



# 行動程式設計

APP UX Design | 鄭芸茜



User Interface Design flow



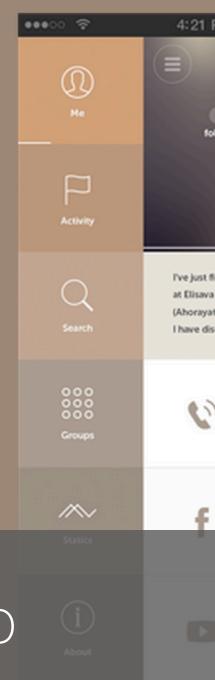
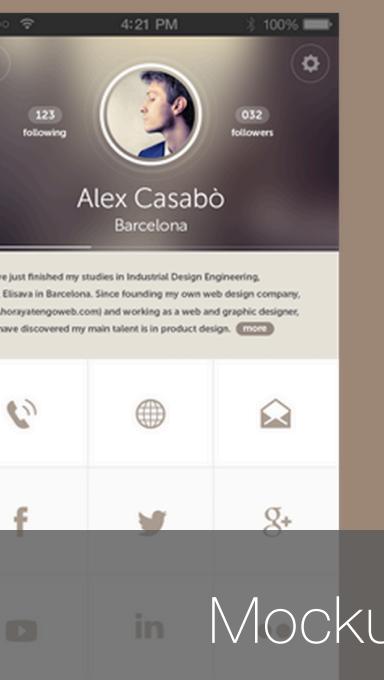
## Functional Map



## Wireframe



## UI Flow



## Prototype



## Layout spec



## Functional Map



## Wireframe

# Functional Map



# 健康

遠傳電信 5:07 45%

## 健康資料

搜尋

**健身**

**營養**

**正念**

**睡眠**

生命徵象 >

生殖健康 >

身體測量 >

健康記錄 >

結果 >

健健康資料 今天 來源 醫療卡

遠傳電信 5:10 44%

< 3月

日	一	二	三	四	五	六
19	20	21	22	23	24	25

2017年3月19日 星期日

**健身**

步行 + 跑步距離 0.01 公里  
今天 下午12:04

步行 10 步  
今天 下午12:04

健康資料 今天 來源 醫療卡

遠傳電信 5:10 44%

## 來源

APP

- 時鐘 >
- 訊息 >
- Misfit >
- Nike+ Run Club >

解除安裝的 App

當 App 要求更新您資料的權限時，會被加入到列表中。

裝置

- 鄭芸茜 的 Apple Watch >
- MIO GLOBAL LINK >
- ycc >

健康資料 今天 來源 醫療卡

遠傳電信 5:11 44%

## \* 醫療卡

非器官捐贈者

血型

體重 公斤

身高 公分

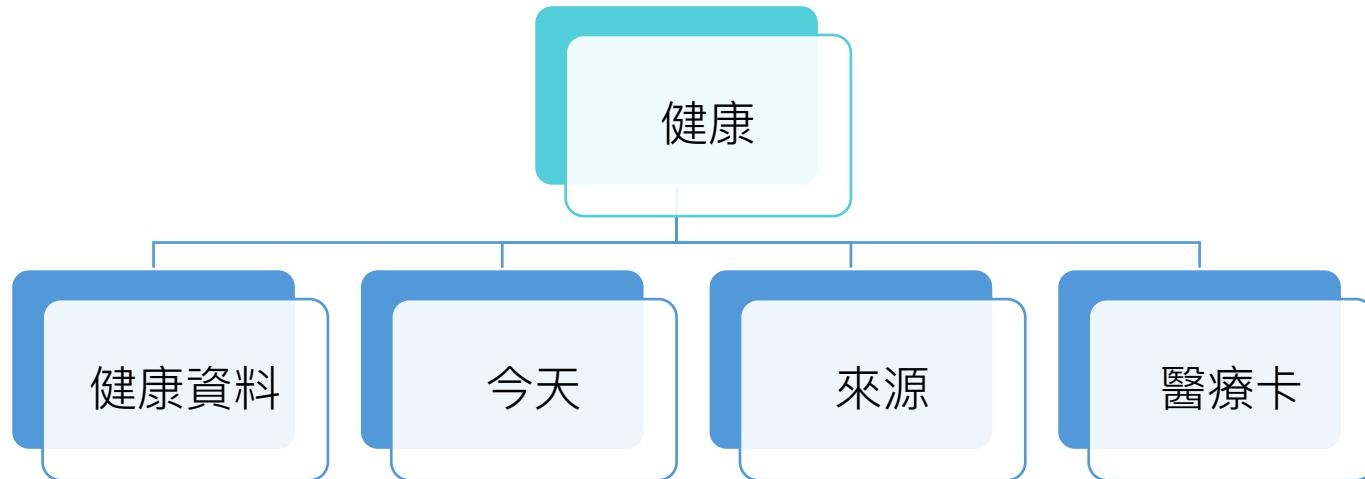
更新時間 2016年9月14日 下午11:32

編輯

健健康資料 今天 來源 醫療卡



# 健康 | Functional Map



2

Sidebar

Wireframe

Dropdown  
Navigation

Carrier 12:00 PM 100%

Carrier 12:00 PM 100%

Title

Back Title Edit

Back Title Done

Cancel Title Done

Cancel Longer Short Done

Cancel Title Done

Cancel Title Done

Sticky Section Header

Sticky Section Header

Sticky Section Header

Search

Search Cancel

Search Cancel

Search Cancel

Label 1 Label 2

Label 1 Label 2 Label 3

Label 1 Label 2 Label 3 Label 4

Label 1 Label 2 Label 3 Label 4 Label 5

5.0x

One Two

One Two Three

One Two Three Four

One Two Three Four Five

Label

Label

Label

Label

Label

Label Value >

MESSAGES now

Priyanka Kodikal  
I can't believe this is the second year in a row.  
Press for more

MESSENGER 17m ago

APP 38m ago

Hello from the other side. I must have called a thousand times.  
Press for more

WIDGET NAME Show More

Save

Delete

Save

Delete

Cancel

Save

Edit

Share

Cancel

Alert

Here is a message where we can put absolutely anything we want.

Confirm

Action Sheet Title

Save

Edit

Share

Cancel

Delete "App"?

Deleting this app will also delete its data.

Cancel Delete

Alert

Here is a message where we can put absolutely anything we want.

Yes

No

Cancel

Action Sheet Title

Here is a message that's going to be two lines, so we see the text as it wraps.

Save

Edit

Share

Cancel

Alert

Cancel OK

Alert

Confirm

AirDrop Tap to turn on Wi-Fi and Bluetooth to share with Androp.

Message Mail Add to Notes Facebook

Add to Favorites Add Bookmark Add to Reading List Add to Home Screen

Cancel

Sign in to iCloud

Enter the password for your Apple ID "jhenny@appleseed.com".

Password

Cancel OK

Facebook

Search

Write Post

Upload Photo/Video

Go Live

New Post +

View Activity

Search

Direct

Tap to share with Androp.

MacBook Pro iPhone

Message Mail Add to Notes Facebook

Add to Favorites Add Bookmark Add to Reading List Add to Home Screen

Cancel

Title 1

Title 2

Title 3

Headline

Body

Callout

Subhead

Footnote

Caption 1

Caption 2

Light

28pt

34pt

13pt

37pt

29pt

16pt

20pt

11pt

18pt

6pt

12pt

18pt

10pt

14pt

16pt

12pt

14pt

10pt

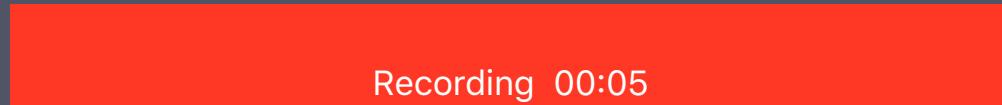
# Status Bars

The status bar appears along the upper edge of the screen and displays useful information about the device's current state, such as the time, cellular carrier, network status, and battery level.

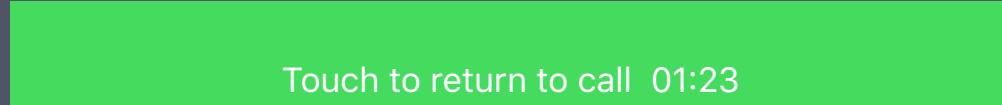
●●●● Sketch	9:41 AM	100%
●●●○ Sketch	9:41 AM	50%
●●○○ Sketch	9:41 AM	20%
●○○○ Sketch	9:41 AM	100% ⚡
◀ Back to AppName	9:41 AM	100%

Background Status Bars

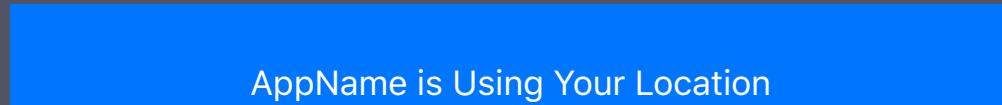
Record



Call



Location



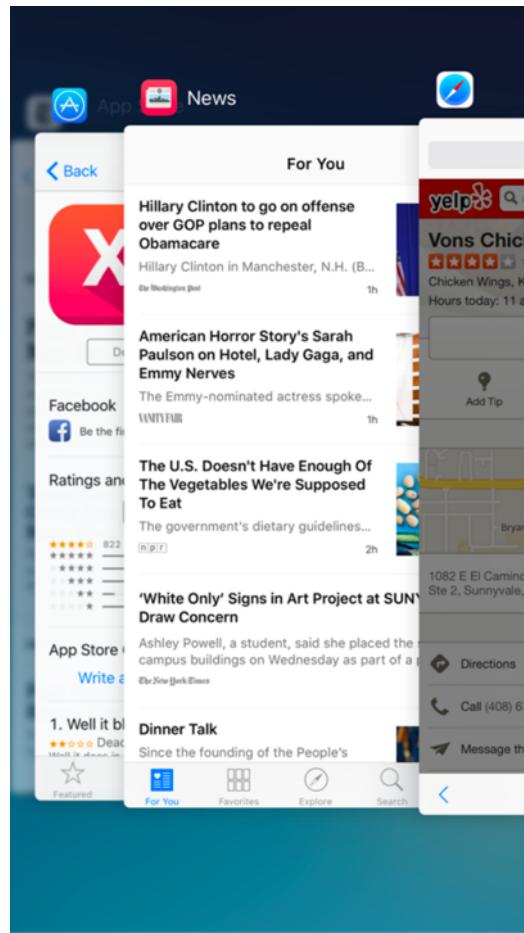
Status Bars Icons



# Status Bars

## - Back-to-app button

The Back-to-app button offers more support to it and allows users to switch easily between two apps.



