| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/AbstractCollection.html) | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/util//class-useAbstractCollection.html)    [**NO FRAMES**](http://docs.google.com/AbstractCollection.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**java.util.AbstractCollection**

| Packages that use [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) | |
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| [**java.util**](#3znysh7) | Contains the collections framework, legacy collection classes, event model, date and time facilities, internationalization, and miscellaneous utility classes (a string tokenizer, a random-number generator, and a bit array). |
| [**java.util.concurrent**](#2et92p0) | Utility classes commonly useful in concurrent programming. |
| [**javax.management**](#tyjcwt) | Provides the core classes for the Java Management Extensions. |
| [**javax.management.relation**](#3dy6vkm) | Provides the definition of the Relation Service. |
| [**javax.print.attribute.standard**](#1t3h5sf) | Package javax.print.attribute.standard contains classes for specific printing attributes. |

| Uses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [java.util](http://docs.google.com/java/util/package-summary.html) | |
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| Subclasses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [java.util](http://docs.google.com/java/util/package-summary.html) | |
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| class | [**AbstractList<E>**](http://docs.google.com/java/util/AbstractList.html)            This class provides a skeletal implementation of the [List](http://docs.google.com/java/util/List.html) interface to minimize the effort required to implement this interface backed by a "random access" data store (such as an array). |
| class | [**AbstractQueue<E>**](http://docs.google.com/java/util/AbstractQueue.html)            This class provides skeletal implementations of some [Queue](http://docs.google.com/java/util/Queue.html) operations. |
| class | [**AbstractSequentialList<E>**](http://docs.google.com/java/util/AbstractSequentialList.html)            This class provides a skeletal implementation of the List interface to minimize the effort required to implement this interface backed by a "sequential access" data store (such as a linked list). |
| class | [**AbstractSet<E>**](http://docs.google.com/java/util/AbstractSet.html)            This class provides a skeletal implementation of the Set interface to minimize the effort required to implement this interface. |
| class | [**ArrayDeque<E>**](http://docs.google.com/java/util/ArrayDeque.html)            Resizable-array implementation of the [Deque](http://docs.google.com/java/util/Deque.html) interface. |
| class | [**ArrayList<E>**](http://docs.google.com/java/util/ArrayList.html)            Resizable-array implementation of the List interface. |
| class | [**EnumSet<E extends Enum<E>>**](http://docs.google.com/java/util/EnumSet.html)            A specialized [Set](http://docs.google.com/java/util/Set.html) implementation for use with enum types. |
| class | [**HashSet<E>**](http://docs.google.com/java/util/HashSet.html)            This class implements the Set interface, backed by a hash table (actually a HashMap instance). |
| class | [**LinkedHashSet<E>**](http://docs.google.com/java/util/LinkedHashSet.html)            Hash table and linked list implementation of the Set interface, with predictable iteration order. |
| class | [**LinkedList<E>**](http://docs.google.com/java/util/LinkedList.html)            Linked list implementation of the List interface. |
| class | [**PriorityQueue<E>**](http://docs.google.com/java/util/PriorityQueue.html)            An unbounded priority [queue](http://docs.google.com/java/util/Queue.html) based on a priority heap. |
| class | [**Stack<E>**](http://docs.google.com/java/util/Stack.html)            The Stack class represents a last-in-first-out (LIFO) stack of objects. |
| class | [**TreeSet<E>**](http://docs.google.com/java/util/TreeSet.html)            A [NavigableSet](http://docs.google.com/java/util/NavigableSet.html) implementation based on a [TreeMap](http://docs.google.com/java/util/TreeMap.html). |
| class | [**Vector<E>**](http://docs.google.com/java/util/Vector.html)            The Vector class implements a growable array of objects. |

