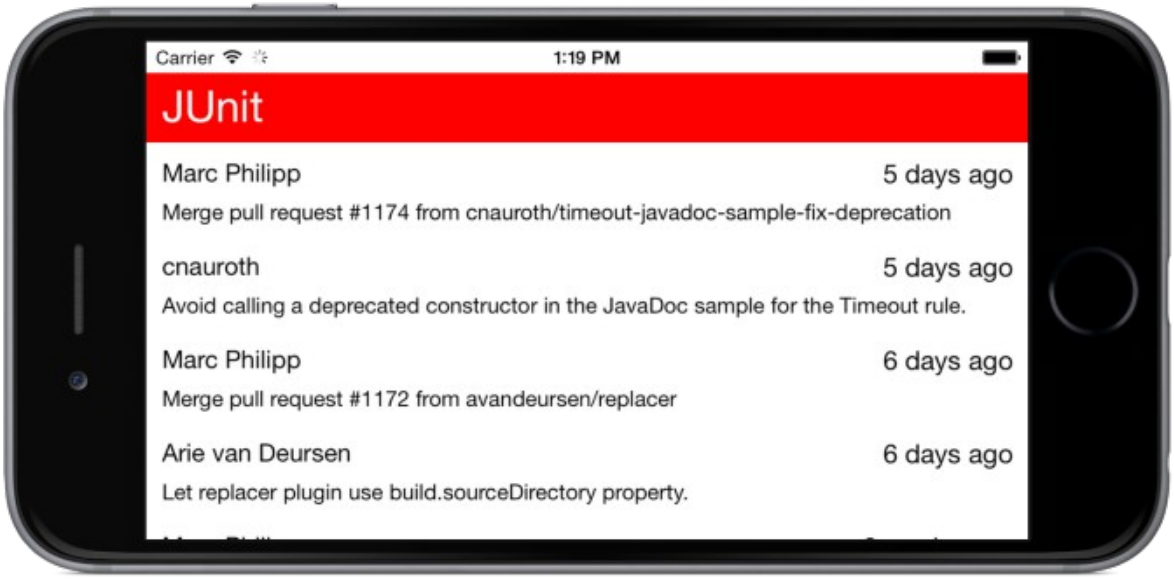
Chapter 8: Running Tests Automatically within a CI Build

