



iOS

UI Components

Sisoft Technologies Pvt Ltd

SRC E7, Shipra Riviera Bazar, Gyan Khand-3, Indirapuram, Ghaziabad

Website: www.sisoft.in Email: info@sisoft.in

Phone: +91-9999-283-283



Types of Views

View category	Purpose	Examples of views
Content	Display a particular type of content, such as an image or text.	Image view, label
Collections	Display collections or groups of views.	Collection view, table view
Controls	Perform actions or display information.	Button, slider, switch
Bars	Navigate, or perform actions.	Toolbar, navigation bar, tab bar
Input	Receive user input text.	Search bar, text view
Containers	Serve as containers for other views.	View, scroll view
Modal	Interrupt the regular flow of the app to allow a user to perform an action.	Action sheet, alert view



Labels

- NSObject->UIResponder->UIView->UILabel
- The UILabel class implements a read-only text view.
- Properties
 - text
 - textColor
 - numberOfLines
- Creating Programmatically
 - `UILabel *sLabel = [[UILabel alloc]
initWithFrame:CGRectMake(20,300,100,60)] ;`

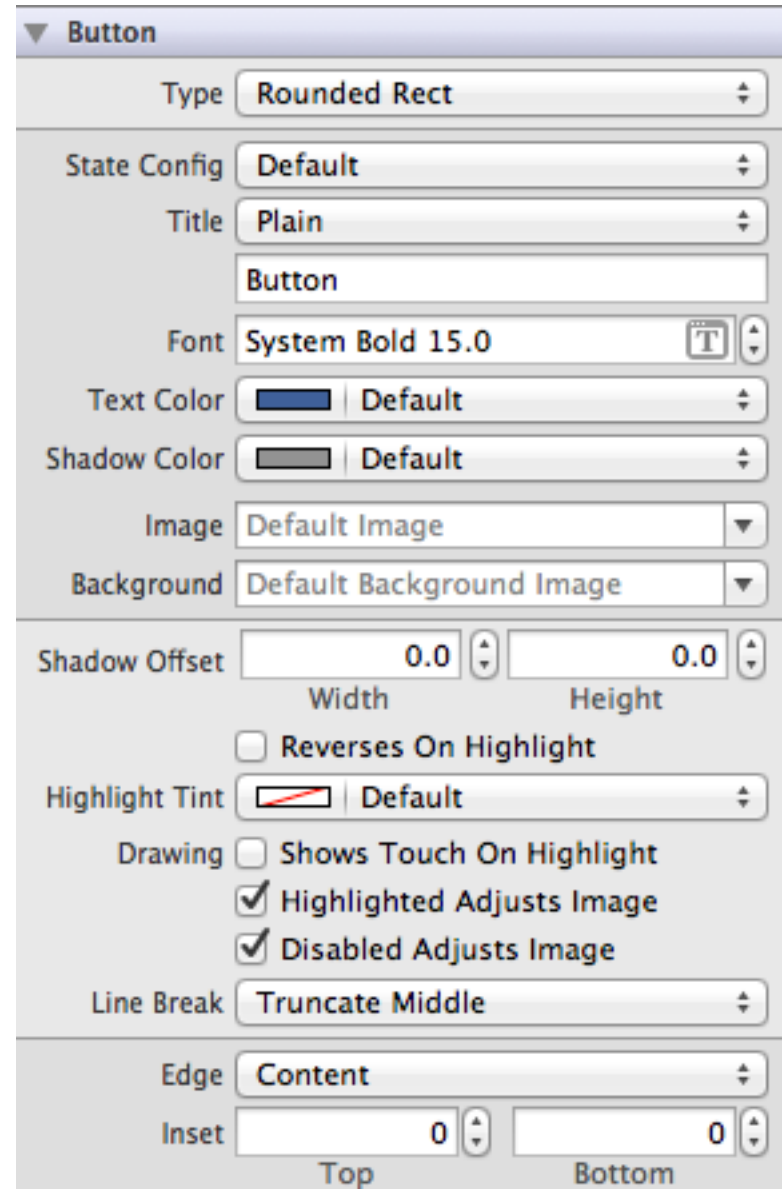


UIButton

- NSObject->UIResponder->UIView->UIControl->UIButton
- Implements a button that intercepts touch events and sends an action message to a target object when it's tapped
- You can set the title, image, and other appearance properties of a button
- In addition, you can specify a different appearance for each button state.

