Class DLinkedList<E>

java.lang.Object
    DLinkedList<E>

```
public class DLinkedList<E>
extends java.lang.Object
```

Constructor Summary

Constructors

Constructor and Description
`DLinkedList()`

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
void	`add(int index, E item)` Add the given item at the given index
void	`addAll(int index, java.lang.Iterable<E> collection)` Inserts all elements of the given collection
void	`addFirst(E item)` Adds the given element to the front of the list.
void	`addLast(E item)` Adds the given item to the end of the list
void	`clear()` clears all elements in the list return the cleared

	list
java.lang.Object	**clone**() returns a copy of the list
boolean	**contains**(**E** items) Determines if the list contains the given item
boolean	**containsIter**(**E** items) Determines if the list contains the given item
boolean	**equals**(java.lang.Object list) determine is this list is equal to the given list
E	**getFirst**() Returns the first element in the list.
E	**getLast**() Returns the last element in the list.
boolean	**isEmpty**() If the list is empty
java.util.Iterator<**E**>	**iterator**()
void	**remove**() Remove the element in the list
boolean	**removeAll**(**E** item) removes all occurrences of the given item in the list
boolean	**removeAllIter**(**E** item) Same as removeAll but uses an iterator
boolean	**removeItem**(**E** item) removes the first occurence of the given item in the list
void	**test_iter_fails**()
java.lang.String	**toString**() changing integers to string return string representation of the list
java.lang.String	**toStringRev**() reversing toString method

Methods inherited from class java.lang.Object

`getClass, hashCode, notify, notifyAll, wait, wait, wait`

Constructor Detail

DLinkedList

```
public DLinkedList()
```

Method Detail

isEmpty

```
public boolean isEmpty()
```

If the list is empty

Returns:

`the data null;`

getFirst

```
public E getFirst()
```

Returns the first element in the list.

Returns:

`the first element in the list`

Throws:

`java.util.NoSuchElementException - when the list is empty`

getLast

```
public E getLast()
```

Returns the last element in the list.

Returns:

the last element in the list.

Throws:

java.util.NoSuchElementException - when list is empty

addLast

```
public void addLast(E item)
```

Adds the given item to the end of the list

Parameters:

item - the element to add

addFirst

```
public void addFirst(E item)
```

Adds the given element to the front of the list.

Parameters:

data - the element to add

add

```
public void add(int index,
                E item)
```

Add the given item at the given index

Parameters:

index - to the node that you are adding

item - added to the list

contains

```
public boolean contains(E items)
```

Determines if the list contains the given item

Parameters:

items - in the given list

Returns:

`true`

clear

```
public void clear()
```

clears all elements in the list return the cleared list

toString

```
public java.lang.String toString()
```

changing integers to string return string representation of the list

Overrides:

`toString in class java.lang.Object`

toStringRev

```
public java.lang.String toStringRev()
```

reversing toString method

Returns:

`the string`

containsIter

```
public boolean containsIter(E items)
```

Determines if the list contains the given item

Parameters:

`items - visit the nodes as it searches for the item`

Returns:

`null`

iterator

```
public java.util.Iterator<E> iterator()
```

removeItem

```
public boolean removeItem(E item)
```

removes the first occurence of the given item in the list

Parameters:

`item - is the given item`

Returns:

`true if the element is removed`

removeAll

```
public boolean removeAll(E item)
```

removes all occurrences of the given item in the list

Parameters:

`item - is the item we remove in all occurences`

Returns:

`true if the value of the element was removed`

equals

```
public boolean equals(java.lang.Object list)
```

determine is this list is equal to the given list

Overrides:

`equals in class java.lang.Object`

Parameters:

`list - return`

clone

```
public java.lang.Object clone()
```

returns a copy of the list

Overrides:

clone in class java.lang.Object

addAll

```
public void addAll(int index,
                   java.lang.Iterable<E> collection)
```

Inserts all elements of the given collection

Parameters:

index - in which we give the collection

collection - all elements that were inserted

remove

```
public void remove()
```

Remove the element in the list

removeAllIter

```
public boolean removeAllIter(E item)
```

Same as removeAll but uses an iterator

Parameters:

item - that is being removed

Returns:

the item being removed

test_iter_fails

```
public void test_iter_fails()
```

PREV CLASS **NEXT CLASS** FRAMES NO FRAMES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD