| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ConcurrentModificationException.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/util/Comparator.html)   [**NEXT CLASS**](http://docs.google.com/java/util/Currency.html) | [**FRAMES**](http://docs.google.com/index.html?java/util/ConcurrentModificationException.html)    [**NO FRAMES**](http://docs.google.com/ConcurrentModificationException.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | METHOD |

## **java.util**

Class ConcurrentModificationException

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.lang.Throwable](http://docs.google.com/java/lang/Throwable.html)  
 [java.lang.Exception](http://docs.google.com/java/lang/Exception.html)  
 [java.lang.RuntimeException](http://docs.google.com/java/lang/RuntimeException.html)  
 **java.util.ConcurrentModificationException**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html)

public class **ConcurrentModificationException**extends [RuntimeException](http://docs.google.com/java/lang/RuntimeException.html)

This exception may be thrown by methods that have detected concurrent modification of an object when such modification is not permissible.

For example, it is not generally permissible for one thread to modify a Collection while another thread is iterating over it. In general, the results of the iteration are undefined under these circumstances. Some Iterator implementations (including those of all the general purpose collection implementations provided by the JRE) may choose to throw this exception if this behavior is detected. Iterators that do this are known as *fail-fast* iterators, as they fail quickly and cleanly, rather that risking arbitrary, non-deterministic behavior at an undetermined time in the future.

Note that this exception does not always indicate that an object has been concurrently modified by a *different* thread. If a single thread issues a sequence of method invocations that violates the contract of an object, the object may throw this exception. For example, if a thread modifies a collection directly while it is iterating over the collection with a fail-fast iterator, the iterator will throw this exception.

Note that fail-fast behavior cannot be guaranteed as it is, generally speaking, impossible to make any hard guarantees in the presence of unsynchronized concurrent modification. Fail-fast operations throw ConcurrentModificationException on a best-effort basis. Therefore, it would be wrong to write a program that depended on this exception for its correctness: *ConcurrentModificationException should be used only to detect bugs.*

**Since:** 1.2 **See Also:**[Collection](http://docs.google.com/java/util/Collection.html), [Iterator](http://docs.google.com/java/util/Iterator.html), [ListIterator](http://docs.google.com/java/util/ListIterator.html), [Vector](http://docs.google.com/java/util/Vector.html), [LinkedList](http://docs.google.com/java/util/LinkedList.html), [HashSet](http://docs.google.com/java/util/HashSet.html), [Hashtable](http://docs.google.com/java/util/Hashtable.html), [TreeMap](http://docs.google.com/java/util/TreeMap.html), [AbstractList](http://docs.google.com/java/util/AbstractList.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.util.ConcurrentModificationException)

| **Constructor Summary** | |
| --- | --- |
| [**ConcurrentModificationException**](http://docs.google.com/java/util/ConcurrentModificationException.html#ConcurrentModificationException())()            Constructs a ConcurrentModificationException with no detail message. |
| [**ConcurrentModificationException**](http://docs.google.com/java/util/ConcurrentModificationException.html#ConcurrentModificationException(java.lang.String))([String](http://docs.google.com/java/lang/String.html) message)            Constructs a ConcurrentModificationException with the specified detail message. |

| **Method Summary** | |
| --- | --- |

| **Methods inherited from class java.lang.**[**Throwable**](http://docs.google.com/java/lang/Throwable.html) |
| --- |
| [fillInStackTrace](http://docs.google.com/java/lang/Throwable.html#fillInStackTrace()), [getCause](http://docs.google.com/java/lang/Throwable.html#getCause()), [getLocalizedMessage](http://docs.google.com/java/lang/Throwable.html#getLocalizedMessage()), [getMessage](http://docs.google.com/java/lang/Throwable.html#getMessage()), [getStackTrace](http://docs.google.com/java/lang/Throwable.html#getStackTrace()), [initCause](http://docs.google.com/java/lang/Throwable.html#initCause(java.lang.Throwable)), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace()), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace(java.io.PrintStream)), [printStackTrace](http://docs.google.com/java/lang/Throwable.html#printStackTrace(java.io.PrintWriter)), [setStackTrace](http://docs.google.com/java/lang/Throwable.html#setStackTrace(java.lang.StackTraceElement%5B%5D)), [toString](http://docs.google.com/java/lang/Throwable.html#toString()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### ConcurrentModificationException

public **ConcurrentModificationException**()

Constructs a ConcurrentModificationException with no detail message.

### ConcurrentModificationException

public **ConcurrentModificationException**([String](http://docs.google.com/java/lang/String.html) message)

Constructs a ConcurrentModificationException with the specified detail message.

**Parameters:**message - the detail message pertaining to this exception.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ConcurrentModificationException.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/util/Comparator.html)   [**NEXT CLASS**](http://docs.google.com/java/util/Currency.html) | [**FRAMES**](http://docs.google.com/index.html?java/util/ConcurrentModificationException.html)    [**NO FRAMES**](http://docs.google.com/ConcurrentModificationException.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | METHOD |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).