UIButton...

- Common action
- **Touch Up Inside**
- Inspector window showing various properties

A screenshot of the UIButton Inspector window in Xcode. The window has a title bar with a dropdown arrow and the text "Button". Below the title bar, there are several sections of controls. The first section contains dropdown menus for "Type" (set to "Rounded Rect"), "State Config" (set to "Default"), "Title" (set to "Plain"), and a text field containing "Button". The second section contains a "Font" dropdown (set to "System Bold 15.0"), a "Text Color" color picker (set to "Default"), a "Shadow Color" color picker (set to "Default"), an "Image" dropdown (set to "Default Image"), and a "Background" dropdown (set to "Default Background Image"). The third section contains two numeric input fields for "Shadow Offset" (Width and Height, both set to 0.0), a checkbox for "Reverses On Highlight" (unchecked), a "Highlight Tint" color picker (set to "Default"), a "Drawing" section with three checkboxes ("Shows Touch On Highlight" unchecked, "Highlighted Adjusts Image" checked, "Disabled Adjusts Image" checked), and a "Line Break" dropdown (set to "Truncate Middle"). The fourth section contains an "Edge" dropdown (set to "Content") and an "Inset" section with two numeric input fields for "Top" and "Bottom" (both set to 0).



UIButton...

A button sends the [UIControlEventTouchUpInside](#) event when the user taps it. You can respond to this event by performing some corresponding action in your app, such as saving information. You register the [target-action](#) methods for a button as shown below.

```
[self.myButton addTarget:self  
    action:@selector(myAction:)  
    forControlEvents:UIControlEventTouchUpInside];
```



Text Field

- NSObject->UIResponder->UIView->UIControl->UITextField
- A UITextField object is a control that displays editable text
- When the user taps in a text field, that text field becomes the first responder and automatically asks the system to display the associated keyboard
- To dismiss the keyboard, send the [resignFirstResponder](#) message to the text field that is currently the first responder.



Text Field

- Properties
 - text
 - Placeholder
 - Font
 - textColor



Text View

- NSObject->UIResponder->UIView->UIScrollView->UITextView
- The UITextView class implements the behavior for a scrollable, multiline text region. The class supports the display of text using custom style information and also supports text editing.

ImageView

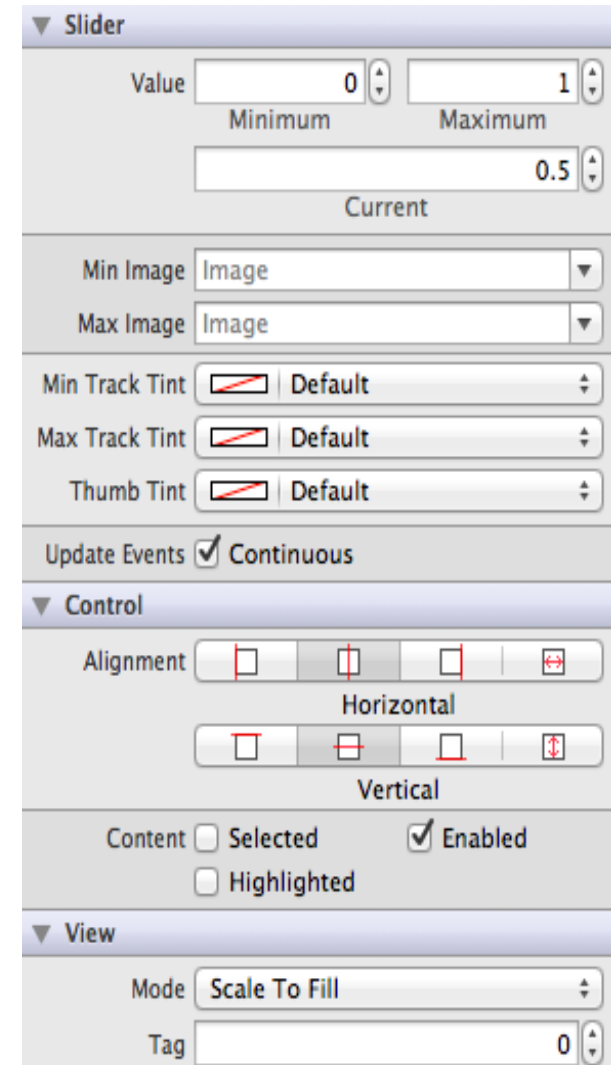
- NSObject->UIResponder->UIView->UIImageView
- An image view object provides a view-based container for displaying either a single image or for animating a series of images.
- Initialization : - initWithImage
- Properties
 - image
 - highlightedImage

