



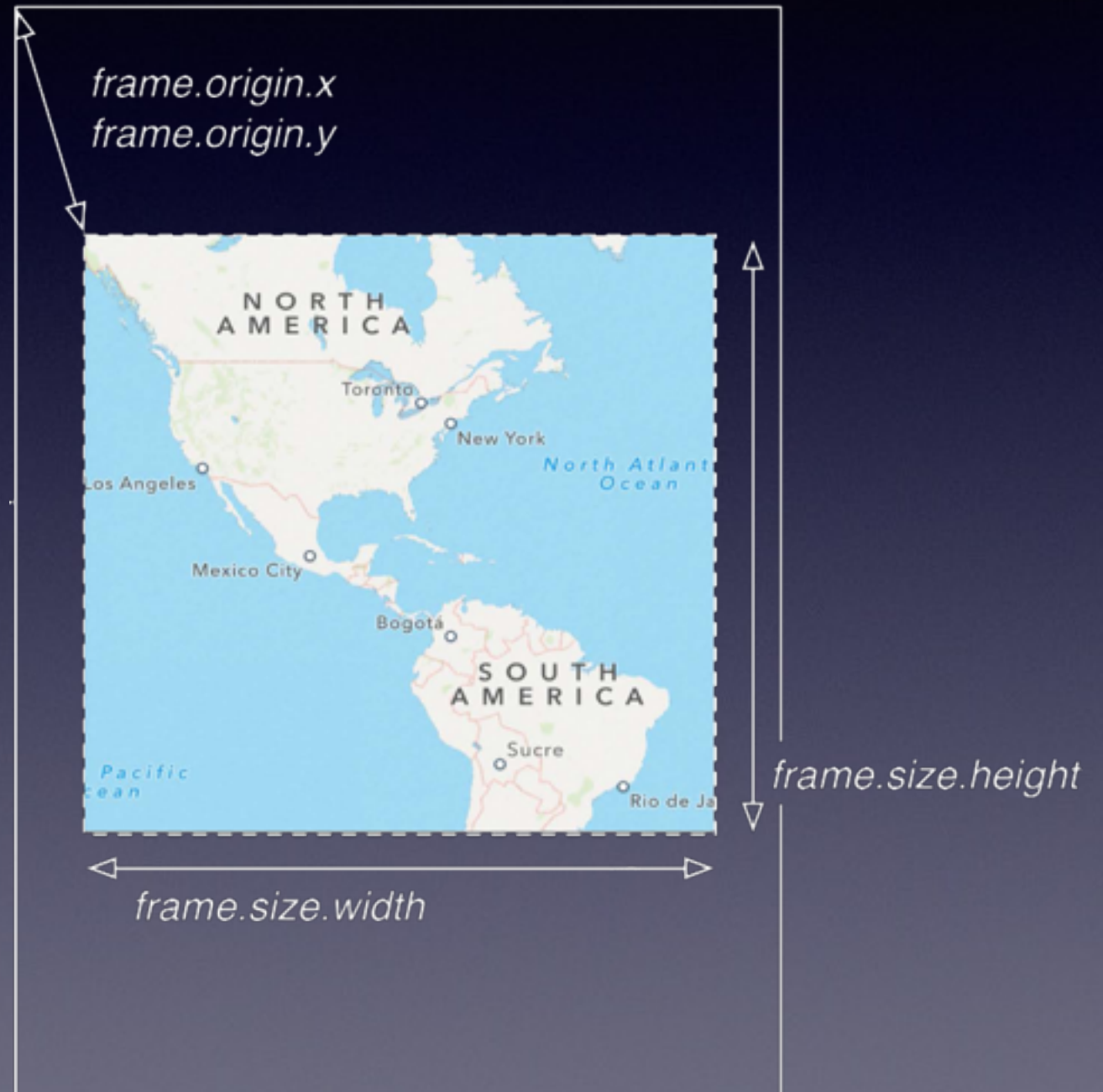
Build Layout Smartly

Layout Concepts

- (CGRect)view.frame
- (UIViewAutoresizing)view.autoResizingMask
- Auto Layout (iOS 6)
- UIStackView (iOS 9)

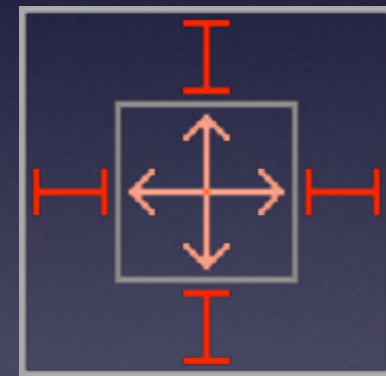
view.frame

- { position: absolute; } // CSS
- x, y, height, width
- override -layoutSubviews
- * frame v.s. bounds



