

# «iWrite»

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# As an introduction...

## Goals of this example

- Shows how the keyboard works
- UITextView
- UITextField



# Example



# ViewController



**Sake of simplicity...**

Code located in a  
ViewController

# ViewController

```
import UIKit

class ViewController: UIViewController, UITextViewDelegate, UITextFieldDelegate {

    let back = UIImageView(image: UIImage(named: "backimg"))
    let lab1 = UILabel()
    let lab2 = UILabel()
    let output = UILabel()
    let textv = UITextView()
    let textf = UITextField()
```

# ViewController

```
override func viewDidLoad() {
    super.viewDidLoad()
    // Do any additional setup after loading the view
    self.view = UIView()
    self.view.backgroundColor = UIColor.white

    back.frame = CGRect(x: 0.0, y: 0.0,
                        width: UIScreen.main.bounds.width,
                        height: UIScreen.main.bounds.width)

    back.alpha = 0.6

    lab1.font = UIFont.boldSystemFont(ofSize: 18.0)
    lab1.text = "UITextView"
    lab1.translatesAutoresizingMaskIntoConstraints = false
    lab1.textAlignment = .center

    lab2.text = "UITextField"
    lab2.translatesAutoresizingMaskIntoConstraints = false
    lab2.font = UIFont.boldSystemFont(ofSize: 18.0)
    lab2.textAlignment = .center

    textv.translatesAutoresizingMaskIntoConstraints = false
    textv.backgroundColor = UIColor(red:0.98, green:0.94,
                                     blue:0.54, alpha:0.5)

    textv.keyboardType = .asciiCapable
    textv.returnKeyType = .send
    textv.keyboardAppearance = .dark
    textv.delegate = self
}
```

# ViewController

```
textf.translatesAutoresizingMaskIntoConstraints = false
textf.backgroundColor = UIColor(red:0.98, green:0.94,
                                blue:0.54, alpha:0.5)

textf.borderStyle = .roundedRect
textf.keyboardType = .decimalPad
textf.delegate = self

self.view.addSubview(back)
self.view.addSubview(lab1)
self.view.addSubview(lab2)
self.view.addSubview(textv)
self.view.addSubview(textf)
self.view.addSubview(output)

let v = UIView();
v.backgroundColor = UIColor.blue
self.view.addSubview(v)

self.displayInSize(size: UIScreen.main.bounds.size)
}

override func viewWillTransition(to size: CGSize,
                                  with coordinator: UIViewControllerTransitionCoordinator) {
    self.displayInSize(size: size)
}
```

# ViewController

```
func displayInSize(size: CGSize) {
    var top = 0
    if size.width < size.height {
        top = 20
    } else {
        top = 0
    }
    // To have he image centered
    back.center = CGPoint(x:size.width / 2, y:size.height / 2)
    lab1.frame = CGRect(x: 20, y: top + 10,
                        width:Int(size.width - 40), height:30)
    textv.frame = CGRect(x: 10, y: top + 40,
                        width:Int(size.width - 20), height:100)
    lab2.frame = CGRect(x: 20, y: top + 150,
                        width:Int(size.width - 40), height:30)
    textf.frame = CGRect(x: 50, y: top + 180,
                        width:Int(size.width - 100), height:30)
    output.frame = CGRect(x: 50, y: top + 250,
                        width:Int(size.width - 100), height:30)
}
```



# ViewController

```
// UITextViewDelegate protocol

func textViewDidBeginEditing(_ textView: UITextView) {
    textView.backgroundColor = UIColor(red: 1.0, green: 1.0,
                                       blue: 1.0, alpha: 0.5)
}

func textViewDidEndEditing(_ textView: UITextView) {
    textView.backgroundColor = UIColor(red: 0.3, green: 0.3,
                                       blue: 0.3, alpha: 0.3)
    output.text = "textView = "+textView.text
}

func textView(_ textView: UITextView,
              shouldChangeTextIn range: NSRange,
              replacementText text: String) -> Bool {
    if text == "\n" {
        textView.resignFirstResponder()
        return false
    } else {
        return true
    }
}
```

