**TextInput** 

**UITextField** 

**UITextView** 

**TextInput Delegates** 

Customizing TextInput Views

UIWebView/WKWebView

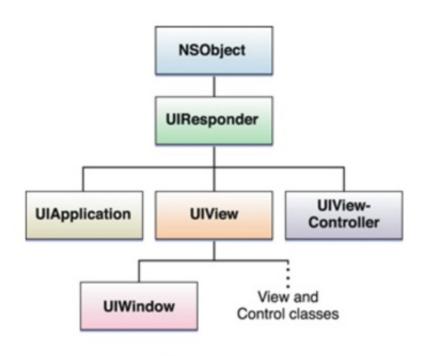
Custom Drawing With Core Graphics & UIBezierPath

## **Text Input**

- UIKit offers 2 ways to input text
- UITextField: single lines
- UITextView: multiple lines
- UITextView inherits from UIScrollView
- Delegates are important for interacting with text input controls
- These inputs conform to the UITextInputTraits protocol which allows you to customize the keyboard type

### **UIResponder**

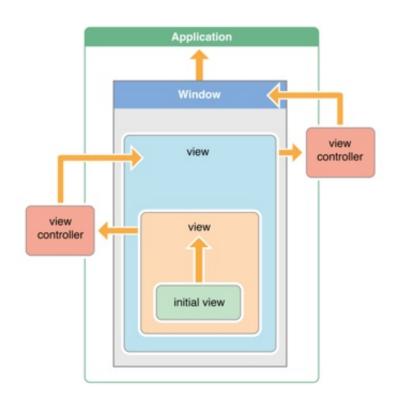
- Both UITextField & UITextView inherit from UIResponder
- Let's talk about responders in iOS.
- All responder objects that inherit from the class UIResponder
- Any instance that inherits from UIResponder can handle events, like, touch events, motion events
- Visible elments of an app are almost always responders. e.g. all UIViews, controls (like UIButton)
- ViewControllers and the UIApplication itself are responders.



**UIKit framework** 

# Responder Chain

• If a responder cannot handle an event it automatically forwards it to the "next responder" in a linked series called the **responder chain**.



- The Responder Chain will always mark one responder as the First Responder & Next Responder.
- The responder chain allows flexibility in handling events. (How so?).
- Events travel up the chain starting at the leaf most responder.
- If nothing overrides the event in question it is forwarded to the next responder in the chain until the final responder in the chain the UIApplication.

- If UIApplication delegate doesn't handle it then the event is just discarded.
- userInteractionEnabled is a property on UIView that determines whether a view receives interactions. By default this is set to YES for UIView's but most subclasses set this to NO by default. So, if you want a UIImageView to handle a touch event you must always set the userInteractionEnabled to YES. (This is a common beginner gotcha).

# UIWebView / WKWebView / SFSafariViewController

- UIWebView is basically a slightly crippled version of Safari that you can just drop into your view controller.
- UIWebView has been replaced by WKWebView, which is much faster and flexible.
- You can use webviews for displaying web pages (obviously!)
- You can also load web content from other sources, like a data base, or network endpoint.
- You can interact with web content using javascript and do things like make content editable using contentEditable. So, you can make a blog editor from a webview, for instance.

#### ==> **Demos** <==