UISlider

- NSObject->UIResponder->UIView->UIControl->UITextField
- UISlider displays a horizontal bar, called a track, that represents a range of values
- The current value is shown by the position of an indicator, or thumb
- A user selects a value by sliding the thumb along the track
- You can customize the appearance of both the track and the thumb.

UISlider....

- Common action **Value Changed**
- Inspector window showing various properties

The image shows the UISlider Inspector window in Xcode. It is divided into three sections: Slider, Control, and View. The Slider section includes fields for Value (0 to 1), Minimum, Maximum, and Current (0.5). It also has dropdown menus for Min Image and Max Image, and tint color pickers for Min Track Tint, Max Track Tint, and Thumb Tint, all set to Default. The Update Events section has a checked checkbox for Continuous. The Control section shows Alignment options for Horizontal and Vertical, with Horizontal selected. The Content section has checkboxes for Selected (unchecked) and Enabled (checked), and a checkbox for Highlighted (unchecked). The View section has a Mode dropdown set to Scale To Fill and a Tag field set to 0.

▼ Slider

Value
Minimum Maximum

Current

Min Image

Max Image

Min Track Tint

Max Track Tint

Thumb Tint

Update Events ☒ Continuous

▼ Control

Alignment

Horizontal

Vertical

Content ☐ Selected ☒ Enabled
☐ Highlighted

▼ View

Mode

Tag



UISlider....

- Properties
 - Value
 - minimumValue
 - maximumValue

UISwitch

- NSObject->UIResponder->UIView->UIControl->UISwitch
- class to create and manage the On/Off buttons used
- The UISwitch class declares a property and a method to control its on/off state
- when the user manipulates the switch control (“flips” it) a [UIControlEventValueChanged](#) event is generated, which results in the control (if properly configured) sending an action message

