

[AppKit](#) / NSPopUpButton

## Class

# NSPopUpButton

A control for selecting an item from a list.

macOS

```
@MainActor
class NSPopUpButton
```

## Overview

An `NSPopUpButton` object uses an `NSPopUpButtonCell` object to implement its user interface.

Note that while a menu is tracking user input, programmatic changes to the menu, such as adding, removing, or changing items on the menu, is not reflected.

### Important

Setting a pop up button's `image` property has no effect. The image displayed in a pop up button is taken from the selected menu item (in the case of a pop up menu) or from the first menu item (in the case of a pull-down menu).

## Topics

### Initializing an NSPopUpButton

```
init(frame: NSRect, pullsDown: Bool)
```

Returns an NSPopUpButton object initialized to the specified dimensions.

## Configuring the Cell

```
class NSPopUpButtonCell
```

The NSPopUpButtonCell class defines the visual appearance of pop-up buttons that display pop-up or pull-down menus. Pop-up menus present the user with a set of choices, much the way radio buttons do, but using much less space. Pull-down menus also provide a set of choices but present the information in a slightly different way, usually to provide a set of commands from which the user can choose.

## Setting the type of menu

```
var pullsDown: Bool
```

A Boolean value indicating whether the button displays a pull-down or pop-up menu.

```
var autoenablesItems: Bool
```

A Boolean value indicating whether the button enables and disables its items every time a user event occurs.

## Inserting and deleting items

```
func addItem(withTitle: String)
```

Adds an item with the specified title to the end of the menu.

```
func addItem(withTitles: [String])
```

Adds multiple items to the end of the menu.

```
func insertItem(withTitle: String, at: Int)
```

Inserts an item at the specified position in the menu.

```
func removeAllItems()
```

Removes all items in the receiver's item menu.

```
func removeItem(withTitle: String)
```

Removes the item with the specified title from the menu.

```
func removeItem(at: Int)
```

Removes the item at the specified index.

## Getting the user's selection

```
var selectedItem: NSMenuItem?
```

The menu item that was last selected by the user.

```
var titleOfSelectedItem: String?
```

The title of the item that was last selected by the user.

```
var indexOfSelectedItem: Int
```

The index of the item that was last selected by the user.

## Setting the current selection

```
func select(NSMenuItem?)
```

Selects the specified menu item.

```
func selectItem(at: Int)
```

Selects the item in the menu at the specified index.

```
func selectItem(withTag: Int) -> Bool
```

Selects the menu item with the specified tag.

```
func selectItem(withTitle: String)
```

Selects the item with the specified title.

## Getting menu items

```
var menu: NSMenu?
```

The menu associated with the pop-up button.

```
var numberOfItems: Int
```

The number of items in the menu.

```
var itemArray: [NSMenuItem]
```

The array of menu item objects associated with the button.

```
func item(at: Int) -> NSMenuItem?
```

Returns the menu item at the specified index.

```
func itemTitle(at: Int) -> String
```

Returns the title of the item at the specified index.

```
var itemTitles: [String]
```

An array of strings corresponding to the titles of the items in the menu.

```
func item(withTitle: String) -> NSMenuItem?
```

Returns the menu item with the specified title.

```
var lastItem: NSMenuItem?
```

The last item in the menu.

## Getting the indices of menu items

```
func index(of: NSMenuItem) -> Int
```

Returns the index of the specified menu item.

```
func indexOfItem(withTag: Int) -> Int
```

Returns the index of the menu item with the specified tag.

```
func indexOfItem(withTitle: String) -> Int
```

Returns the index of the item with the specified title.

```
func indexOfItem(withRepresentedObject: Any?) -> Int
```

Returns the index of the menu item that holds the specified represented object.

```
func indexOfItem(withTarget: Any?, andAction: Selector?) -> Int
```

Returns the index of the menu item with the specified target and action.

## Setting the cell edge to pop out in restricted situations

```
var preferredEdge: NSRectEdge
```

The edge of the button on which to display the menu when screen space is constrained.

## Setting the title

```
func setTitle(String)
```

Sets the string displayed in the receiver when the user isn't pressing the mouse button.

## Setting the state

```
func synchronizeTitleAndSelectedItem()
```

Ensures that the item being displayed by the receiver agrees with the selected item.

## Notifications

```
class let willPopUpNotification: NSNotification.Name
```

Posted when an NSPopUpButton object receives a mouse-down event—that is, when the user is about to select an item from the menu.

## Instance Methods

```
func selectedTag() -> Int
```

## Initializers

```
convenience init(image: NSImage, pullDownMenu: NSMenu)
```

Creates a standard pull-down button with a title, optional image, and menu.

```
convenience init(popUpMenu: NSMenu, target: AnyObject?, action: Selector?)
```

Creates a standard pop-up button with a menu, target, and action.

```
convenience init(title: String, image: NSImage?, pullDownMenu: NSMenu)
```

Creates a standard pull-down button with a title, optional image, and menu.

## Instance Properties

```
var altersStateOfSelectedItem: Bool
```

When the value of this property is YES, the selected menu item's state is set to NSControl StateValueOn. When the value of this property is NO, the menu item's state is not changed. When this property changes, the state of the currently selected item is updated appropriately. This property is ignored for pull-down buttons.

```
var usesItemFromMenu: Bool
```

When usesItemFromMenu is YES, a pull-down button uses the title of the first menu item and hides the first menu item. A pop-up button uses the title of the currently selected menu. The default value is YES.

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# Relationships

## Inherits From

`UIButton`

## Conforms To

`CVarArg`  
`CustomDebugStringConvertible`  
`CustomStringConvertible`  
`Equatable`  
`Hashable`  
`NSAccessibilityButton`  
`NSAccessibilityElementProtocol`  
`NSAccessibilityProtocol`  
`NSAnimatablePropertyContainer`  
`NSAppearanceCustomization`  
`NSCoding`  
`NSDraggingDestination`  
`NSObjectProtocol`  
`NSStandardKeyBindingResponding`  
`NSTouchBarProvider`  
`NSUserActivityRestoring`  
`NSUserInterfaceCompression`  
`NSUserInterfaceItemIdentification`  
`NSUserInterfaceValidations`  
`Sendable`  
`SendableMetatype`

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## See Also

### Controls

 Responding to control-based events using target-action

Handle user input by connecting buttons, sliders, and other controls to your app’s code using the target-action design pattern.

`class NSButton`

A control that defines an area on the screen that a user clicks to trigger an action.

`class NSColorWell`

A control that displays a color value and lets the user change that color value.

 Combo Box

Display a list of values in a pop-up menu that lets the user select a value or type in a custom value.

`class NSComboBoxButton`

A button with a pull-down menu and a default action.

 Date Picker

Display a calendar date and provide controls for editing the date value.

`class NSImageView`

A display of image data in a frame.

`class NSLevelIndicator`

A visual representation of a level or quantity, using discrete values.

 Path Control

A display of a file system path or virtual path information.

`class NSProgressIndicator`

An interface that provides visual feedback to the user about the status of an ongoing task.

`class NSRuleEditor`

An interface for configuring a rule-based list of options.

`class NSPredicateEditor`

A defined set of rules that allows the editing of predicate objects.

 Search Field

Provide a text field that is optimized for text-based search interfaces.

`class NSSegmentedControl`

Display one or more buttons in a single horizontal group.

 Slider

Display a range of values from which the user selects a single value.