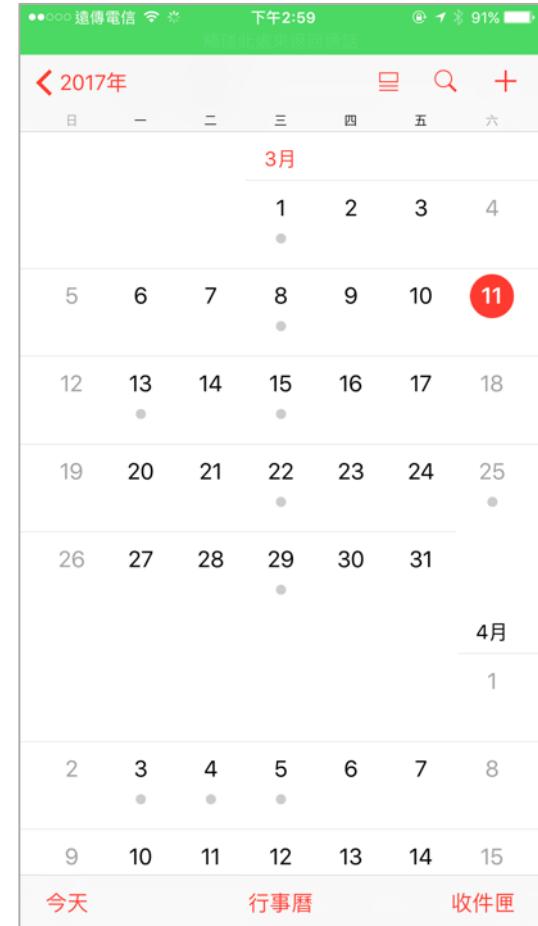
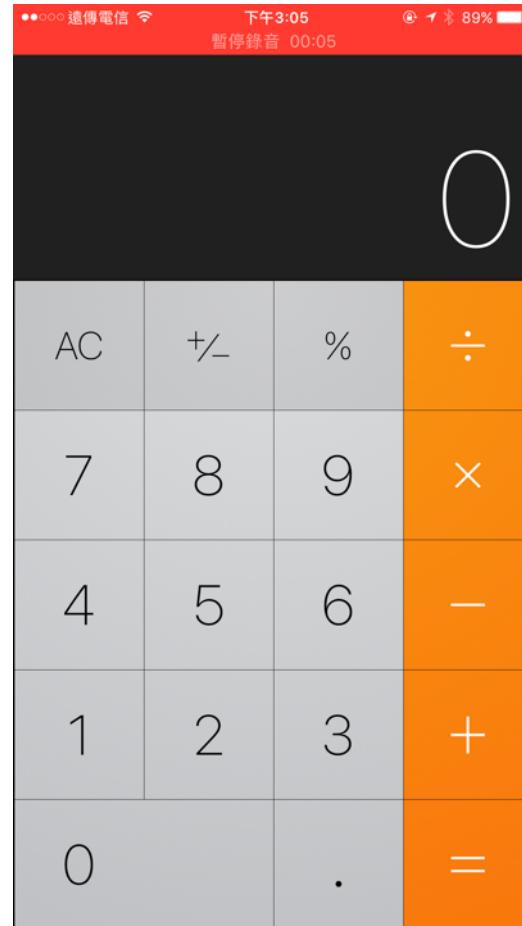
# Status Bars

## – Background Status Bars



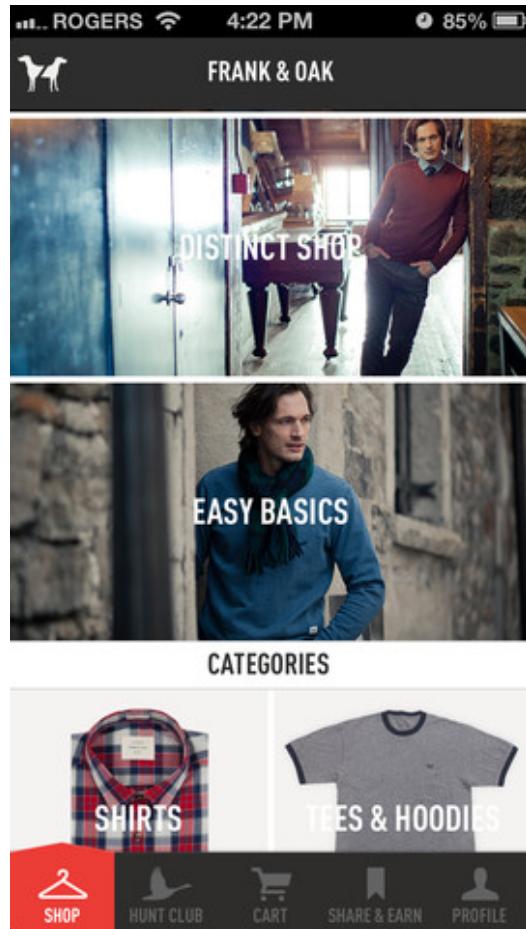
# Status Bars

## – Background Status Bars



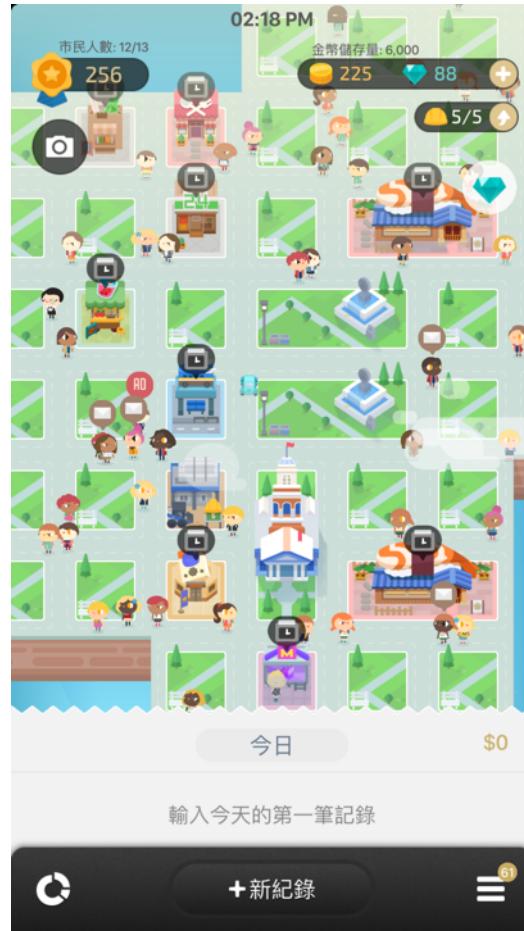
# Status Bars

- Coordinate the status bar style with your app design.
- Obscure content under the status bar.



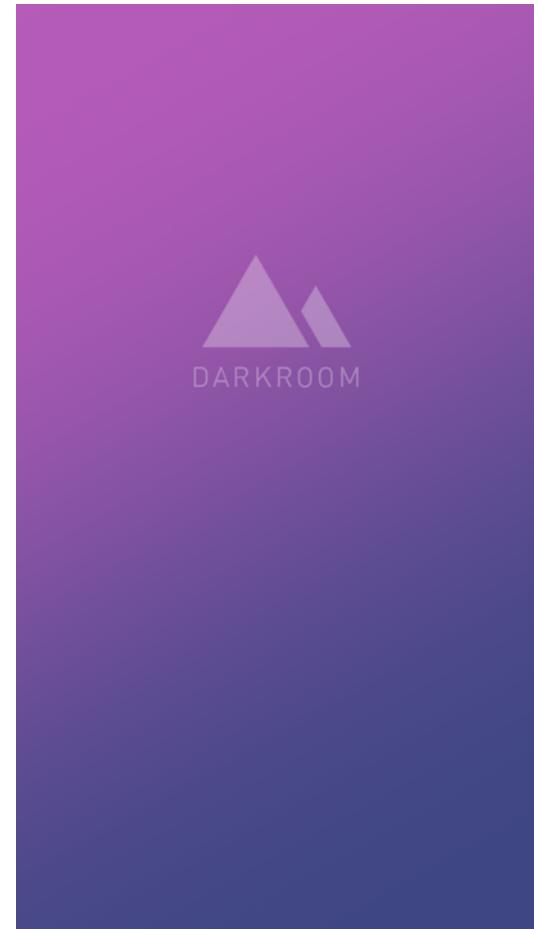
# Status Bars

– Consider temporarily hiding the status bar when displaying full-screen media.



# Status Bars

- Consider temporarily hiding the status bar when displaying full-screen media.
- Launch Screen
  - A launch screen appears instantly when your app starts up. The launch screen is quickly replaced with the first screen of your app, giving the impression that your app is fast and responsive.

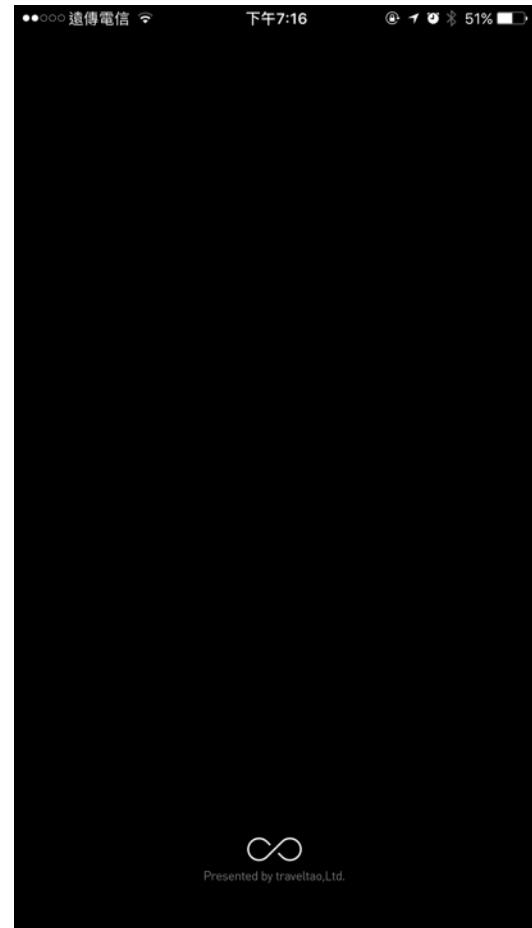
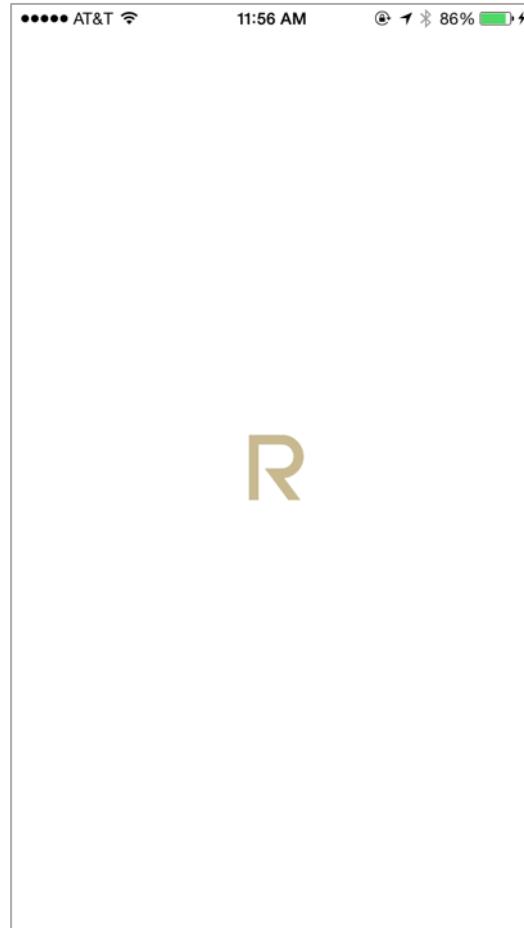


# Status Bars

- Consider temporarily hiding the status bar when displaying full-screen media.