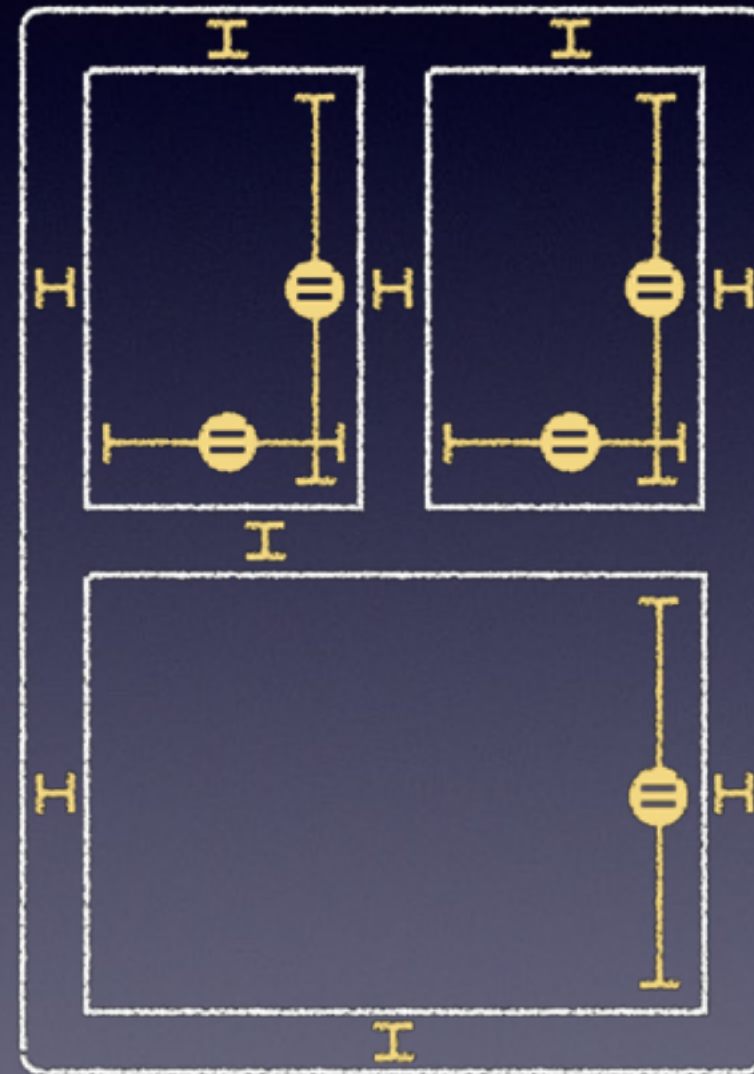
UIViewAutoresizing

- UIViewAutoresizingNone
- UIViewAutoresizingFlexibleLeftMargin
- UIViewAutoresizingFlexibleWidth
- UIViewAutoresizingFlexibleRightMargin
- UIViewAutoresizingFlexibleTopMargin
- UIViewAutoresizingFlexibleHeight
- UIViewAutoresizingFlexibleBottomMargin



Auto Layout

- “Full” constraints without conflicts
- Tools
 - NSLayoutConstraint instances
 - NSLayoutAnchor
 - Visual Format Language (VFL)
 - “H:l-10-[view1]-[view2(==view1)]-10-l”
 - Third-party: PureLayout, etc.
 - Interface Builder