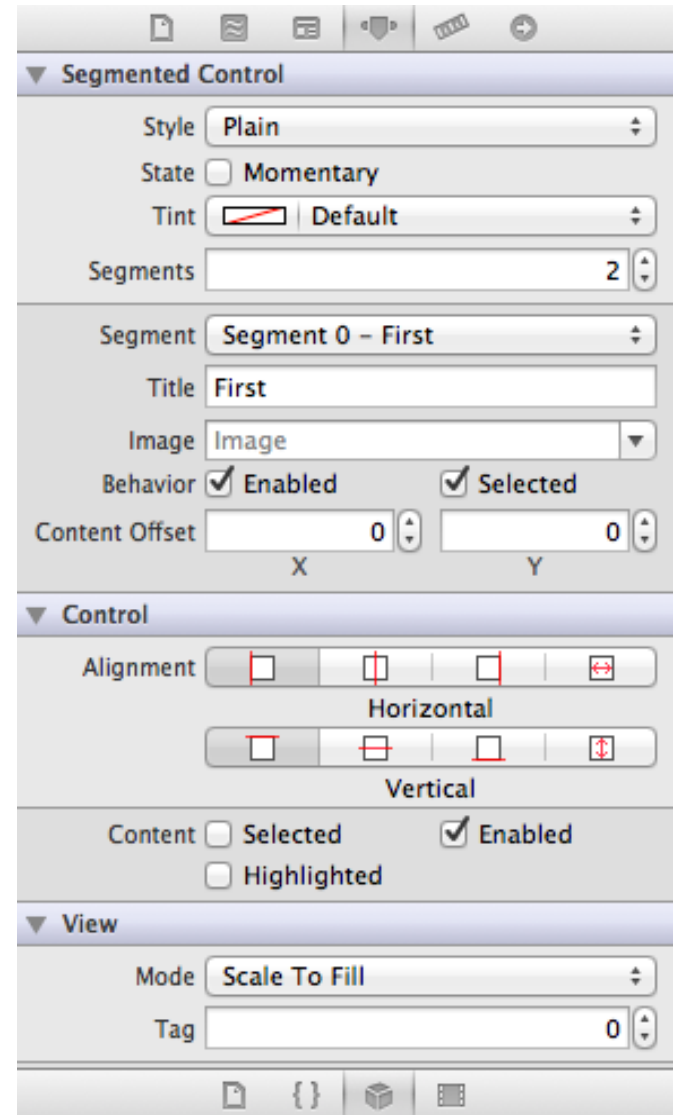


UISegmentedControl

- NSObject->UIResponder->UIView->UIControl->UISegmentedControl
- Displays an element that comprises multiple segments
- Each of which functions as a discrete button
Each segment can display either text or an image, but not both
- UISegmentedControl ensures that the width of each segment is proportional, based on the total number of segments, unless you set a specific width.

UISegmentedControl...

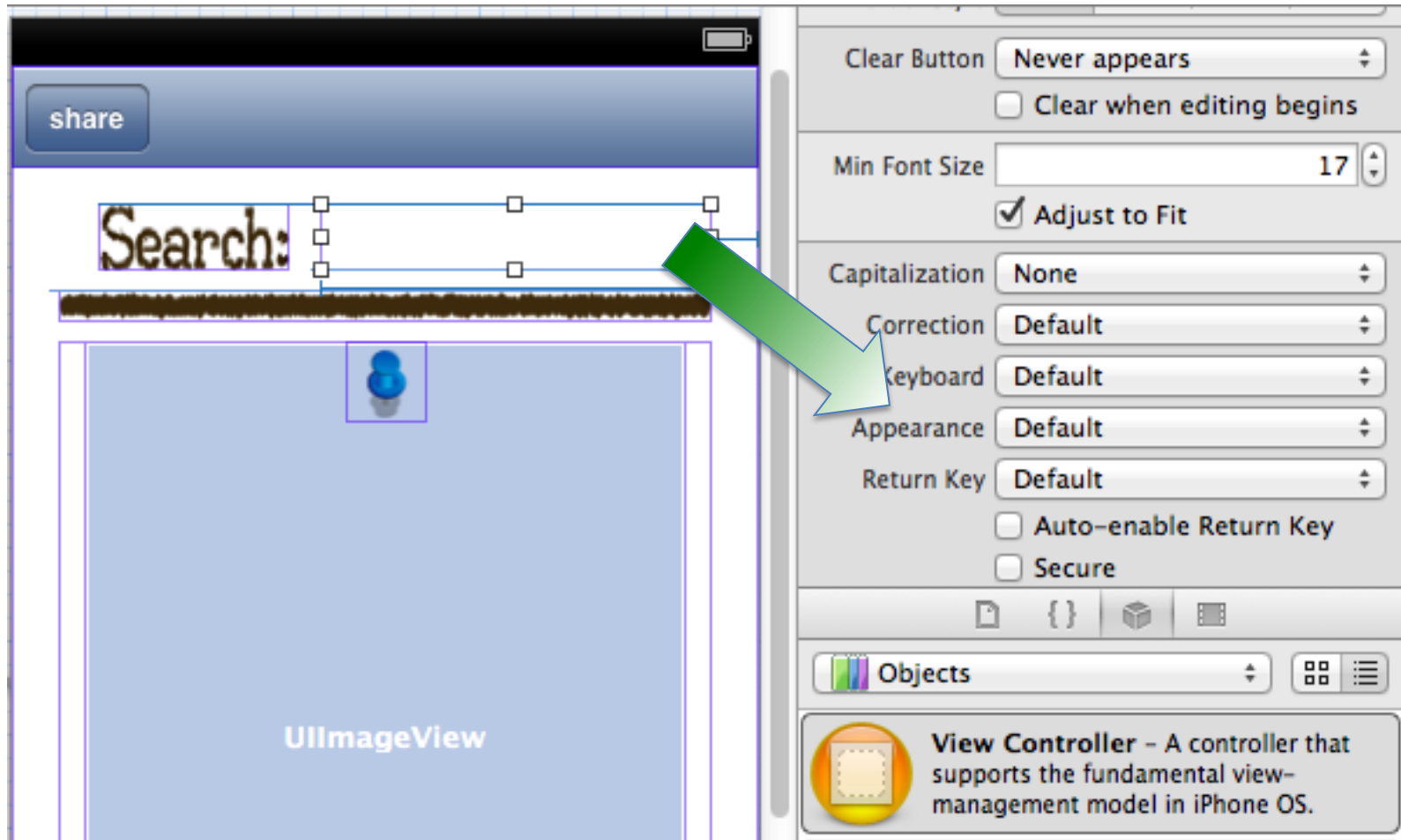
- Common action
Value Changed
- Inspector window showing various properties



