

# UIScrollViewDelegate

The methods declared by the UIScrollViewDelegate protocol allow the adopting delegate to respond to messages from the [UIScrollView](#) class and thus respond to, and in some affect, operations such as scrolling, zooming, deceleration of scrolled content, and scrolling animations.

## Declaration

```
protocol UIScrollViewDelegate
```

## Topics

## Responding to Scrolling and Dragging

func `scrollViewDidScroll`(UIScrollView)

Tells the delegate when the user scrolls the content view within the receiver.

func `scrollViewWillBeginDragging`(UIScrollView)

Tells the delegate when the scroll view is about to start scrolling the content.

func `scrollViewWillEndDragging`(UIScrollView, with `Velocity`: CGPoint, `targetContentOffset`: UnsafeMutablePointer<CGPoint>)

Tells the delegate when the user finishes scrolling the content.

func `scrollViewDidEndDragging`(UIScrollView, will `Decelerate`: Bool)

Tells the delegate when dragging ended in the scroll view.

func `scrollViewShouldScrollToTop`(UIScrollView) -> Bool

Asks the delegate if the scroll view should scroll to the top of the content.

func `scrollViewDidScrollToTop`(UIScrollView)

Tells the delegate that the scroll view scrolled to the top of the content.

func `scrollViewWillBeginDecelerating`(UIScrollView)

Tells the delegate that the scroll view is starting to decelerate the scrolling movement.

func `scrollViewDidEndDecelerating`(UIScrollView)

Tells the delegate that the scroll view has ended decelerating the scrolling movement.

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## Managing Zooming

```
func viewForZooming(in: UIScrollView) -> UIView?
```

Asks the delegate for the view to scale when zooming is about to occur in the scroll view.

```
func scrollViewWillBeginZooming(UIScrollView, with: UIView?)
```

Tells the delegate that zooming of the content in the scroll view is about to commence.

```
func scrollViewDidEndZooming(UIScrollView, with: UIView?, atScale: CGFloat)
```

Tells the delegate when zooming of the content in the scroll view completed.

```
func scrollViewDidZoom(UIScrollView)
```

Tells the delegate that the scroll view's zoom factor changed.

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## Responding to Scrolling Animations

```
func scrollViewDidEndScrollingAnimation(UIScrollView)
```

Tells the delegate when a scrolling animation in the scroll view concludes.

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## Responding to Inset Changes

```
func scrollViewDidChangeAdjustedContentInset(UIScrollView)
```

Called when the scroll view's inset values changed.