#### Getting the Safe Area

var safeAreaInsets: UIEdgeInsets

The insets that you use to determine the safe area for this view.

var safeAreaLayoutGuide: UILayoutGuide

The layout guide representing the portion of your view that is unobscured by bars and other content.

func safeAreaInsetsDidChange()

Called when the safe area of the view changes.

var insetsLayoutMarginsFromSafeArea: Bool

A Boolean value indicating whether the view's layout margins are updated automatically to reflect the safe area.

# Managing the View's Constraints

var constraints: [NSLayoutConstraint]

The constraints held by the view.

func addConstraint(NSLayoutConstraint)

Adds a constraint on the layout of the receiving view or its subviews.

func addConstraints([NSLayoutConstraint])

Adds multiple constraints on the layout of the receiving view or its subviews.

func removeConstraint(NSLayoutConstraint)

Removes the specified constraint from the view.

func removeConstraints([NSLayoutConstraint])

Removes the specified constraints from the view.

## **Working with Layout Guides**

func addLayoutGuide(UILayoutGuide)

Adds the specified layout guide to the view.

var layoutGuides: [UILayoutGuide]

The array of layout guide objects owned by this view.

var layoutMarginsGuide: UILayoutGuide

A layout guide representing the view's margins.

var readableContentGuide: UILayoutGuide

A layout guide representing an area with a readable width within the view.

func removeLayoutGuide(UILayoutGuide)

Removes the specified layout guide from the view.

## Measuring in Auto Layout

```
func systemLayoutSizeFitting(CGSize) -> CGSize
```

Returns the optimal size of the view based on its current constraints.

```
func systemLayoutSizeFitting(CGSize, withHorizontalFitting
Priority: UILayoutPriority, verticalFittingPriority: UILayout
Priority) -> CGSize
```

Returns the optimal size of the view based on its constraints and the specified fitting priorities.

```
var intrinsicContentSize: CGSize
```

The natural size for the receiving view, considering only properties of the view itself.

```
func invalidateIntrinsicContentSize()
```

Invalidates the view's intrinsic content size.

func contentCompressionResistancePriority(for: NSLayoutConstraint
.Axis) -> UILayoutPriority

Returns the priority with which a view resists being made smaller than its intrinsic size.

```
func setContentCompressionResistancePriority(UILayoutPriority,
for: NSLayoutConstraint.Axis)
```

Sets the priority with which a view resists being made smaller than its intrinsic size.

```
func contentHuggingPriority(for: NSLayoutConstraint.Axis) ->
UILayoutPriority
```

Returns the priority with which a view resists being made larger than its intrinsic size.

```
func setContentHuggingPriority(UILayoutPriority, for: NSLayout
Constraint.Axis)
```

Sets the priority with which a view resists being made larger than its intrinsic size.

## **Creating Constraints Using Layout Anchors**

func alignmentRect(forFrame: CGRect) -> CGRect

Returns the view's alignment rectangle for a given frame.

func frame(forAlignmentRect: CGRect) -> CGRect

Returns the view's frame for a given alignment rectangle.

var alignmentRectInsets: UIEdgeInsets

The insets from the view's frame that define its alignment rectangle.

func forBaselineLayout() > UIView

Returns a view used to satisfy baseline constraints.

Deprecated

var forFirstBaselineLayout: UIView

Returns a view used to satisfy first baseline constraints.

var forLastBaselineLayout: UIView

Returns a view used to satisfy last baseline constraints.

#### **Creating Constraints Using Layout Anchors**

Attach Auto Layout constraints to one of the view's anchors.

var bottomAnchor: NSLayoutYAxisAnchor

A layout anchor representing the bottom edge of the view's frame.

var centerXAnchor: NSLayoutXAxisAnchor

A layout anchor representing the horizontal center of the view's frame.

var centerYAnchor: NSLayoutYAxisAnchor

A layout anchor representing the vertical center of the view's frame.

var firstBaselineAnchor: NSLayoutYAxisAnchor

A layout anchor representing the baseline for the topmost line of text in the view.

var heightAnchor: NSLayoutDimension

A layout anchor representing the height of the view's frame.

var lastBaselineAnchor: NSLayoutYAxisAnchor

A layout anchor representing the baseline for the bottommost line of text in the view.

var leadingAnchor: NSLayoutXAxisAnchor

A layout anchor representing the leading edge of the view's frame.

var leftAnchor: NSLayoutXAxisAnchor

A layout anchor representing the left edge of the view's frame.

var rightAnchor: NSLayoutXAxisAnchor

A layout anchor representing the right edge of the view's frame.

var topAnchor: NSLayoutYAxisAnchor

A layout anchor representing the top edge of the view's frame.

var trailingAnchor: NSLayoutXAxisAnchor

A layout anchor representing the trailing edge of the view's frame.

var widthAnchor: NSLayoutDimension

A layout anchor representing the width of the view's frame.

## **Configuring Content Margins**

var directionalLayoutMargins: NSDirectionalEdgeInsets

The default spacing to use when laying out content in a view, taking into account the current language direction.

#### var layoutMargins: UIEdgeInsets

The default spacing to use when laying out content in the view.

#### var preservesSuperviewLayoutMargins: Bool

A Boolean value indicating whether the current view also respects the margins of its superview.

#### func layoutMarginsDidChange()

Notifies the view that the layout margins changed.