Keyboard Inputs



Selecting Keyboard Type For Text Field

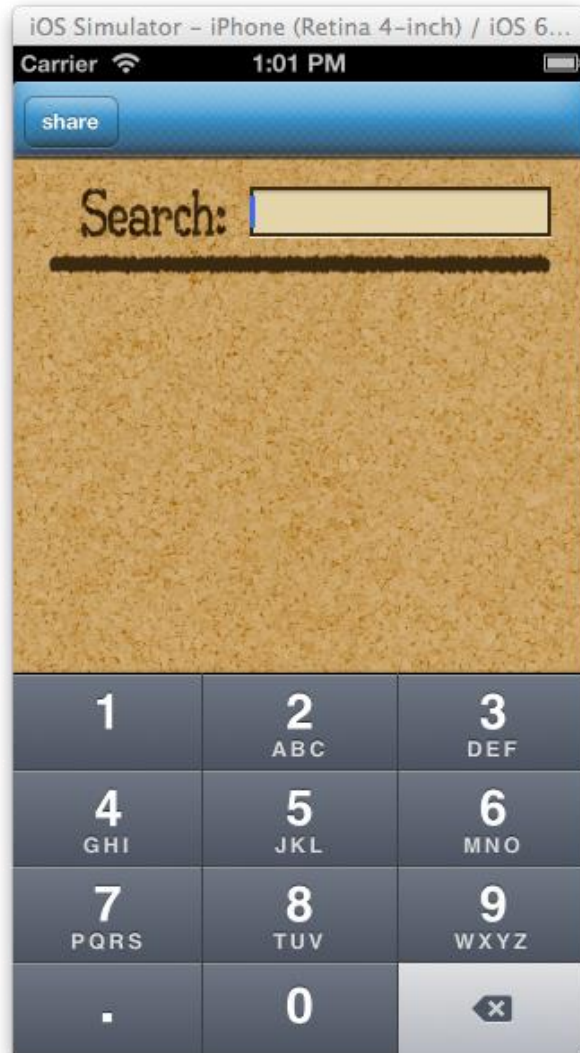




Types of Keyboard

- Default
- NumberPad
- DecimalPad
- PhonePad
- NumberPhonePad
- E-mail Address
- Url
- Twitter
- Numbers And Punctuations
- ASCII Capable

