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# UITextRange Class Reference

Data Management: Strings, Text, & Fonts



2010-02-25



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# UITextRange Class Reference

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<b>Inherits from</b>	NSObject
<b>Conforms to</b>	NSObject (NSObject)
<b>Framework</b>	/System/Library/Frameworks/UIKit.framework
<b>Availability</b>	Available in iOS 3.2 and later.
<b>Declared in</b>	UITextInput.h

## Overview

A `UITextRange` object represents a range of characters in a text container; in other words, it identifies a starting index and an ending index in string backing a text-entry object.

Classes that adopt the `UITextInput` protocol must create custom `UITextRange` objects for representing ranges within the text managed by the class. The starting and ending indexes of the range are represented by `UITextPosition` objects. The text system uses both `UITextRange` and `UITextPosition` objects for communicating text-layout information. There are two reasons for using objects for text ranges rather than primitive types such as `NSRange`:

- Some documents contain nested elements (for example, HTML tags and embedded objects) and you need to track both absolute position and position in the visible text.
- The WebKit framework, which the iPhone text system is based on, requires that text indexes and offsets be represented by objects.

If you adopt the `UITextInput` protocol, you must create a custom `UITextRange` subclass as well as a custom `UITextPosition` subclass.

## Tasks

### Defining Ranges of Text

[start](#) (page 6) *property*

The start of a range of text. (read-only)

[end](#) (page 6) *property*

The end of the range of text. (read-only)

[empty](#) (page 6) *property*

A Boolean value that indicates whether the range of text represented by the receiver is zero-length. (read-only)

## Properties

For more about Objective-C properties, see “Properties” in *The Objective-C Programming Language*.

### empty

A Boolean value that indicates whether the range of text represented by the receiver is zero-length. (read-only)

```
@property(n nonatomic, readonly, getter=isEmpty) BOOL empty
```

#### Availability

Available in iOS 3.2 and later.

#### Declared In

UITextInput.h

### end

The end of the range of text. (read-only)

```
@property(n nonatomic, readonly) UITextPosition *end
```

#### Discussion

Compute and store in this property the UITextPosition object representing the end of a range of text.

#### Availability

Available in iOS 3.2 and later.

#### Declared In

UITextInput.h

### start

The start of a range of text. (read-only)

```
@property(n nonatomic, readonly) UITextPosition *start
```

#### Discussion

Compute and store in this property the UITextPosition object representing the start of a range of text.

#### Availability

Available in iOS 3.2 and later.

#### Declared In

UITextInput.h

# Document Revision History

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

Date	Notes
2010-02-25	New document that describes the base class used for objects that represent ranges in a text document.

## REVISION HISTORY

### Document Revision History