| Uses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) | |
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| Subclasses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) | |
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| class | [**ArrayBlockingQueue<E>**](http://docs.google.com/java/util/concurrent/ArrayBlockingQueue.html)            A bounded [blocking queue](http://docs.google.com/java/util/concurrent/BlockingQueue.html) backed by an array. |
| class | [**ConcurrentLinkedQueue<E>**](http://docs.google.com/java/util/concurrent/ConcurrentLinkedQueue.html)            An unbounded thread-safe [queue](http://docs.google.com/java/util/Queue.html) based on linked nodes. |
| class | [**ConcurrentSkipListSet<E>**](http://docs.google.com/java/util/concurrent/ConcurrentSkipListSet.html)            A scalable concurrent [NavigableSet](http://docs.google.com/java/util/NavigableSet.html) implementation based on a [ConcurrentSkipListMap](http://docs.google.com/java/util/concurrent/ConcurrentSkipListMap.html). |
| class | [**CopyOnWriteArraySet<E>**](http://docs.google.com/java/util/concurrent/CopyOnWriteArraySet.html)            A [Set](http://docs.google.com/java/util/Set.html) that uses an internal [CopyOnWriteArrayList](http://docs.google.com/java/util/concurrent/CopyOnWriteArrayList.html) for all of its operations. |
| class | [**DelayQueue<E extends Delayed>**](http://docs.google.com/java/util/concurrent/DelayQueue.html)            An unbounded [blocking queue](http://docs.google.com/java/util/concurrent/BlockingQueue.html) of Delayed elements, in which an element can only be taken when its delay has expired. |
| class | [**LinkedBlockingDeque<E>**](http://docs.google.com/java/util/concurrent/LinkedBlockingDeque.html)            An optionally-bounded [blocking deque](http://docs.google.com/java/util/concurrent/BlockingDeque.html) based on linked nodes. |
| class | [**LinkedBlockingQueue<E>**](http://docs.google.com/java/util/concurrent/LinkedBlockingQueue.html)            An optionally-bounded [blocking queue](http://docs.google.com/java/util/concurrent/BlockingQueue.html) based on linked nodes. |
| class | [**PriorityBlockingQueue<E>**](http://docs.google.com/java/util/concurrent/PriorityBlockingQueue.html)            An unbounded [blocking queue](http://docs.google.com/java/util/concurrent/BlockingQueue.html) that uses the same ordering rules as class [PriorityQueue](http://docs.google.com/java/util/PriorityQueue.html) and supplies blocking retrieval operations. |
| class | [**SynchronousQueue<E>**](http://docs.google.com/java/util/concurrent/SynchronousQueue.html)            A [blocking queue](http://docs.google.com/java/util/concurrent/BlockingQueue.html) in which each insert operation must wait for a corresponding remove operation by another thread, and vice versa. |

| Uses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.management](http://docs.google.com/javax/management/package-summary.html) | |
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| Subclasses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.management](http://docs.google.com/javax/management/package-summary.html) | |
| --- | --- |
| class | [**AttributeList**](http://docs.google.com/javax/management/AttributeList.html)            Represents a list of values for attributes of an MBean. |

| Uses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.management.relation](http://docs.google.com/javax/management/relation/package-summary.html) | |
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| Subclasses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.management.relation](http://docs.google.com/javax/management/relation/package-summary.html) | |
| --- | --- |
| class | [**RoleList**](http://docs.google.com/javax/management/relation/RoleList.html)            A RoleList represents a list of roles (Role objects). |
| class | [**RoleUnresolvedList**](http://docs.google.com/javax/management/relation/RoleUnresolvedList.html)            A RoleUnresolvedList represents a list of RoleUnresolved objects, representing roles not retrieved from a relation due to a problem encountered when trying to access (read or write) the roles. |

| Uses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.print.attribute.standard](http://docs.google.com/javax/print/attribute/standard/package-summary.html) | |
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| Subclasses of [AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html) in [javax.print.attribute.standard](http://docs.google.com/javax/print/attribute/standard/package-summary.html) | |
| --- | --- |
| class | [**JobStateReasons**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html)            Class JobStateReasons is a printing attribute class, a set of enumeration values, that provides additional information about the job's current state, i.e., information that augments the value of the job's [JobState](http://docs.google.com/javax/print/attribute/standard/JobState.html) attribute. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/AbstractCollection.html) | **Use** | [**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*** |
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[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.

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