# ViewController

```
// textFieldDelegate protocol

func textField(_ textField: UITextField,
               shouldChangeCharactersIn range: NSRange,
               replacementString string: String) -> Bool {
    if textField.text!.count >= 10 {
        textField.resignFirstResponder()
        if textField.text != nil {
            output.text = "textField = "+textField.text!
        }
    }
    return true
}

func textFieldDidBeginEditing(_ textField: UITextField) {
    textField.backgroundColor = UIColor(red: 1.0, green: 0.0,
                                         blue: 0.0, alpha: 0.2)

    textField.borderStyle = .bezel
    textField.text = ""
}

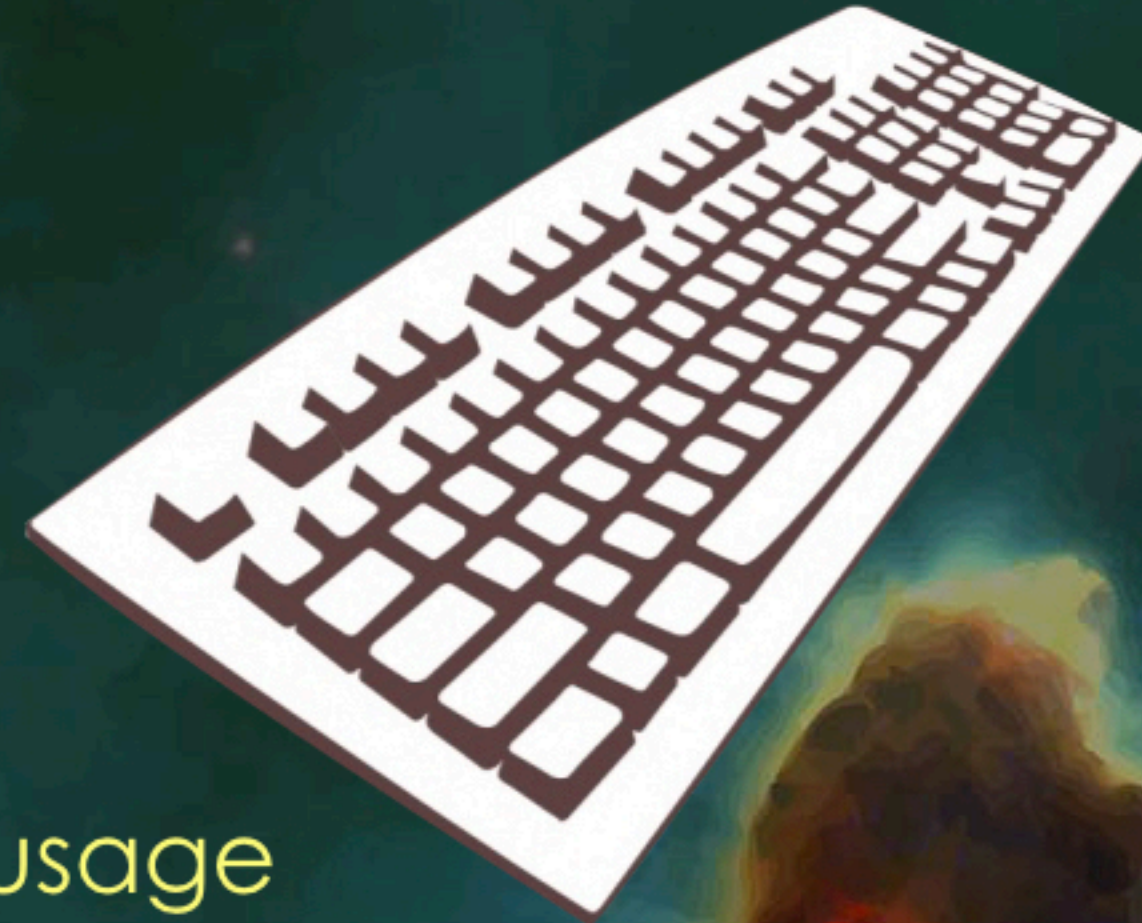
func textFieldDidEndEditing(_ textField: UITextField) {
    textField.backgroundColor = UIColor(red:0.98, green:0.94,
                                         blue:0.54, alpha:0.5)

    textField.borderStyle = .roundedRect
}
}
```


# A sa conclusion...

## You now have several ways to get text from users

-  UIAlertController (alert)
-  UISearchBar
-  UITextView
-  UITextField
  
-  Each one is adapted for a given usage



## You next apps might consider more interactivity

-  Let's go...