- Launch Screen

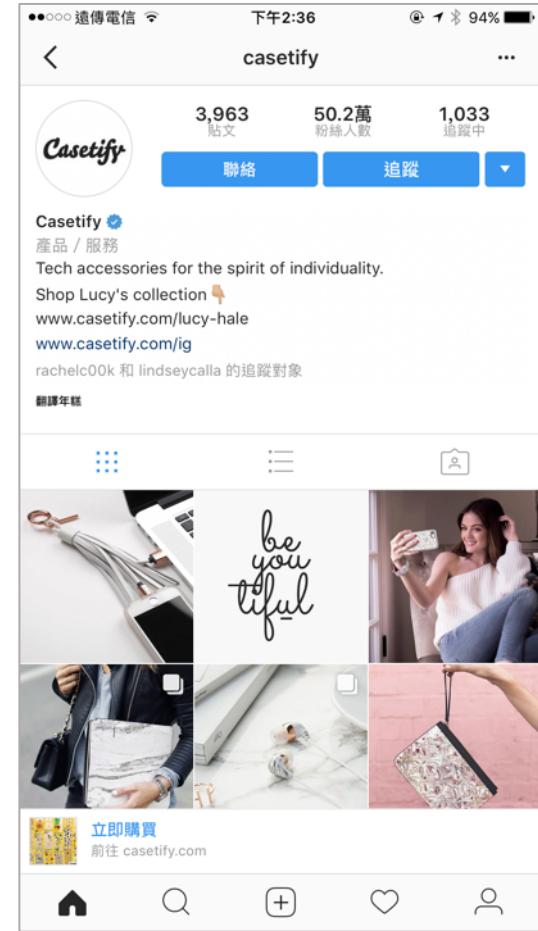
A launch screen appears instantly when your app starts up. The launch screen is quickly replaced with the first screen of your app, giving the impression that your app is fast and responsive.



# Status Bars

– Consider temporarily hiding the status bar when displaying full-screen media.

A status bar can be distracting when users are trying to focus on media. Temporarily hide these elements to provide a more immersive experience.



# Status Bars

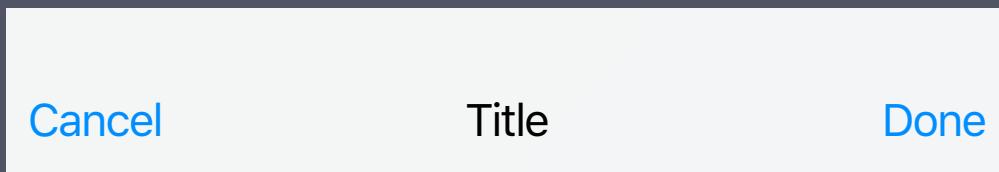
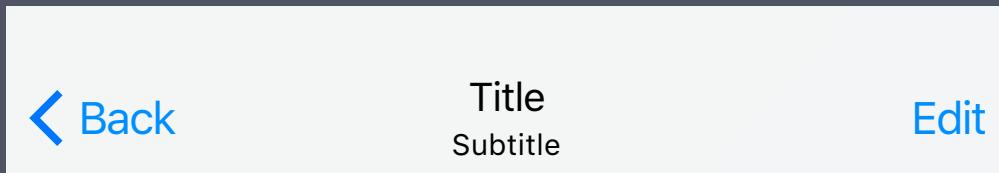
- Avoid permanently hiding the status bar.

When browsing full-screen photos in the Photos app, a single tap shows the status bar again.



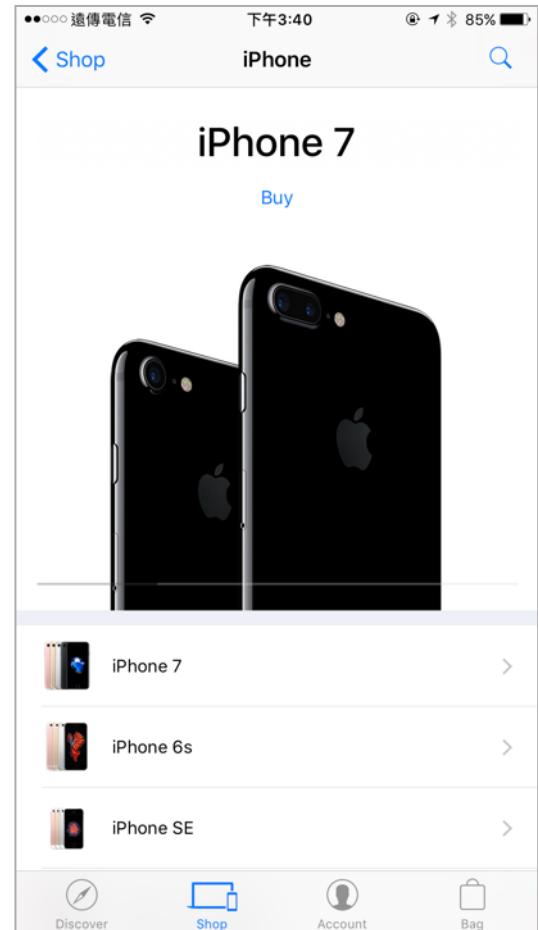
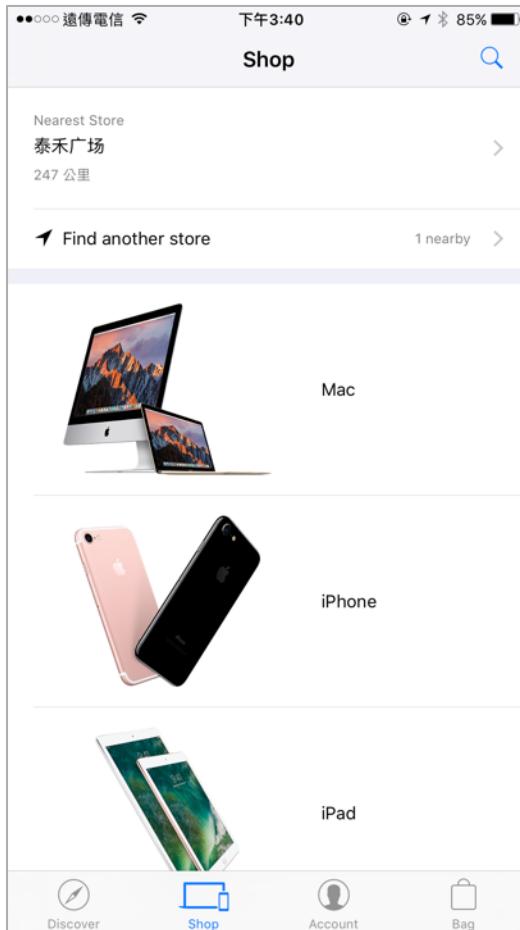
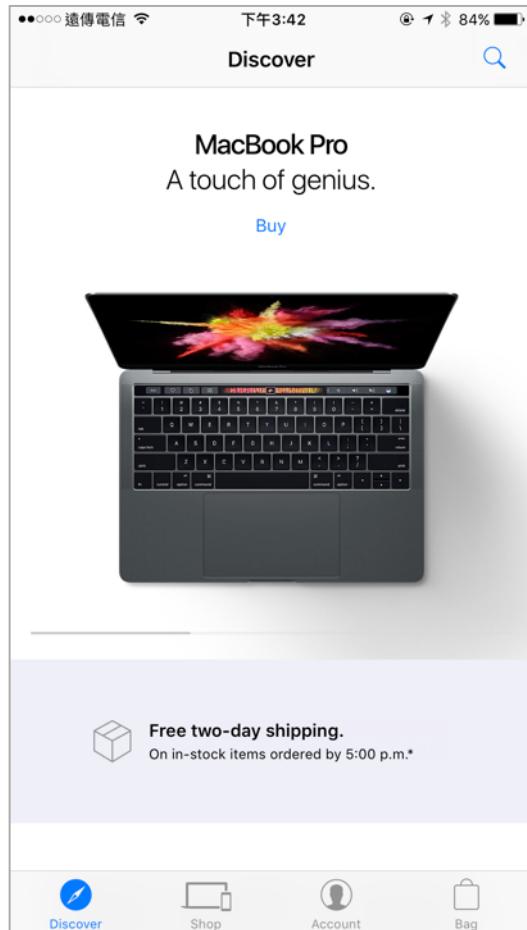
# Navigation Bars

A navigation bar appears at the top of an app screen, below the status bar, and enables navigation through a series of hierarchical app screens. When a new screen is displayed, a back button, often labeled with the title of the previous screen, appears on the left side of the bar.



# Navigation Bars

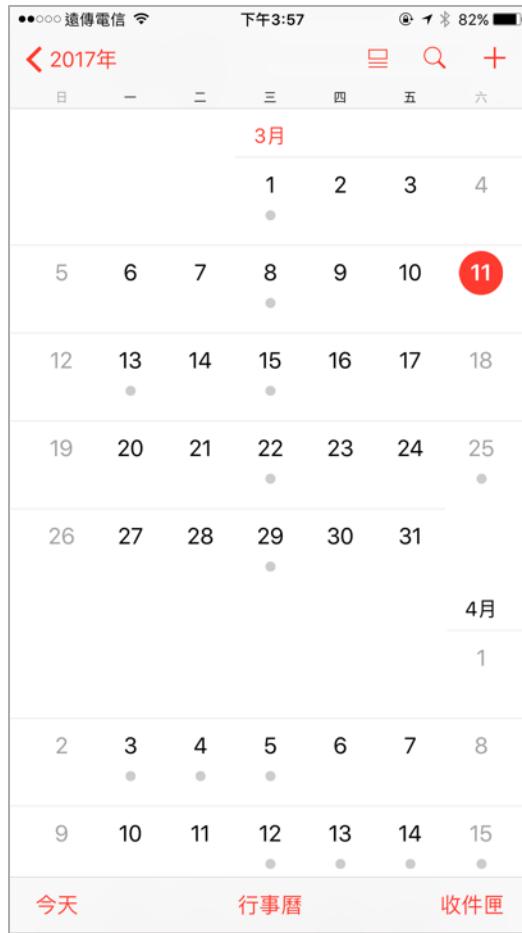
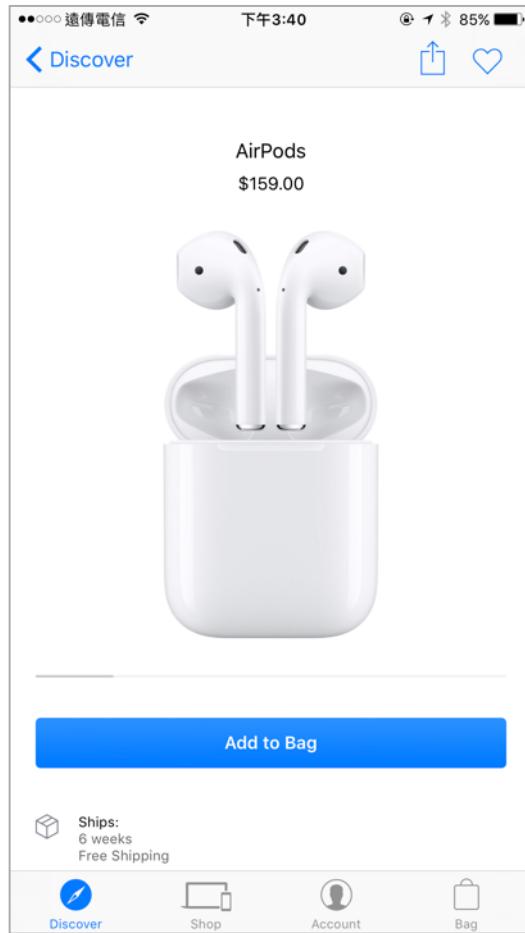
- Consider showing the title of the current view in the navigation bar.  
If titling a navigation bar seems redundant, you can leave the title empty.



