• Constructor Summary

Constructors

Constructor and Description

LinkedList()

Constructs an empty list.

$$\underline{\textbf{LinkedList}}\,(\underline{\textbf{Collection}} \text{ extends }\underline{\textbf{E}}\text{ c})$$

Constructs a list containing the elements of the specified collection, in the order they are returned by the col

Method Summary

| All Methods Instance Methods Concrete Methods | | |
|---|--|--|
| Modifier and Type | Method and Description | |
| boolean | \underline{add} ($\underline{\mathbf{E}}$ e) Appends the specified element to the end of this list. | |
| void | <pre>add(int index, E element) Inserts the specified element at the specified position in this list.</pre> | |
| boolean | addAll (Collection extends E c) Appends all of the elements in the specified collection to the end of this l returned by the specified collection's iterator. | |
| boolean | <pre>addAll(int index, Collection<? extends E> c) Inserts all of the elements in the specified collection into this list, startin</pre> | |
| void | | |
| void | addLast (E e) Appends the specified element to the end of this list. | |

| void | <pre>clear() Removes all of the elements from this list.</pre> |
|----------------------------------|---|
| Object | <pre>clone () Returns a shallow copy of this LinkedList.</pre> |
| boolean | <pre>contains (Object o) Returns true if this list contains the specified element.</pre> |
| <pre>Iterator<e></e></pre> | descendingIterator () Returns an iterator over the elements in this deque in reverse sequential |
| <u>E</u> | element () Retrieves, but does not remove, the head (first element) of this list. |
| <u>E</u> | <pre>get (int index) Returns the element at the specified position in this list.</pre> |
| E | getFirst() Returns the first element in this list. |
| <u>E</u> | getLast () Returns the last element in this list. |
| int | <pre>indexOf (Object o) Returns the index of the first occurrence of the specified element in this the element.</pre> |
| int | <pre>lastIndexOf (Object o) Returns the index of the last occurrence of the specified element in this l the element.</pre> |
| <u>ListIterator</u> < <u>E</u> > | <pre>listIterator (int index) Returns a list-iterator of the elements in this list (in proper sequence), st the list.</pre> |
| boolean | offer (E e) Adds the specified element as the tail (last element) of this list. |

| boolean | offerFirst (E e) Inserts the specified element at the front of this list. |
|----------|---|
| boolean | offerLast (E e) Inserts the specified element at the end of this list. |
| <u>E</u> | <pre>peek () Retrieves, but does not remove, the head (first element) of this list.</pre> |
| <u>E</u> | <pre>peekFirst() Retrieves, but does not remove, the first element of this list, or returns n</pre> |
| E | <pre>peekLast() Retrieves, but does not remove, the last element of this list, or returns no</pre> |
| E | <u>pol1</u> ()Retrieves and removes the head (first element) of this list. |
| <u>E</u> | <pre>pollFirst() Retrieves and removes the first element of this list, or returns null if th</pre> |
| E | <pre>pollLast() Retrieves and removes the last element of this list, or returns null if this</pre> |
| E | pop () Pops an element from the stack represented by this list. |
| void | <u>push</u> (<u>E</u> e)Pushes an element onto the stack represented by this list. |
| E | remove () Retrieves and removes the head (first element) of this list. |
| E | remove (int index) Removes the element at the specified position in this list. |
| boolean | remove (Object o) |

| | Removes the first occurrence of the specified element from this list, if it is |
|---------------------------------|---|
| E | removeFirst () Removes and returns the first element from this list. |
| boolean | removeFirstOccurrence (Object o) Removes the first occurrence of the specified element in this list (when t |
| <u>E</u> | removeLast () Removes and returns the last element from this list. |
| boolean | removeLastOccurrence (Object o) Removes the last occurrence of the specified element in this list (when tr |
| <u>E</u> | <pre>set(int index, E element) Replaces the element at the specified position in this list with the specified</pre> |
| int | <u>size</u> () Returns the number of elements in this list. |
| <u>Spliterator</u> < <u>E</u> > | <pre>spliterator() Creates a late-binding and fail-fast Spliterator over the elements in</pre> |
| Object[] | toArray() Returns an array containing all of the elements in this list in proper sequ |
| <t> T[]</t> | toArray (T[] a) Returns an array containing all of the elements in this list in proper sequence the runtime type of the returned array is that of the specified array. |

Methods inherited from class java.util. <u>AbstractSequentialList</u>

iterator

Methods inherited from class java.util. <u>AbstractList</u>

equals, hashCode, listIterator, removeRange, subList

• Methods inherited from class java.util.<u>AbstractCollection</u>

containsAll, isEmpty, removeAll, retainAll, toString

Methods inherited from class java.lang. Object

finalize, getClass, notify, notifyAll, wait, wait, wait

Methods inherited from interface java.util.<u>List</u>

containsAll, equals, hashCode, isEmpty, iterator, listIterator
, removeAll, replaceAll, retainAll, sort, subList

Methods inherited from interface java.util.<u>Deque</u>

iterator

• Methods inherited from interface java.util.Collection

parallelStream, removeIf, stream

Methods inherited from interface java.lang.<u>lterable</u>

forEach