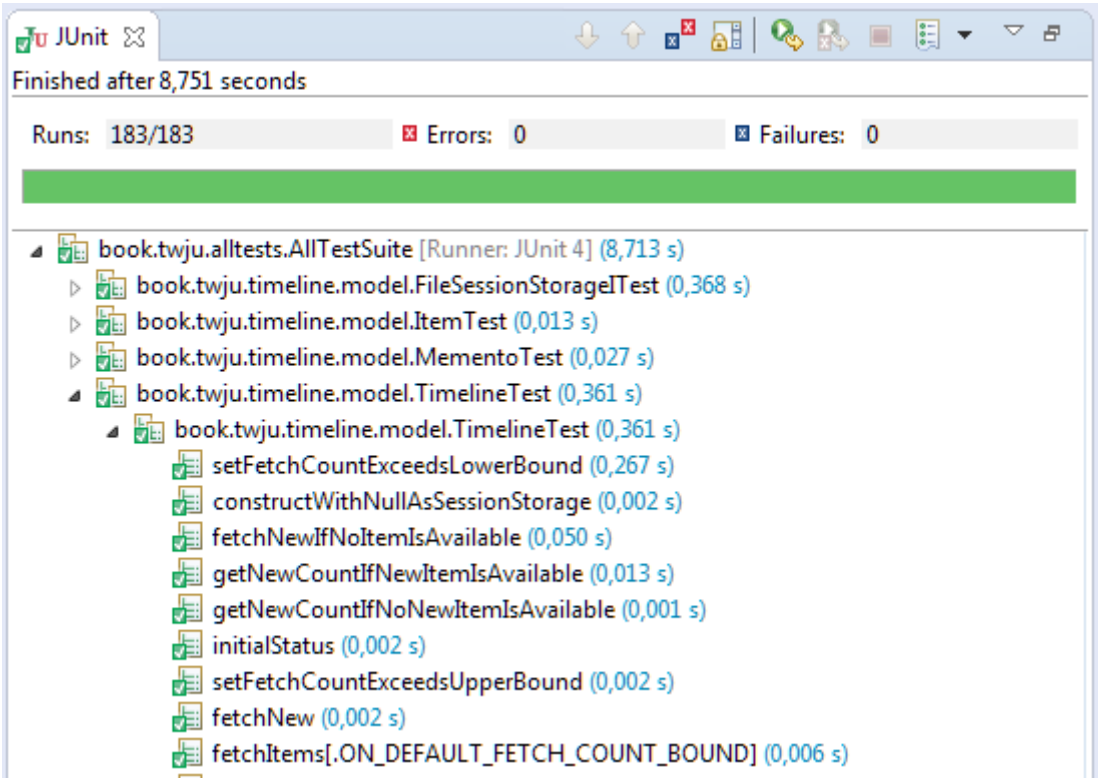


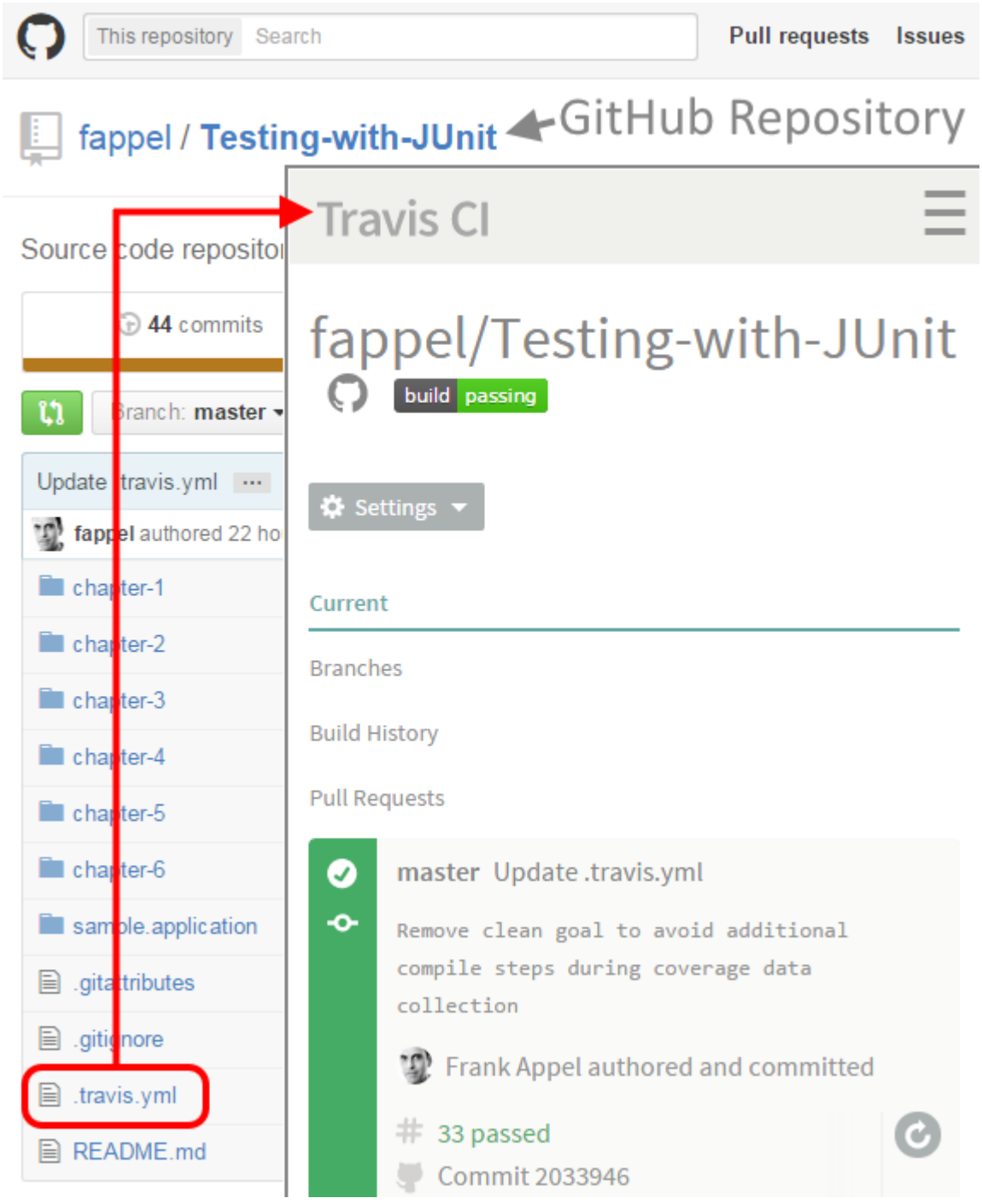

JUnit Timeline
Swing Application
JUnit Timeline
SWT Application
Swing Timeline
Git Item Provider
SWT Timeline
Timeline
Utility Module

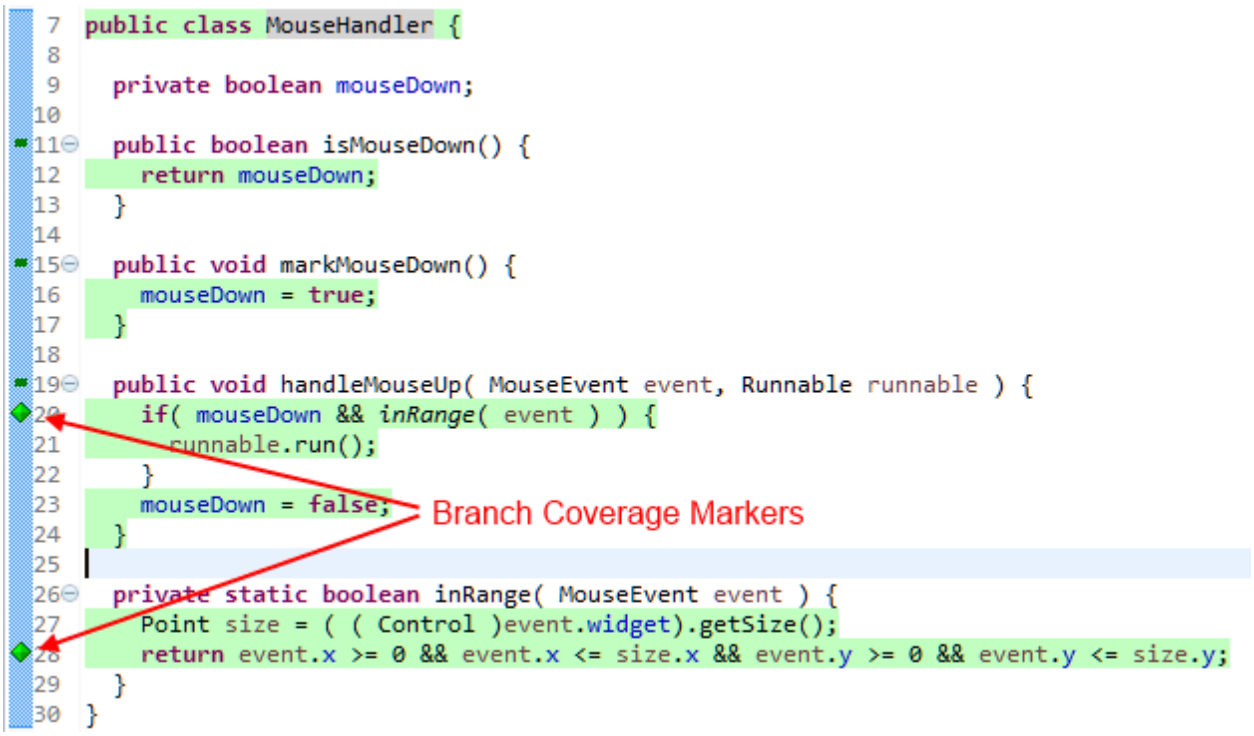

Package Explorer
alltests [testing-with-junit master]
build [testing-with-junit master]
timeline [testing-with-junit master]
src/main/java
book.twju.timeline
model
FileSessionStorage.java
Item.java
ItemProvider.java
ItemSerialization.java
Memento.java
SessionStorage.java
Timeline.java
ui
src/test/java
Maven Dependencies
JRE System Library [JavaSE-1.8]
src
target
pom.xml
timeline.provider [testing-with-junit master]
timeline.swing [testing-with-junit master]
timeline.swing.application [testing-with-junit master]
timeline.test.util [testing-with-junit master]
timeline.util [testing-with-junit master]