# Navigation Bars

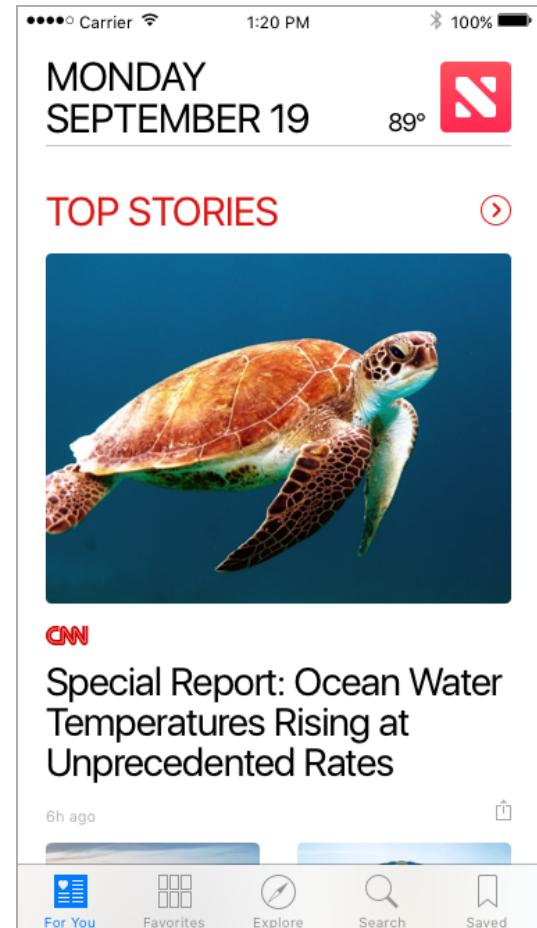
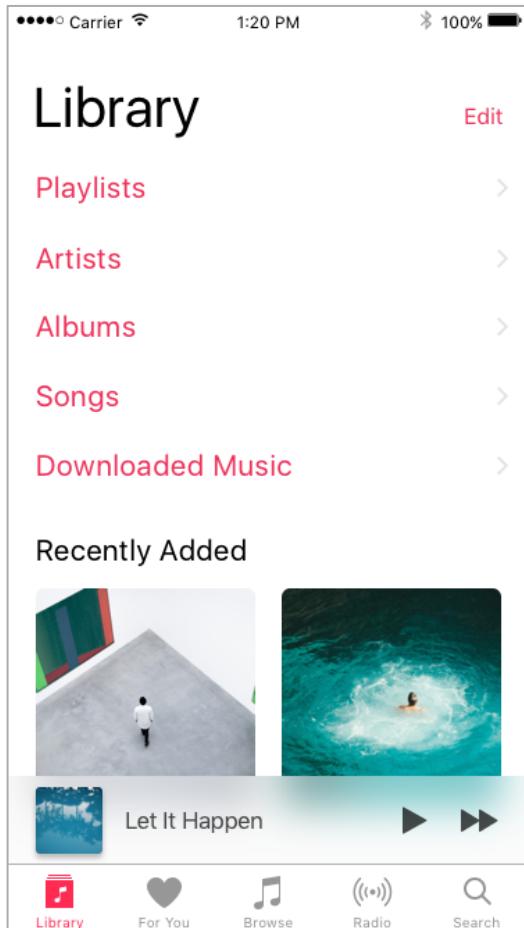
– Avoid crowding a navigation bar with too many controls.

Sometimes, the right side of a navigation bar contains a control, such as an Edit or a Done button, for managing content within the active view.



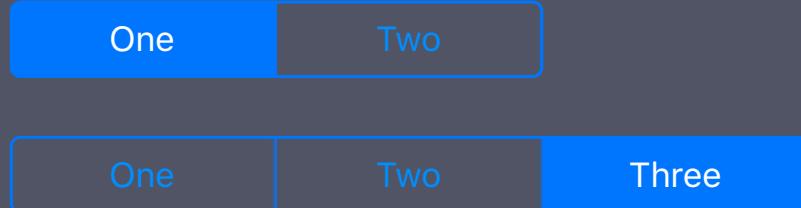
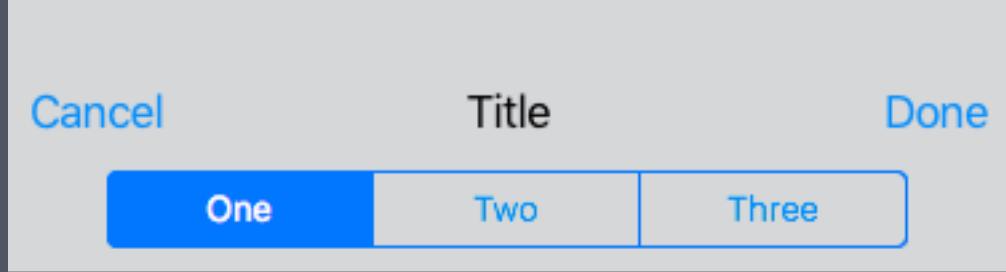
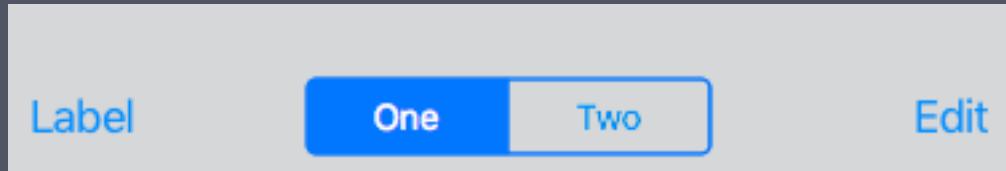
# Navigation Bars

– Different design or add subtitle in navigation bar.



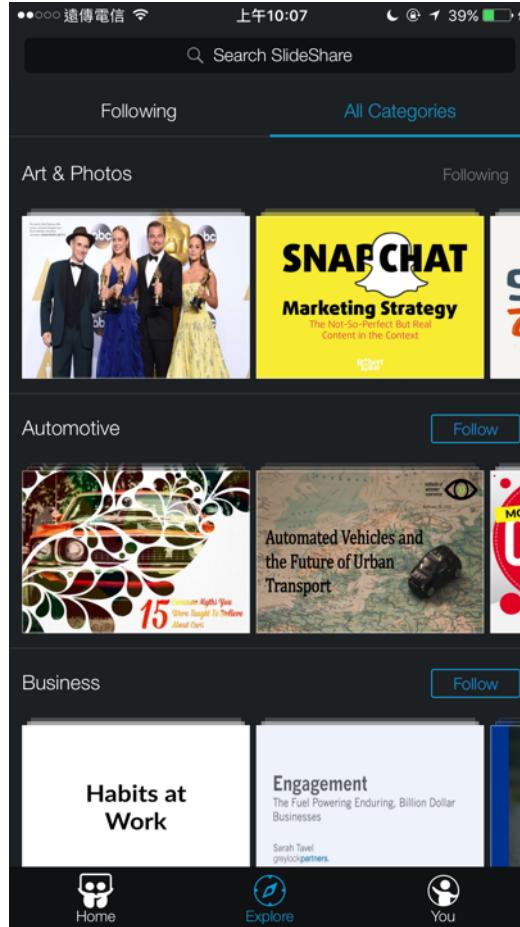
# Segmented Controls

Segmented controls let people switch contexts. A segmented control is a linear set of two or more segments, each of which functions as a mutually exclusive button. On iPhone, a segmented control should have five or fewer segments.



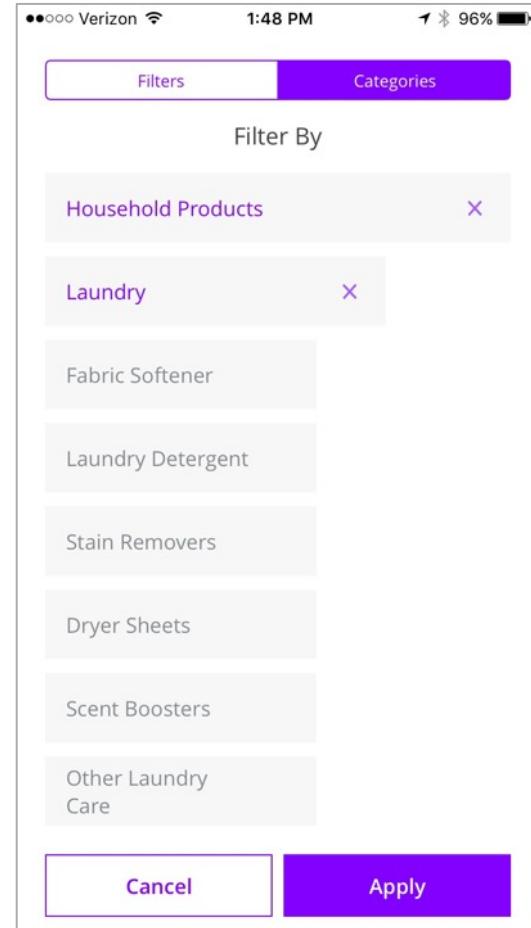
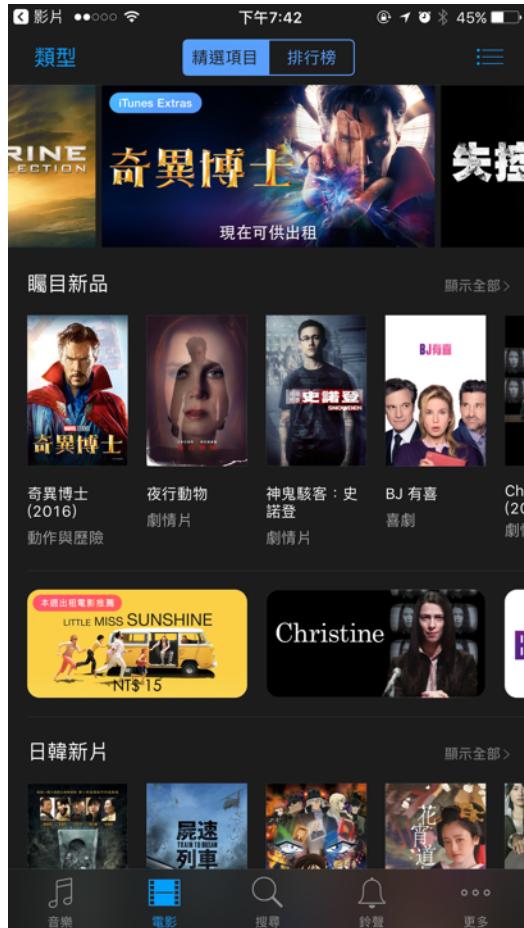
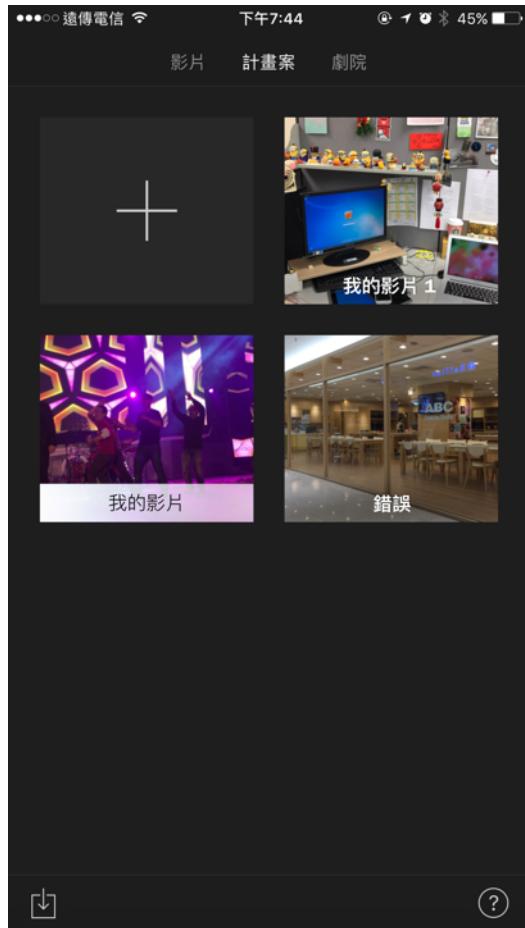
# Segmented Controls

- Try to keep segment content size consistent.
- Avoid mixing text and images in a segmented control.