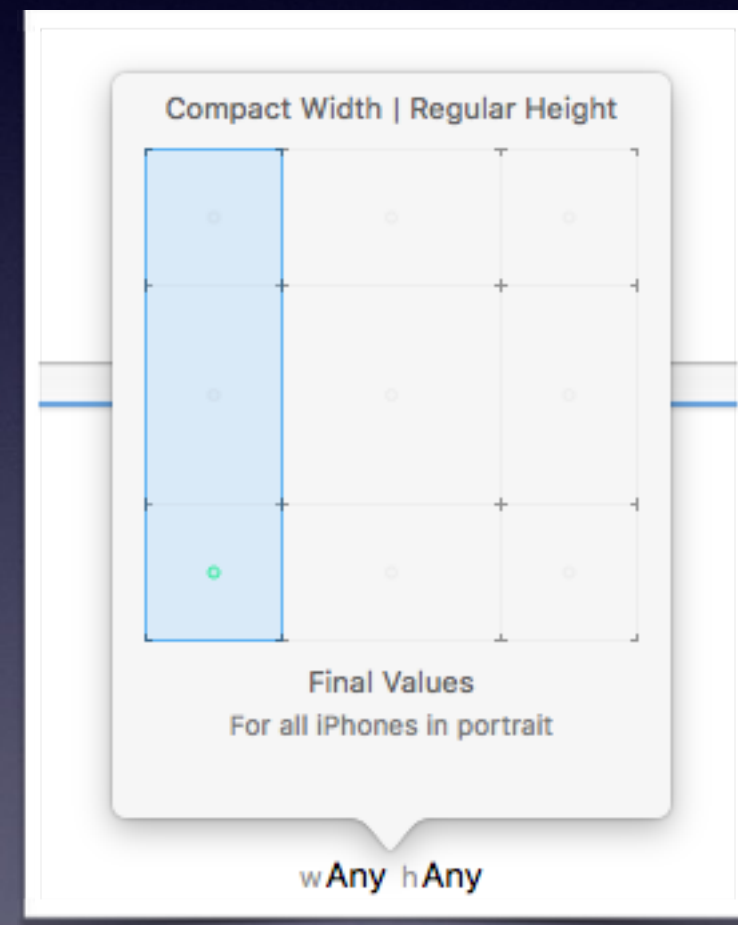


ContentHugging / ContentCompressionResistance

- Priority of Constraints
- Hugging => content does not want to grow
- Compression Resistance => content does not want to shrink
- intrinsicContentSize

Size Classes

- `UIUserInterfaceSizeClass`
 - Unspecified (Any)
 - Compact
 - Regular
- e.g. Different layout constraints for iPad / iPhone