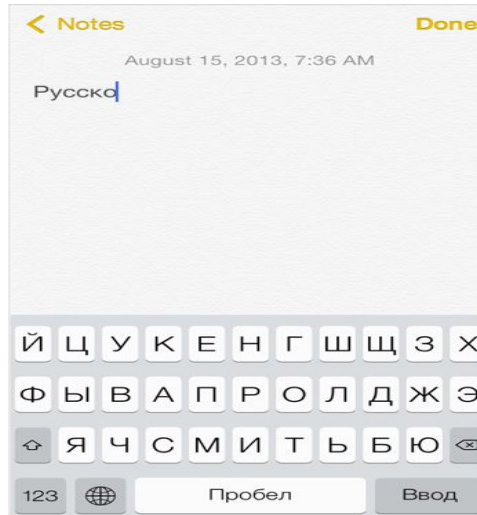
Default, Decimal And E-Mail Pad Look



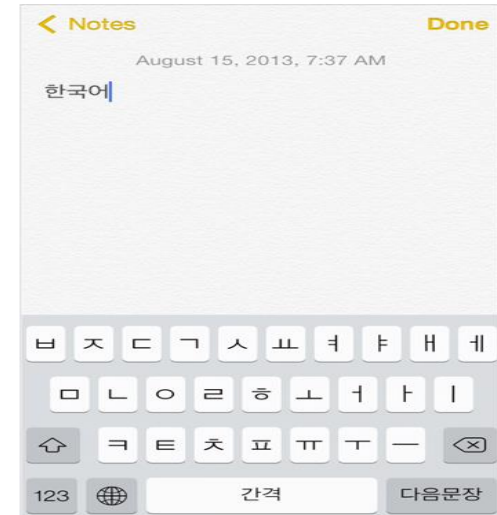
Several different keyboards and input methods