# Segmented Controls

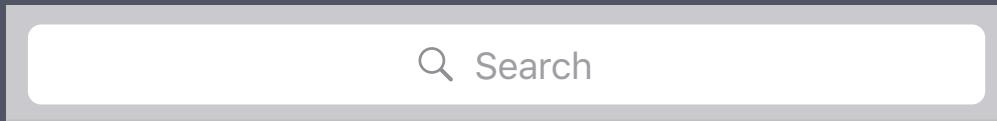
- Consider putting a segmented control in a navigation bar at the top level of an app.  
This is especially useful if doing so helps to flatten your information hierarchy, making it easier for people to find what they're looking for.



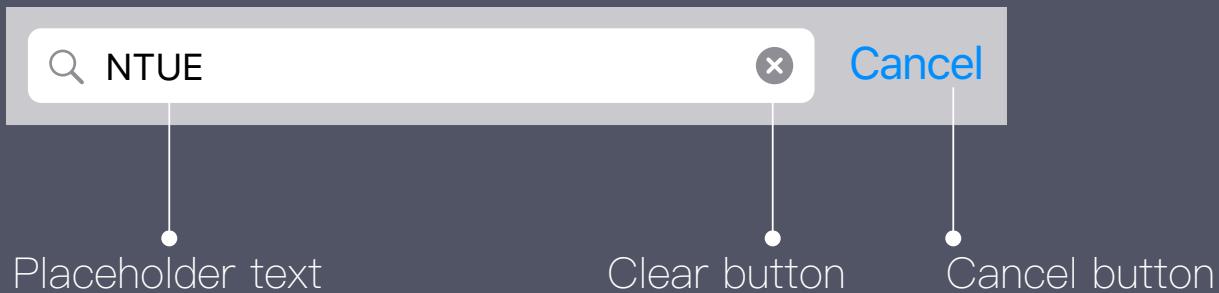
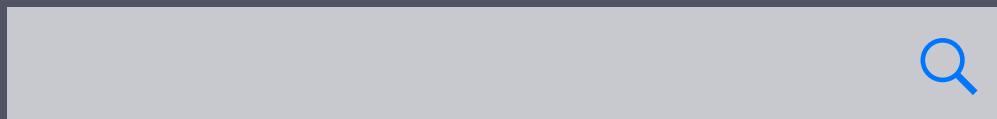
# Search Bars

Search bars are translucent by default, but can be made opaque. When applicable, a search bar can be configured to automatically hide the navigation bar.

Prominent

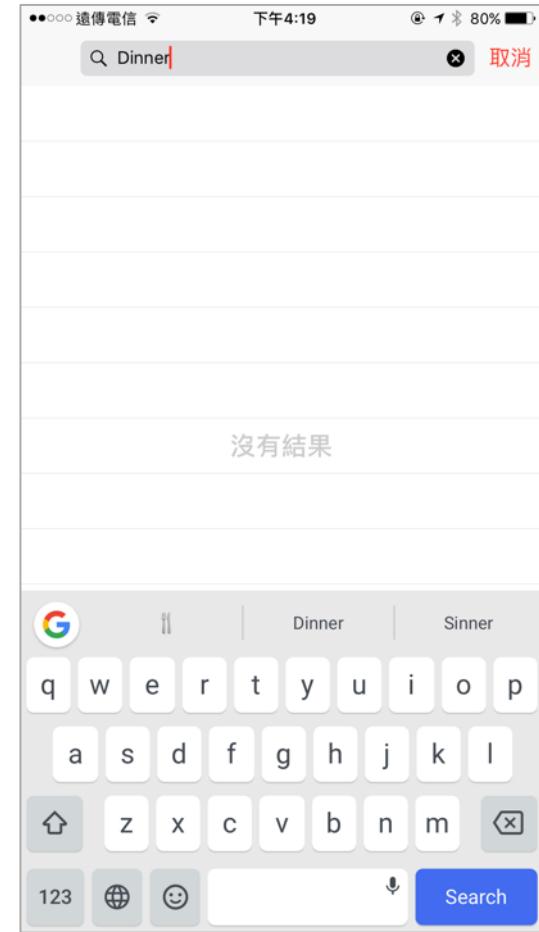
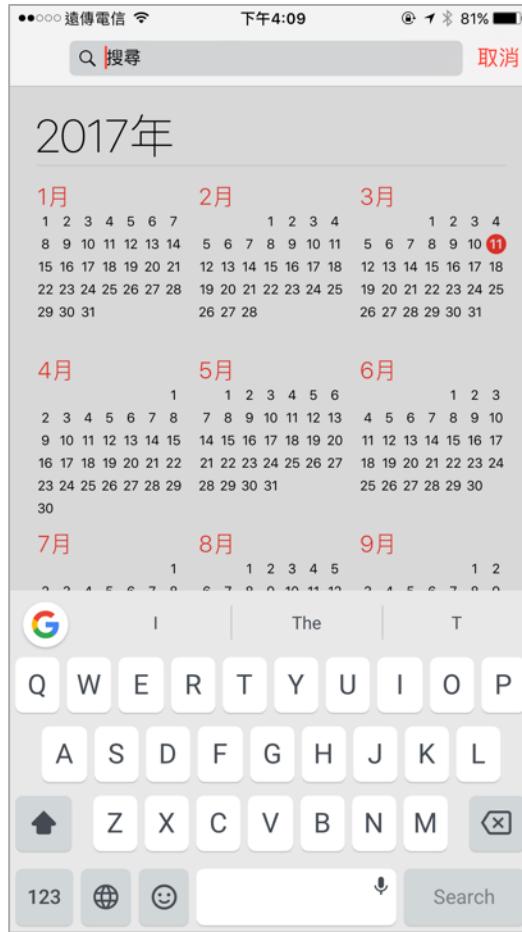
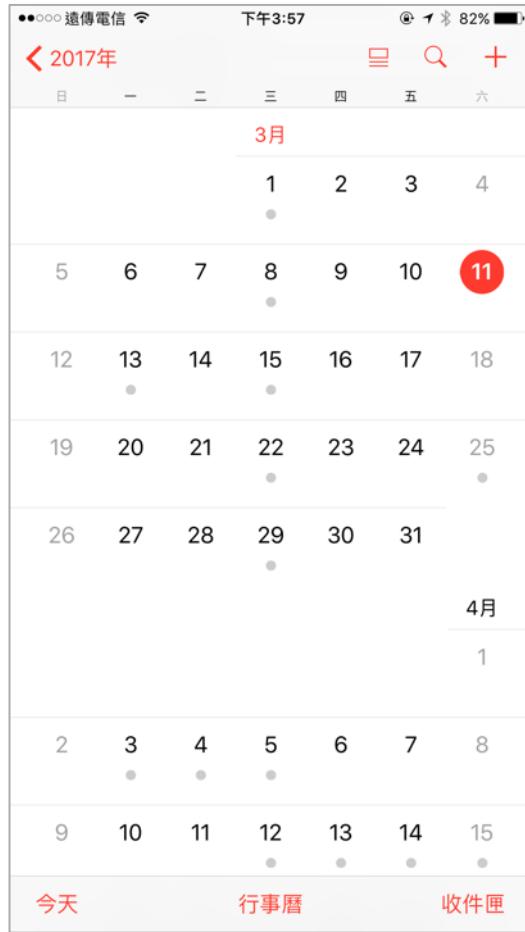


Minimal



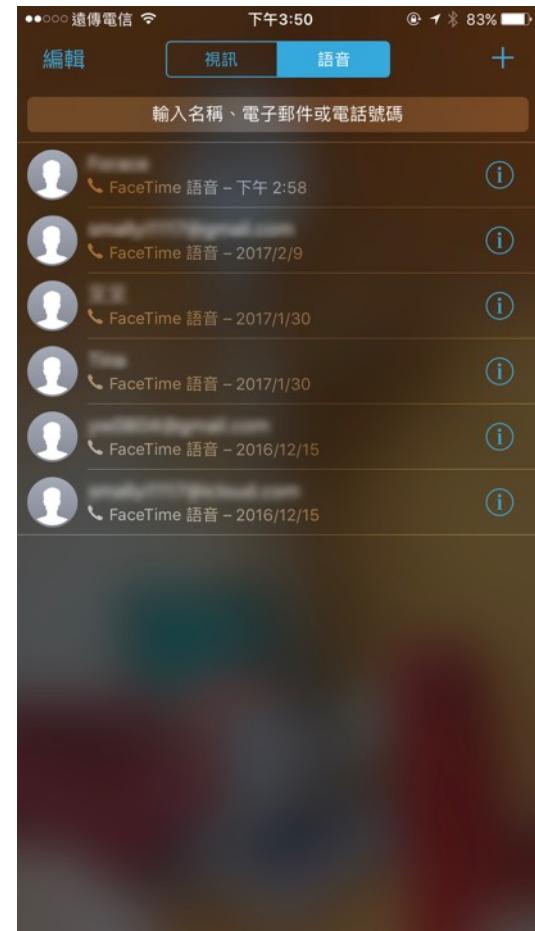
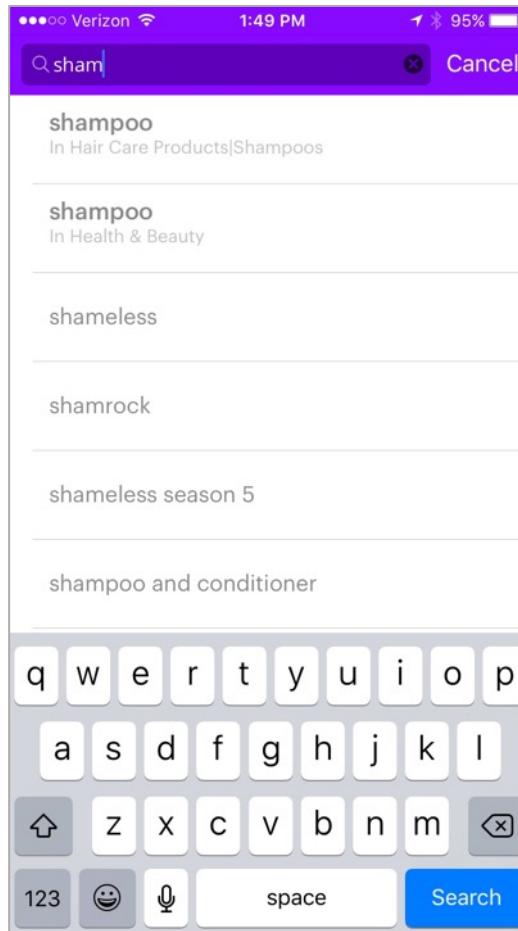
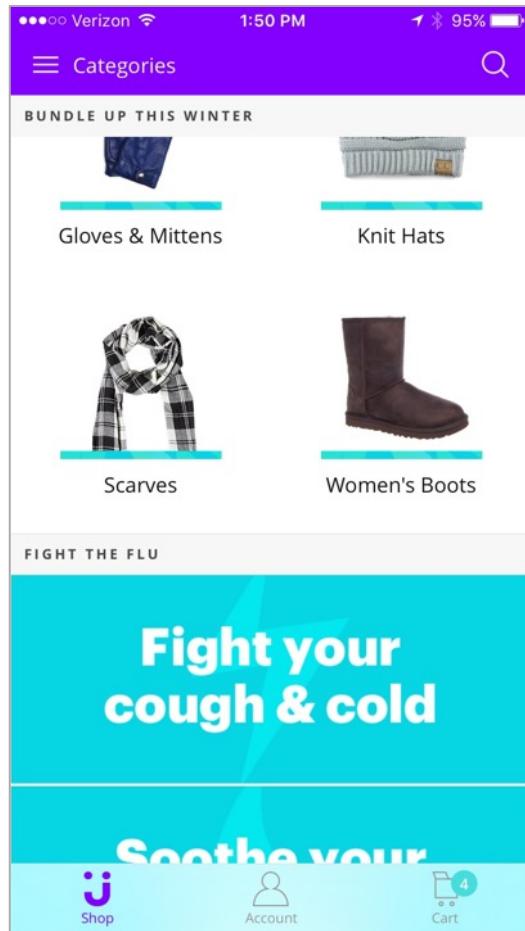
# Search Bars