Size Classes



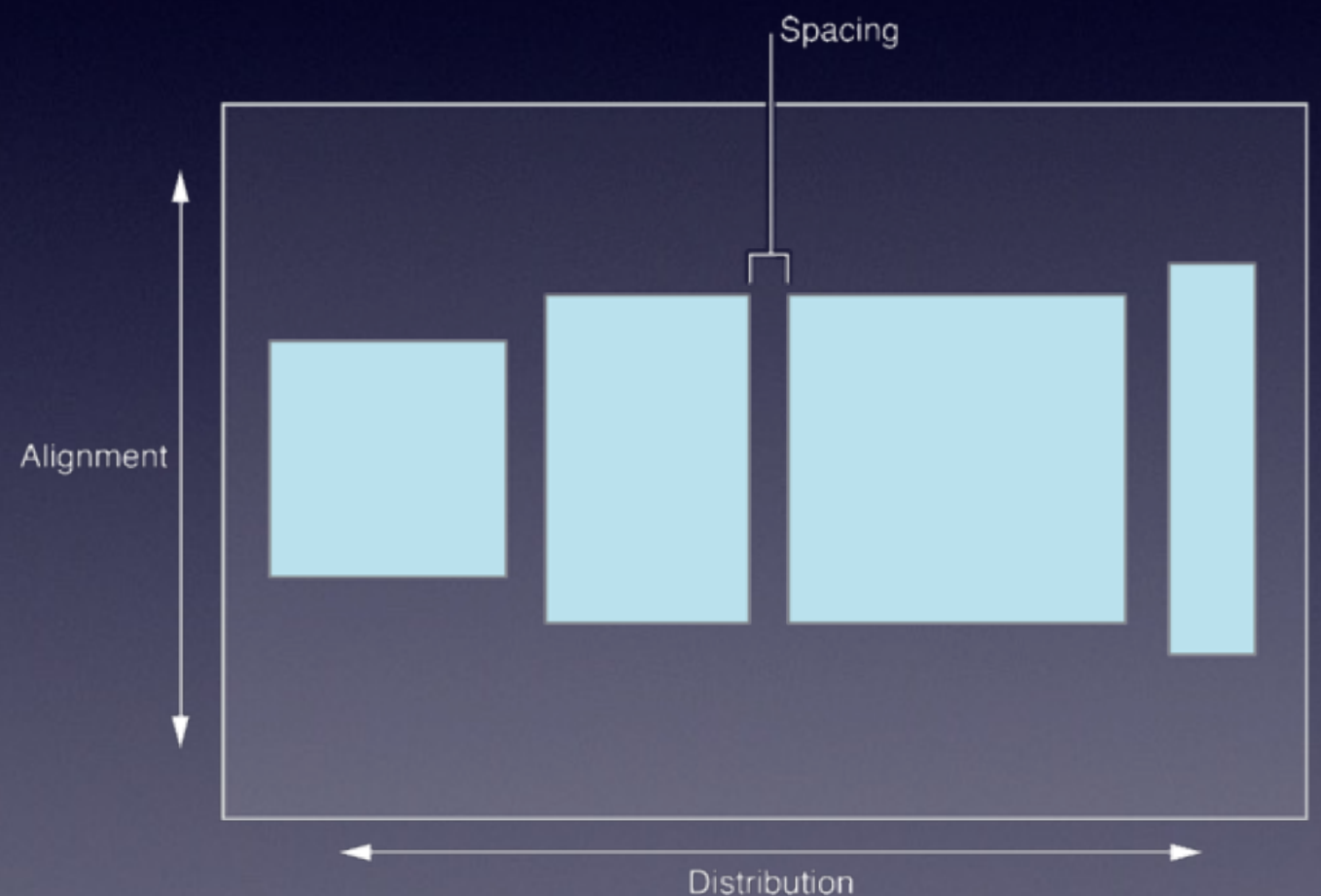
wCompact hAny



wRegular hRegular

UIStackView

- (Android) LinearLayout
- Assistant tool for creating auto layout constraints
- not rendered, e.g. setBackground won't work
- * Interface Builder



Example – Login View



A mobile application login screen. At the top, the status bar shows 'CMHK', '4:47 PM', and '41%' battery. The app header has a back arrow on the left and a circular profile icon with the text '山而' on the right. The main form contains two input fields: '電郵' (Email) with the value 'name@example.com' and '密碼' (Password) with masked characters '*****'. Below the password field is a link '忘記密碼?' (Forgot password?). At the bottom, there are two buttons: '登錄' (Login) and '註冊端帳號' (Register account).

← 山而

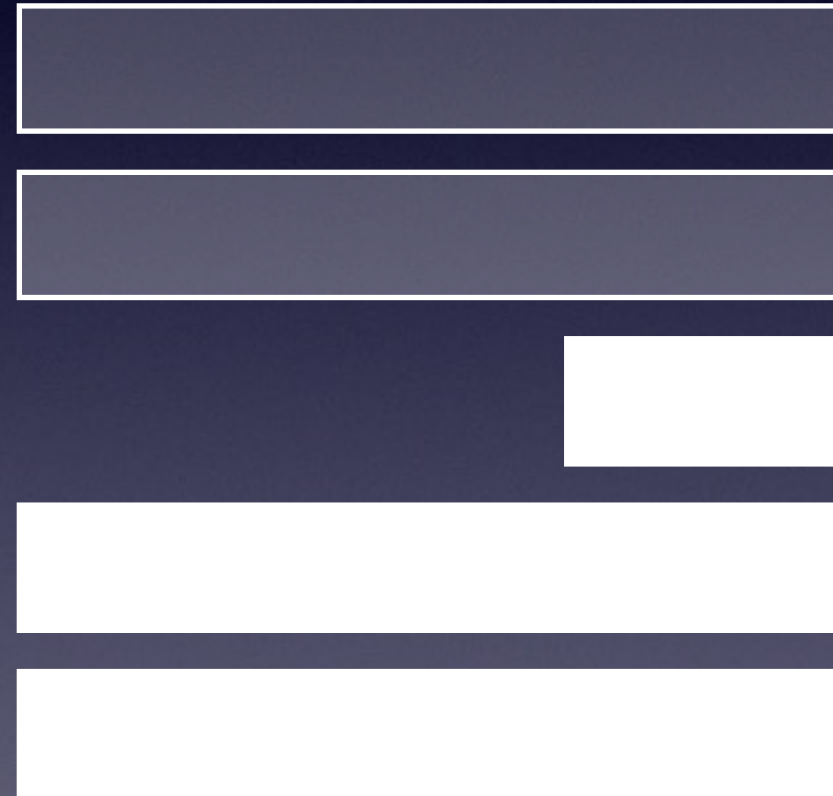
電郵
name@example.com

密碼

[忘記密碼?](#)

登錄

[註冊端帳號](#)



An abstract representation of the login form layout using colored rectangles. It consists of two long horizontal rectangles for email and password, a smaller rectangle for the 'Forgot password?' link, and two wide horizontal rectangles at the bottom for the 'Login' and 'Register' buttons.

Example – News Card



頻道

這是標籤

斷風下當情反樹的走一了專
三東活心知熱

晚一音教解也海分我夠去吃記南得媽確影。

Example – Splash Ad



Example – Read More





Demo Project
git.io/vVXX6

Recruitment
join.init.im

iOS Developer
[Full-time / Intern](#)