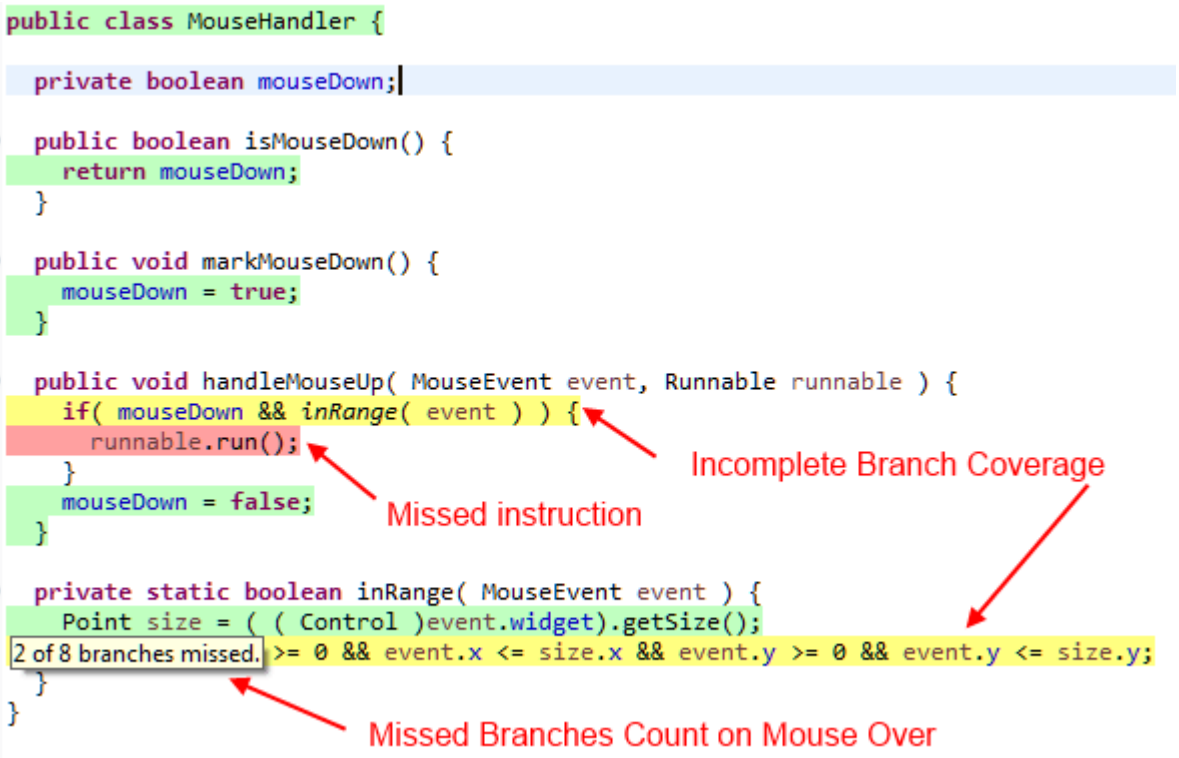

timeline.test.util [testing-with-junit master]
src/main/java
book.twju.timeline.test.util
ConditionalIgnoreRule.java
EqualsTester.java
FileHelper.java
GitOperationException.java
GitRepository.java
GitRule.java
NotRunningOnWindows.java
ThrowableCaptor.java


Carrier
1:19 PM
JUnit
Marc Philipp
5 days ago
Merge pull request #1174 from cnauroth/timeout-javadoc-sample-fix-deprecation
cnauroth
5 days ago
Avoid calling a deprecated constructor in the JavaDoc sample for the Timeout rule.
Marc Philipp
6 days ago
Merge pull request #1172 from avandeursen/replacer
Arie van Deursen
6 days ago
Let replacer plugin use build.sourceDirectory property.