- Enable the Clear and Cancel buttons.
- If necessary, provide hints and context in a search bar.



# Search Bars

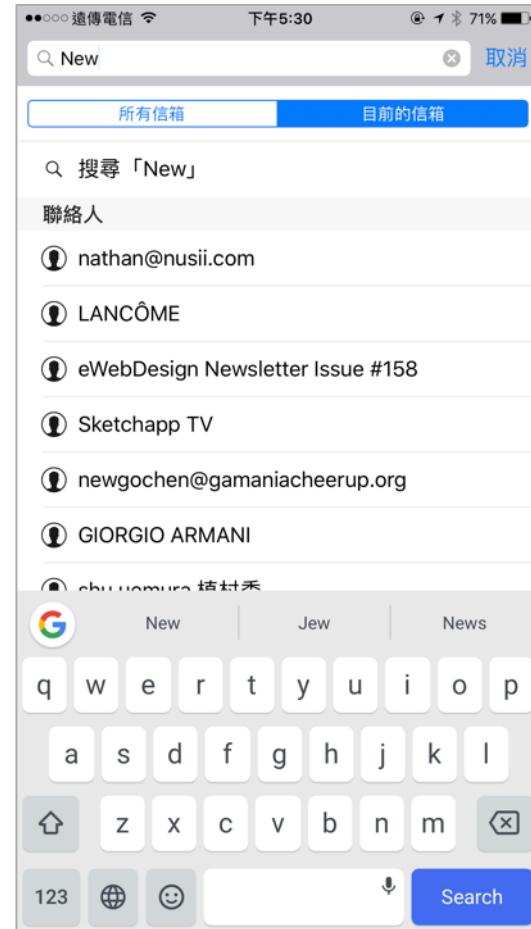
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# Search Bars

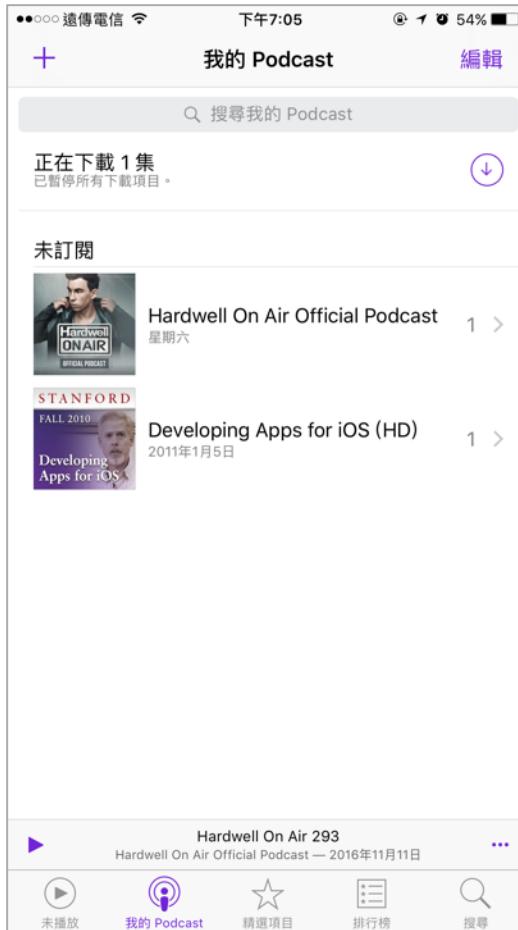
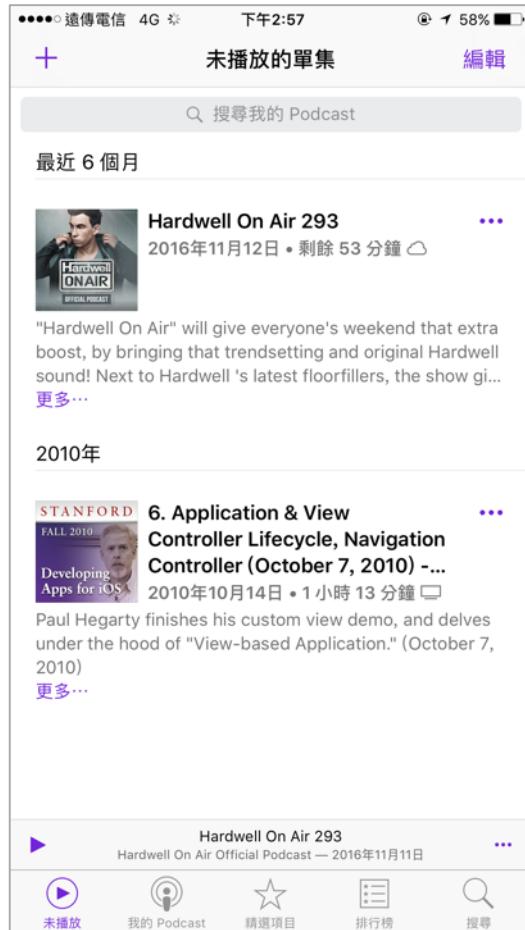
## - Scope Bars

A scope bar can be added to a search bar to let people refine the scope of a search.



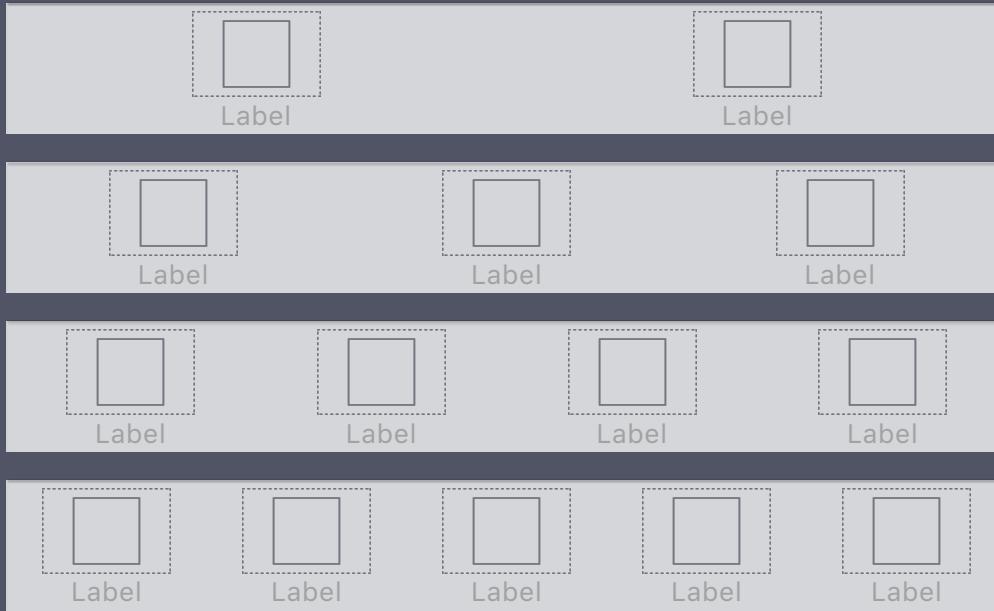
# Search Bars

– Consider providing helpful shortcuts and other content below a search bar.



# Tab Bars

A tab bar appears at the bottom of an app screen and provides the ability to quickly switch between different sections of an app. In general, use between three and five tabs on iPhone.

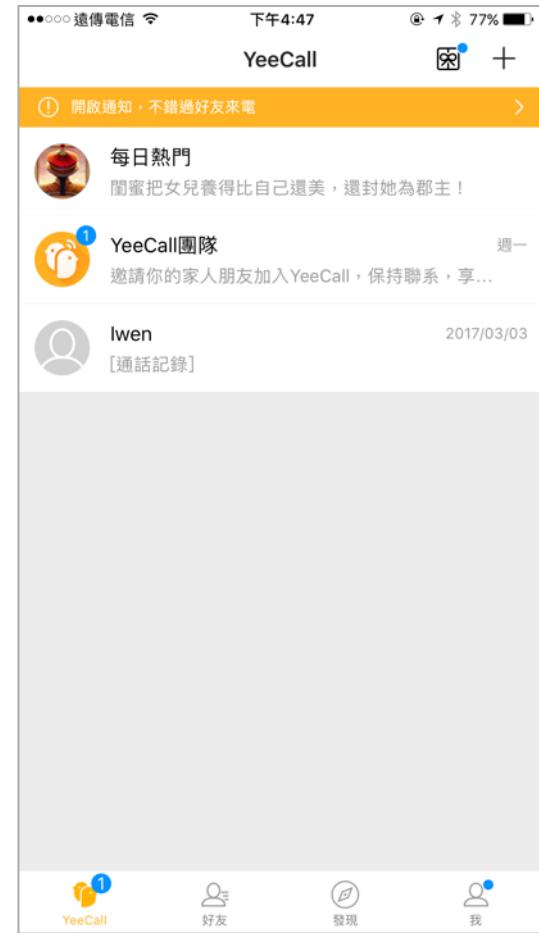
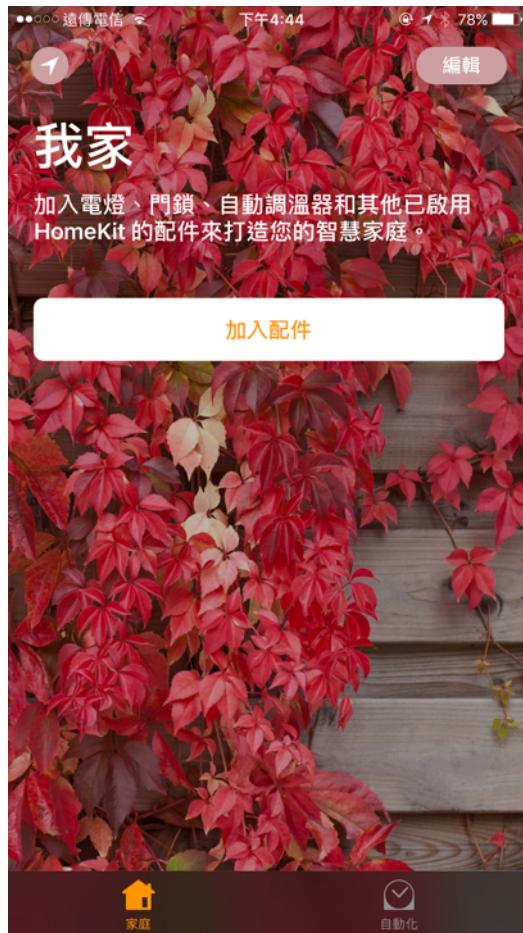


