

FCStack

Inherits From: FCUnsortedCollection : FCOrderedCollection : FCCollection : Object

Declared In: FCStack.h

Class Description

FCStack is a subclass of FCUnsortedCollection that implements a standard FILO (First In Last Out) stack mechanism; objects are added onto the top of the stack and also retrieved from the top.

An example of a stack is the call stack when you run a program; every time you branch to a subroutine you push the address of the calling line onto the stack, and when you want to return from the subroutine you jump back to the address at the top of the stack.

FCStack inherits from FCUnsortedCollection, FCUnorderedCollection, and FCCollection. The

interface documented here only covers the methods that are new or different in FCStack, but all the methods in its superclasses will work on an FCStack as well. Refer to the documentation on those classes to complete the description of an FCStack.

Instance Variables

Inherited from Object

None declared in this class.

Inherited from FCCollection

id **_fc_contents** ;

Class **_fc_class** ;

SEL **_fc_sortSelector** ;

BOOL **_fc_archiveByReference** ;

Inherited from FCOrderedCollection

None declared in this class.

Inherited from FCUnsortedCollection

None declared in this class.

Declared in FCStack

None declared in this class.

Method Types

Querying the Contents	-top
Modifying the Contents	-push: -pop -duplicateTopObject -exchangeTopObjects

Instance Methods

duplicateTopObject
- **duplicateTopObject;**

Pushes the topmost element onto the top of the stack again. The old topmost element will now appear twice on the top of the stack. Returns **nil** if the stack was empty.

See also: - **push**, - **top**

exchangeTopObjects

- **exchangeTopObjects;**

Switches the positions of the topmost two elements on the stack. The old topmost element will now be second from the top; the old second element will now be at the top. Returns **nil** if the stack has less than two elements.

See also: - **push**, - **pop**

pop

- **pop;**

Pops the topmost element off the stack and returns it. Returns **nil** if the stack is empty.

This method is actually just a mnemonic cover for the - **removeLastObject** method.

See also: - **removeLastObject** (FCOrderedCollection)

push:

- **push:anObject;**

Pushes *anObject* onto the top of the stack. Returns **nil** if the programmer has set a content class and *anObject* isn't a kind of that class, otherwise returns **self** .

This method is actually just a mnemonic cover for the - **addObject:** method.

See also: - **addObject:** (FCCollection)

top

- **top;**

Returns the **id** of the topmost object on the stack, or **nil** if the stack is empty. The stack is not modified.

This method is actually just a mnemonic cover for the - **lastObject** method.

See also: - **lastObject** (FCOrderedCollection)