CAConstraintLayoutManager Class Reference

Graphics & Imaging > Quartz

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Contents

CAConstraintLayoutManager Class Reference 5

Overview 5
Tasks 6
  Creating the Layout Manager 6
Class Methods 6
  layoutManager 6

Document Revision History 7

Index 9

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CAConstraintLayoutManager Class Reference

Inherits from	NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/QuartzCore.framework
Availability	Available in Mac OS X v10.5 and later.
Declared in	CAConstraintLayoutManager.h
Companion guides	Core Animation Programming Guide Core Animation Cookbook
Related sample code	Core Animation QuickTime Layer

Overview

`CAConstraintLayoutManager` provides a constraint-based layout manager.

Constraint-based layout allows you to describe the position and size of a layer by specifying relationships between a layer and its sibling layers or its superlayer. The relationships are represented by instances of the `CAConstraint` class that are stored in an array in the layer's `constraints` property. You add constraints for a layer using its `addConstraint:` method. Each `CAConstraint` instance encapsulates one geometry relationship between two layers. Layout is then performed by fetching the constraints of each sublayer and solving the resulting system of constraints for the frame of each sublayer starting from the bounds of the containing layer.

Sibling layers are referenced by name, using the `name` property of each layer. The special name `superlayer` is used to refer to the layer's superlayer.

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Important: It is possible to specify a set of constraints for a layer (for example, circular attribute dependencies) that will cause layout to fail. In that case the behavior is undefined.

Tasks

Creating the Layout Manager

`+ layoutManager` (page 6)
Creates and returns a new `CAConstraintLayoutManager` instance.

Class Methods

layoutManager

Creates and returns a new `CAConstraintLayoutManager` instance.

```
+ (id)layoutManager
```

Return Value
A new `CAConstraintLayoutManager` instance.

Availability
Available in Mac OS X v10.5 and later.

Related Sample Code
Core Animation QuickTime Layer

Declared In
`CAConstraintLayoutManager.h`

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Document Revision History

This table describes the changes to *CAConstraintLayoutManager Class Reference*.

Date	Notes
2007-12-11	Corrected typos.
2007-07-24	New document that describes the class that provides constraint-based relative layout to a layer's sublayers.

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Document Revision History

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Index

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`layoutManager` class method 6

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