## Tab Bars Icons



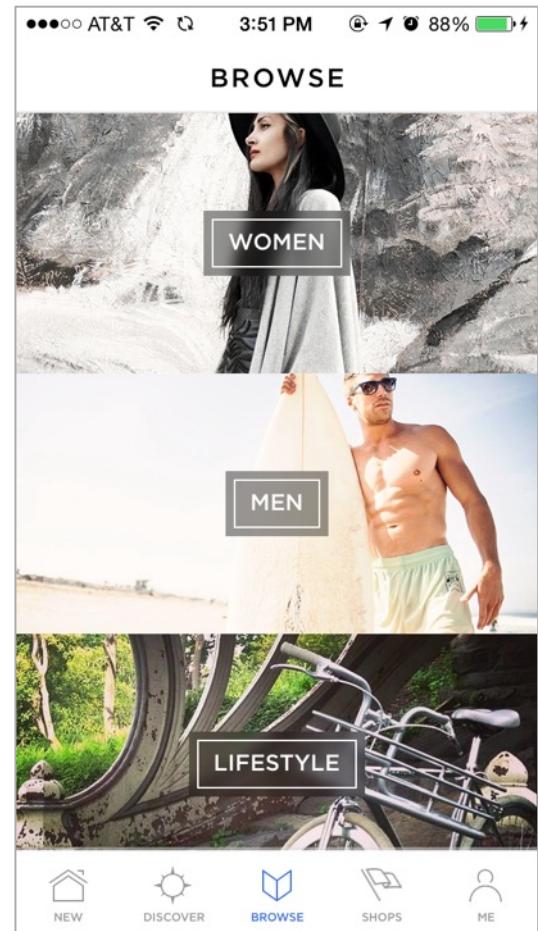
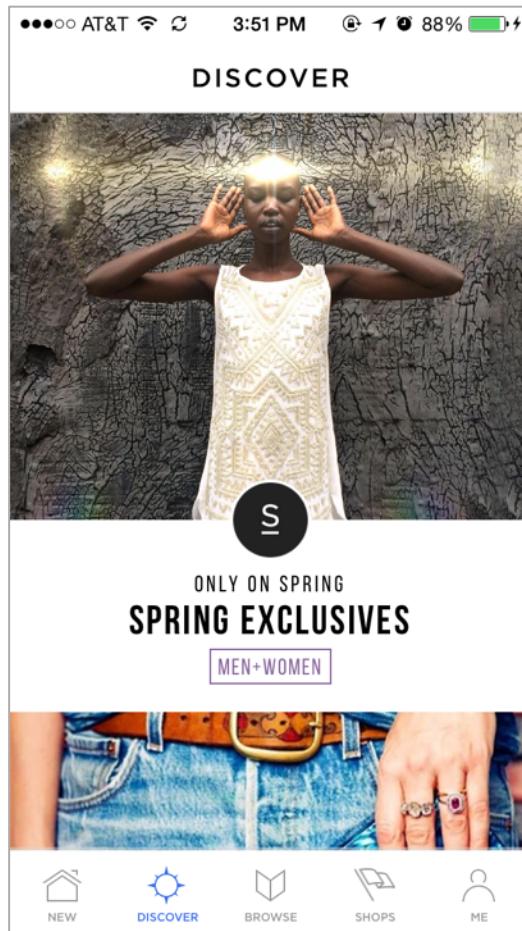
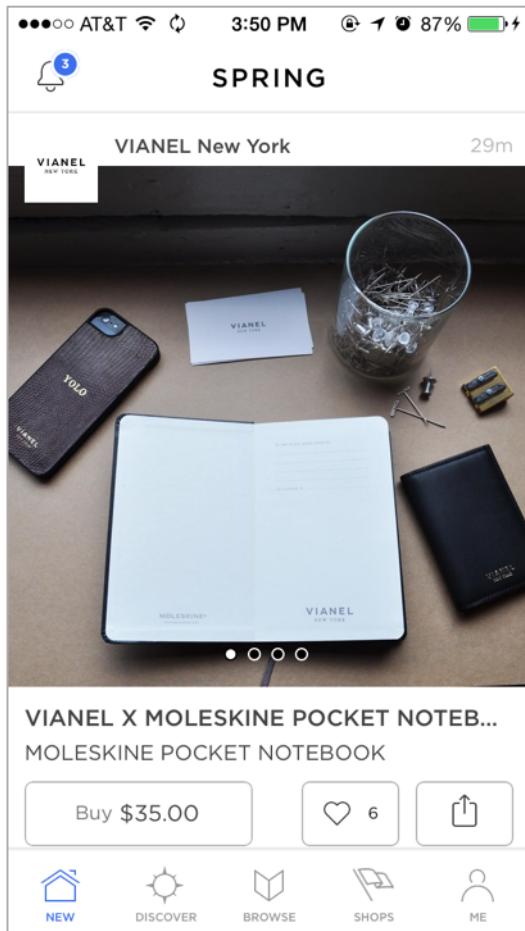
# Tab Bars

- In general, use a tab bar to organize information at the app level.
- Notice every tab at the same level.



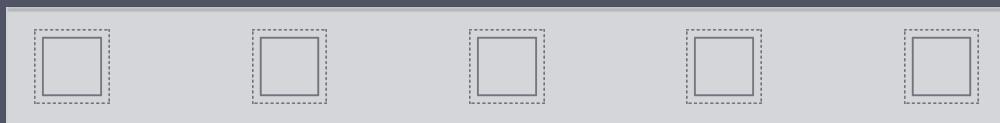
# Tab Bars

- Don't remove or disable a tab when its function is unavailable.
- Use a tab bar strictly for navigation.



# Tool Bars

A toolbar appears at the bottom of an app screen, contains buttons for performing actions related to the current context, such as creating an item, deleting an item, adding an annotation, or taking a photo. Avoid using a segmented control in a toolbar.

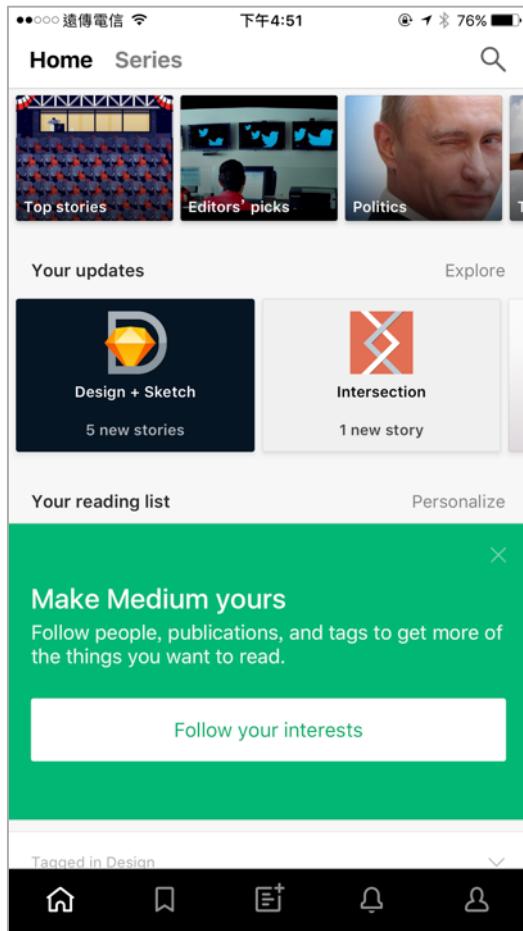


## Tool Bars Icons

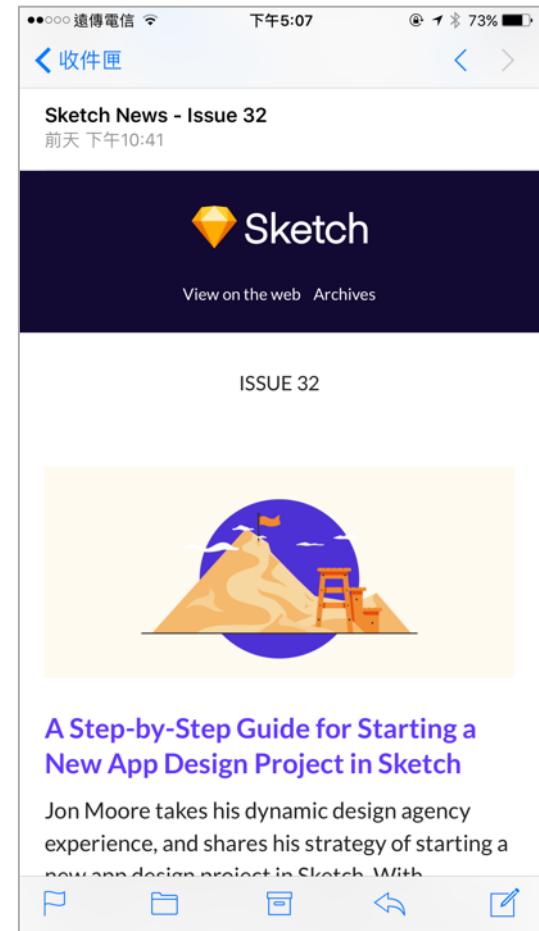


# Tool Bars

- Understand the difference between a toolbar and a tab bar.
- Provide relevant toolbar buttons.