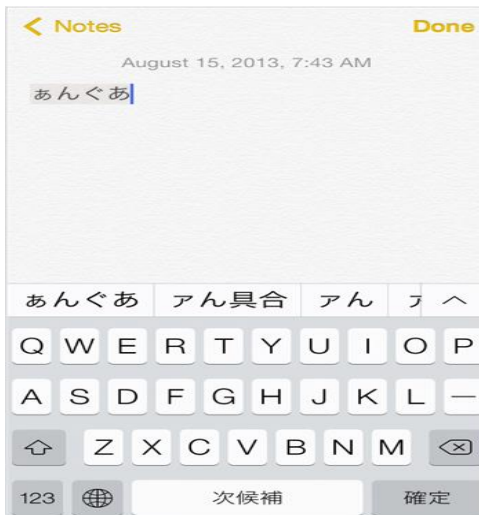
English



Russian



Korean



Japanese-Romanji

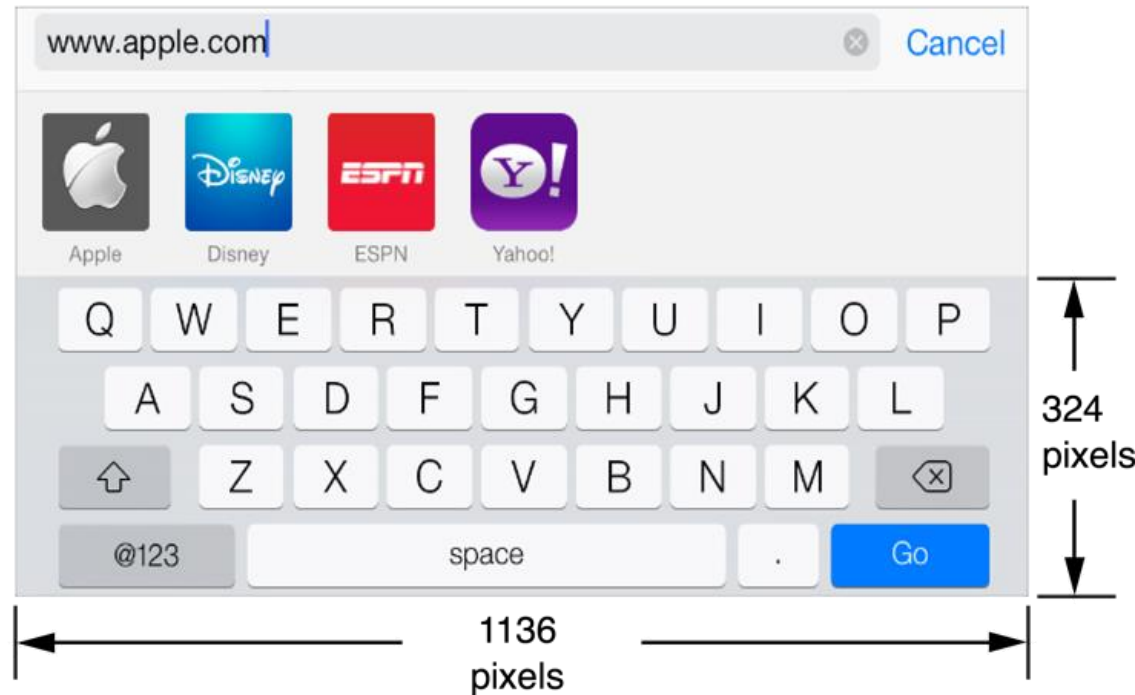
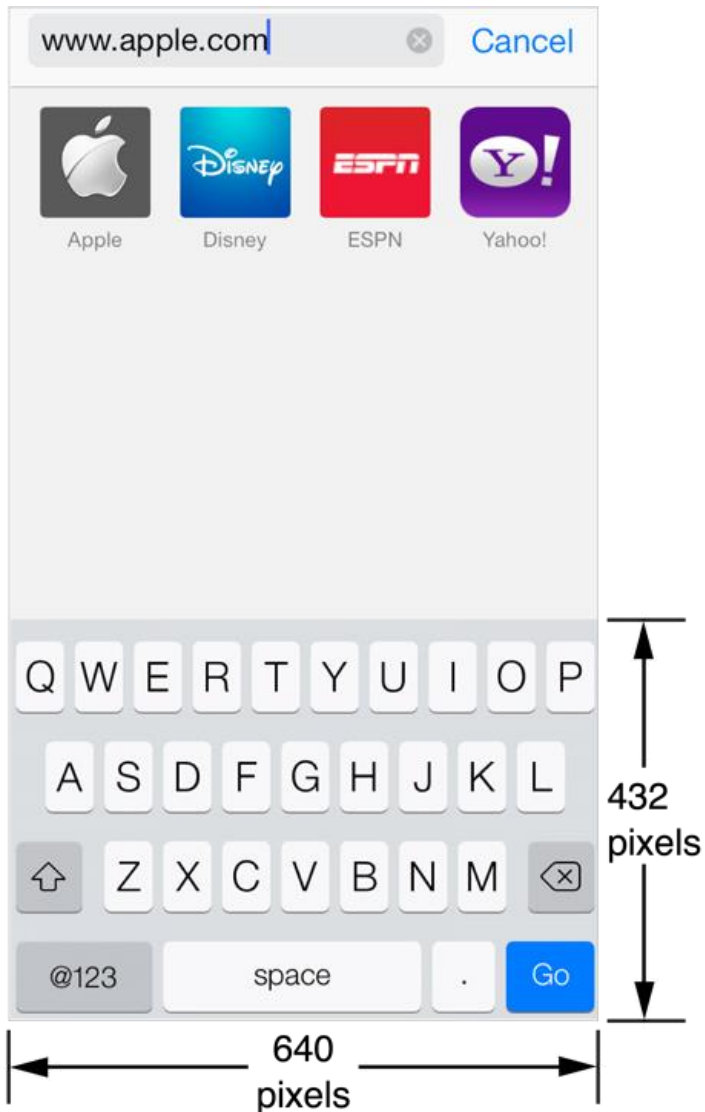


Japanese-Kana



Chinese-Handwriting

Relative keyboard sizes in portrait and landscape modes



Keyboard Method

- In Objective-C there are several method related to keyboard.
- There are delegate method for keyboard that handle the keyboard properties.
- Loading the keyboard.
- Hiding the keyboard.
- Show the keyboard automatically.



Some Code

```
[textBoxName sendMessage];
```

Displaying the Keyboard:

```
[textField becomeFirstResponder];
```

Dismissing the Keyboard

```
[textField resignFirstResponder];
```

Notification

```
-(void)keyboardDoneObserver: (NSNotification*)notification
```

- For more on working with keyboard visit link:

<https://developer.apple.com/library/ios/documentation/StringsTextFonts/Conceptual/TextAndWebiPhoneOS/KeyboardManagement/KeyboardManagement.html>