# **UIDynamicItem Protocol Reference**



## **Contents**

### **UIDynamicItem Protocol Reference 3**

```
Overview 3
Tasks 4
Participating in Dynamic Animation 4
Properties 4
bounds 4
center 4
transform 5
```

**Document Revision History** 6

## UIDynamicItem Protocol Reference

Adopted by	UIView UICollectionViewLayoutAttributes
Conforms to	NSObject
Framework	/System/Library/Frameworks/UIKit.framework
Availability	Available in iOS 7.0 and later.
Declared in	UIDynamicBehavior.h

### Overview

**Important:** This is a preliminary document for an API or technology in development. Although this document has been reviewed for technical accuracy, it is not final. This Apple confidential information is for use only by registered members of the applicable Apple Developer program. Apple is supplying this confidential information to help you plan for the adoption of the technologies and programming interfaces described herein. This information is subject to change, and software implemented according to this document should be tested with final operating system software and final documentation. Newer versions of this document may be provided with future seeds of the API or technology.

To make a custom object eligible to participate in UIKit Dynamics, adopt the UIDynamicItem protocol in the object's class.

Starting in iOS 7, the UIView and UICollectionViewLayoutAttributes classes implement this protocol.

### **Tasks**

#### **Participating in Dynamic Animation**

bounds (page 4) required property

Called when a dynamic animator needs the bounds of the dynamic item. (required) (read-only)

center (page 4) required property

The center point of the dynamic item. (required)

transform (page 5) required property

The rotation of the dynamic item. (required)

## **Properties**

#### bounds

Called when a dynamic animator needs the bounds of the dynamic item. (required) (read-only)

@property(nonatomic, readonly) CGRect bounds

#### **Availability**

Available in iOS 7.0 and later.

#### Declared in

UIDynamicBehavior.h

#### center

The center point of the dynamic item. (required)

@property(nonatomic, readwrite) CGPoint center

#### Discussion

The dynamic animator (that the item is associated with) calls this method when it has computed a new center point for the item.

#### **Availability**

Available in iOS 7.0 and later.

#### Declared in

UIDynamicBehavior.h

#### transform

*The rotation of the dynamic item. (required)* 

@property(nonatomic, readwrite) CGAffineTransform transform

#### Discussion

UIKit Dynamics makes use only of the rotation value in this property.

The dynamic animator (that the item is associated with) calls this method when it has computed a new rotation value for the item.

#### **Availability**

Available in iOS 7.0 and later.

#### Declared in

UIDynamicBehavior.h

## **Document Revision History**

This table describes the changes to UIDynamicItem Protocol Reference.

Date	Notes
2013-06-10	New document that describes the interface that allows an object to participate in UIKit Dynamics.

Apple Inc. Copyright © 2013 Apple Inc. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Apple Inc. 1 Infinite Loop Cupertino, CA 95014 408-996-1010

Apple, the Apple logo, Cocoa, and Cocoa Touch are trademarks of Apple Inc., registered in the U.S. and other countries.

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED (AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.