

init

Setting up the items addItem:

insertItem:at:
removeItem:
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indexOfItem:
count

Interacting with the trigger Button

changeButtonTitle:
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Activating the PopUpList popUp:

Getting the user's selection selectedItem

(SEL)action

Returns the action sent to the PopUpList's target when an item is selected from the list. This is action message of the PopUpList's Matrix.

setAction:, action (Matrix), target

addItem:(const char *)title

Adds an item with the name title to the bottom of the PopUpList, and returns the MenuCell created. If an equivalent can be added, for example). If an item with the name title already exists in the PopUpList, that item is returned.

insertItem:at:, removeItem:

changeButtonTitle:(BOOL)flag

If flag is YES, then when a selection is made from the list, the title of the selected item becomes the trigger that sent the popUp: message (nearly always a Button, but sometimes a Matrix). This makes the user see a pop-up list, with a small rectangular knob as the icon. If flag is NO, then the Button's title is used so that it appears to the user as a pull-down list, with a small inverted triangular mark for an icon. (that is, a pop-up list). Returns self.

(unsigned int)count

Returns the number of items in the PopUpList. If the PopUpList is configured as a pull-down list, the MenuCell that holds the pull-down list's title.

font

Returns the Font used to draw the items in the PopUpList.

setFont:

getButtonFrame:(NXRect *)bFrame

Returns self, and by reference in bFrame the frame for the trigger that last popped up the PopUpList. If the frame is set to (0.0, 0.0), so this method effectively returns the size of the trigger.

(int)indexOfItem:(const char *)title

this method.

`insertItem:(const char *)title at:(unsigned int)index`

Inserts an item with the name `title` at position `index` in the `PopUpList`. The item with an index of 0. Returns the newly inserted `MenuCell`.

If an item with a title of `title` already exists in the `PopUpList`, it's removed and the new one is added. If `index` is not 0, moves `title` to a new position, though if the item removed was at a position before `index`, the new item is inserted at `index + 1`. If you want to move an item, it's better to invoke `removeItem:` explicitly and `insertItem:` at:

`addItem:`, `removeItemAt:`

`popUp:trigger`

Pops up the `PopUpList` over the location of `trigger`, after resizing the `PopUpList` to be as wide as the `trigger`'s frame. `trigger` is the action method sent by the trigger object to the target `PopUpList`. If the mouse goes up in an item of the `Matrix` that displays the `PopUpList`'s entries sends the action message to the target. If the `PopUpList` is set with `changeButtonTitle:`, `trigger`'s title is set to the title of the selected item in the `PopUpList`. The `trigger`'s title is altered by this method. Returns self.

This method works if and only if the following conditions are met. The Application object's current mouse-down, and that mouse-down must have occurred within `trigger`'s frame this method can then be invoked only as a result of a mouse-down occurring in `trigger`. `trigger` must also be either a subclass of `NSMenuItem` that responds to the messages `title` and `setTitle:`, or a subclass of `Matrix` whose selected `Cell` responds to `title`. If there are no items in the `PopUpList` and `trigger`'s title is `NULL`, this method does nothing.

If `trigger`'s title isn't in the `PopUpList`, it's added as an item at the top before the `PopUpList` pops up. If there is an item with the same title as `trigger` (either a pop-up list's selected item or the "title" item), the new item is inserted exactly over `trigger` if possible if this would cause part of the list to be off the top or bottom of the screen, the list is shifted up or down so that it can fit on screen.

If any of the `MenuCells` in the `PopUpList`'s `Matrix` bring up submenus (that is, have a `Menu` as a target), they are changed to simply be title-displaying `MenuCells`, and they no longer bring up their submenus. Essentially, this means that you can't create a hierarchical `PopUpList` with this method. To create a hierarchical `PopUpList`, you must completely override this method.

`setAction:`, `setTarget:`, `changeButtonTitle:`

`removeItem:(const char *)title`

Removes and returns the `MenuCell` with the name `title`. If there is no such `MenuCell`, returns `nil`.

`removeItemAt:`

`removeItemAt:(unsigned int)index`

Removes the `MenuCell` for the item at the specified index. Returns the `MenuCell` at that location, or `nil` if there is no such `MenuCell`.

The target of the PopUpList can get the title of the selected item in one of two ways. Since the send message is actually the PopUpList's Matrix, the target can ask the Matrix for its selected Cell, and its title. Also, the PopUpList is the Matrix's Window, so the target can retrieve that and then send PopUpList. These two methods can be coded as follows:

selectedCell: (Matrix), title (Cell)

setAction:(SEL)aSelector

Sets the action sent to the PopUpList's target when an item is selected. The action message is actually containing the MenuCells that make up the PopUpList. Returns self.

A pull-down list does send its action if the mouse goes up in its title item.

action, setAction: (Matrix), setTarget:

setFont:fontObject

Sets the Font used to draw the PopUpList's items. The PopUpList does redraw itself, but since it redraws the screen when it receives this message, this shouldn't cause any undesirable side-effects. Returns self.

font (Matrix)

setTarget:anObject

Sets the object to which an action will be sent when an item is selected from the PopUpList. The action is sent by the Matrix containing the MenuCells that make up the PopUpList. Returns self.

target, setTarget: (Matrix), setAction:

sizeWindow:(NXCoord)width :(NXCoord)height

Your code should never invoke this method, though you're free to override it. This method is overridden because PopUpList needs to surround itself with a dark gray border, and thus needs to be one pixel larger than the Menu. It simply adds 1.0 to each dimension and sends sizeWindow:: to super. Returns self.

target

Returns the object to which the action will be sent when an item is selected from the list. The default target causes the action message to be sent up the responder chain. The target is actually sent the action list to the Matrix.

setTarget:, target (Matrix), action