JUnit
Finished after 8,751 seconds
Runs: 183/183
Errors: 0
Failures: 0
book.twju.alltests.AllTestSuite [Runner: JUnit 4] (8,713 s)
book.twju.timeline.model.FileSessionStorageITest (0,368 s)
book.twju.timeline.model.ItemTest (0,013 s)
book.twju.timeline.model.MementoTest (0,027 s)
book.twju.timeline.model.TimelineTest (0,361 s)
book.twju.timeline.model.TimelineTest (0,361 s)
setFetchCountExceedsLowerBound (0,267 s)
constructWithNullAsSessionStorage (0,002 s)
fetchNewIfNoItemIsAvailable (0,050 s)
getNewCountIfNewItemIsAvailable (0,013 s)
getNewCountIfNoNewItemIsAvailable (0,001 s)
initialStatus (0,002 s)
setFetchCountExceedsUpperBound (0,002 s)
fetchNew (0,002 s)
fetchItems[.ON_DEFAULT_FETCH_COUNT_BOUND] (0,006 s)


This repository
Search
Pull requests
Issues
fappel / Testing-with-JUnit
GitHub Repository
Travis CI
Source code repositor
44 commits
Branch: master
Update .travis.yml
fappel authored 22 ho
chapter-1
chapter-2
chapter-3
chapter-4
chapter-5
chapter-6
sample.application
.gitattributes
.gitignore
.travis.yml
README.md
fappel/Testing-with-JUnit
build passing
Settings
Current
Branches
Build History
Pull Requests
master Update .travis.yml
Remove clean goal to avoid additional compile steps during coverage data collection
Frank Appel authored and committed
33 passed
Commit 2033946


Branch Coverage Markers


public class MouseHandler {
private boolean mouseDown;
public boolean isMouseDown() {
return mouseDown;
}
public void markMouseDown() {
mouseDown = true;
}
public void handleMouseUp(MouseEvent event, Runnable runnable) {
if(mouseDown && inRange(event)) {
runnable.run();
}
mouseDown = false;
}
private static boolean inRange(MouseEvent event) {
Point size = ((Control)event.widget).getSize();
2 of 8 branches missed.
>= 0 && event.x <= size.x && event.y >= 0 && event.y <= size.y;
}
}
Incomplete Branch Coverage
Missed instruction
Missed Branches Count on Mouse Over

LATEST BUILDS

BUILD	BRANCH	COVERAGE	COMMIT
#33	master	98.31	Update .travis.yml Remove clean goal ge data collection
#31	master	98.31	Introduction of listings for chapter fiv
#30	master	98.3	
#29	master	98.3	
#28	master	98.3	
#27	master	98.3	
#26	master	98.3	
#25	master	98.3	
#24	master	98.3	
#23	master	98.3	

REPO STATS

98.31% COVERED

583 OF 593

RELEVANT LINES COVERED

LANGUAGES

JAVA

REPO ADDED

06 JUL 2015

TOTAL FILES

28

BUILDS

18

LAST BUILD

#33

JOBS

18

LAST JOB

#1

LAST COMMIT

Update .travis.yml Remove clean goal t

FILES

ALL 28 | CHANGED 0 | SOURCE CHANGED 0 | COVERAGE CHANGED 0

COVERAGE	FILE	LINES	RELEVANT
85.71	...c/main/java/book/twju/timeline/util/Iterables.java	23	7
85.71			
87.5			
90.0			
91.67			
95.83			
100.0			
100.0			
100.0			
100.0			
100.0			

SHOWING 1 TO 10

SOURCE FILE

85.71 /sample.application/timeline.util/src/main/java/book/twju/timelin

```
1  package book.twju.timeline.util;
2
3  import static book.twju.timeline.util.Conditions.checkArgument;
4
5  import java.util.ArrayList;
6  import java.util.List;
7
8  public class Iterables {
9
10   static final String ITERABLE_MUST_NOT_BE_NULL = "Argument 'iterable
11
12   public static <T> List<T> asList( Iterable<T> iterable ) {
13     checkArgument( iterable != null, ITERABLE_MUST_NOT_BE_NULL );
14
15     List<T> result = new ArrayList<>();
16     for( T element : iterable ) {
17       result.add( element );
18     }
19     return result;
20   }
21
22   private Iterables() {}
23 }
```