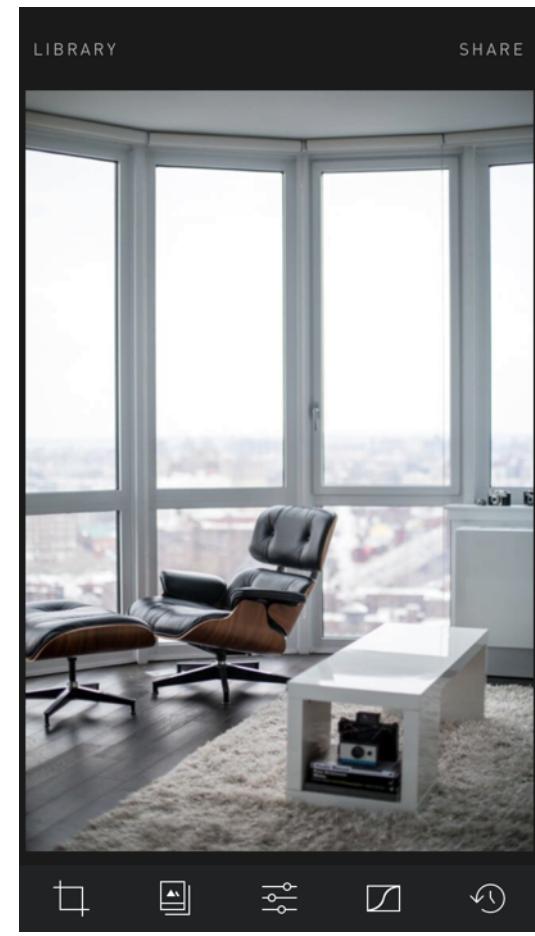
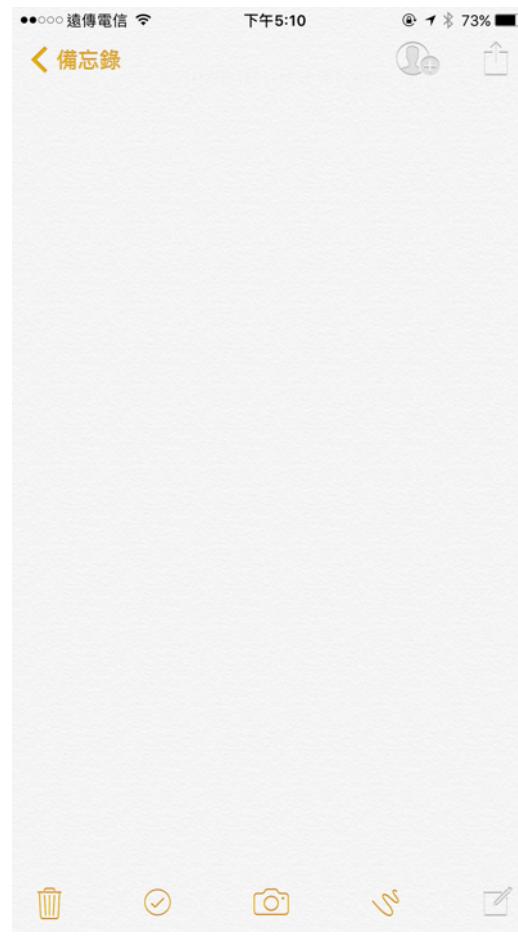
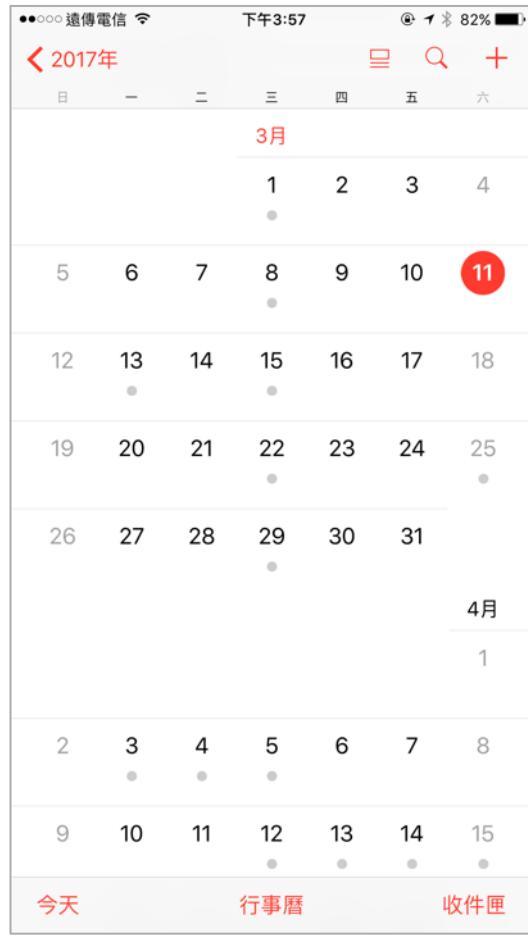


NOT Tool Bar

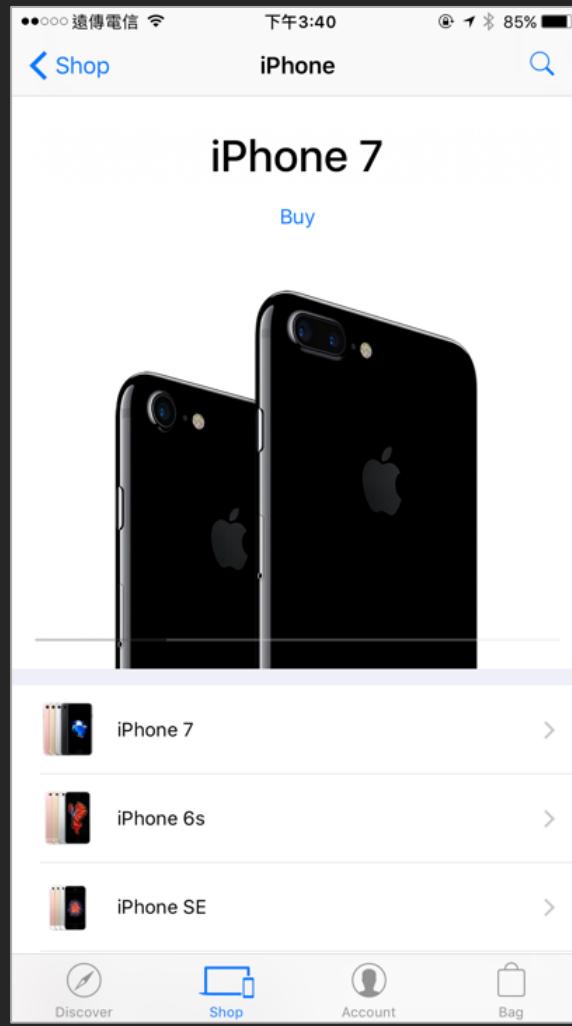
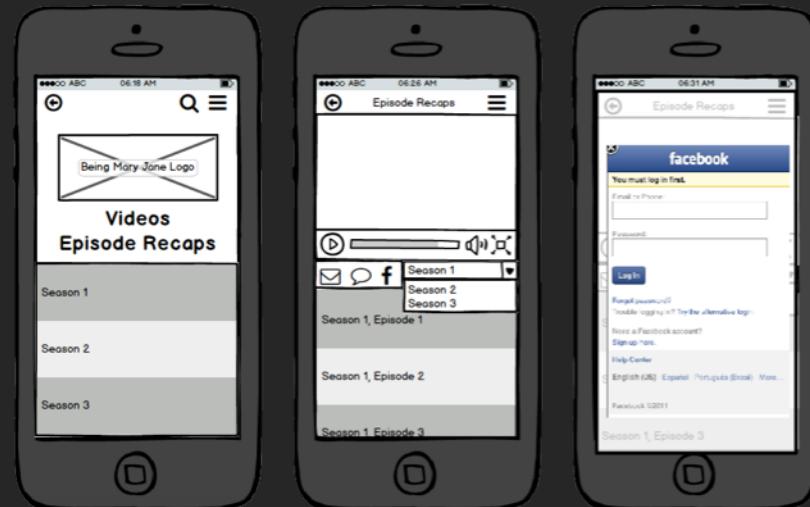
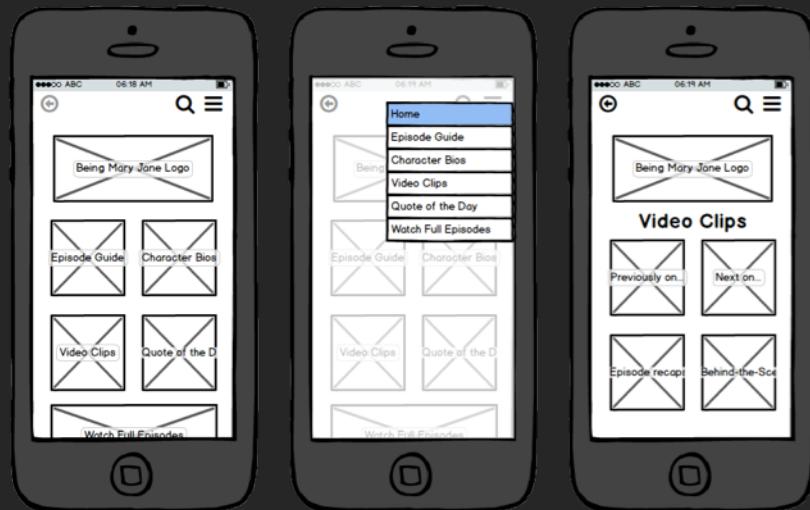


# Tool Bars

- Consider whether icons or text-titled buttons are right for your app.
- Give text-titled buttons enough room.



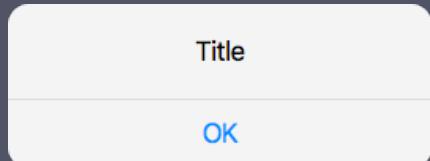
balsamiq



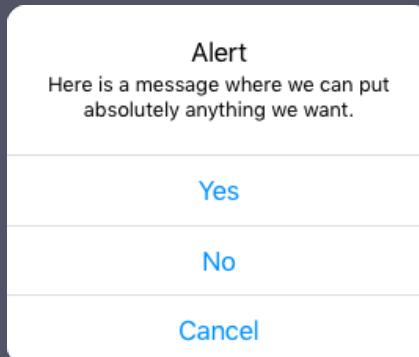
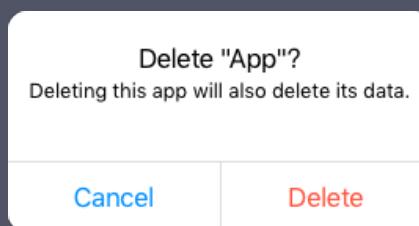
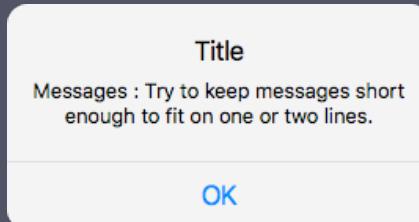
# Alerts

Two-button alerts provide an easy choice between two alternatives. Single-button alerts inform, but give no control over the situation. Alerts with three or more buttons create complexity and can require scrolling, which is a bad user experience.

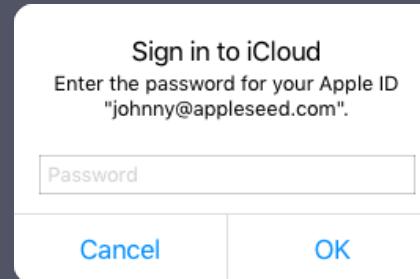
Title Only



Title + Messages



Title + Messages + Prompt



# Alerts

– Place buttons where people expect them.

In general, buttons people are most likely to tap should be on the right. Cancel buttons should always be on the left.



# UI Controls

Page Controls



Switches



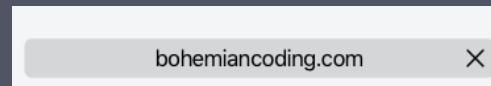
Sliders



Progress Indicators



Activity Indicators



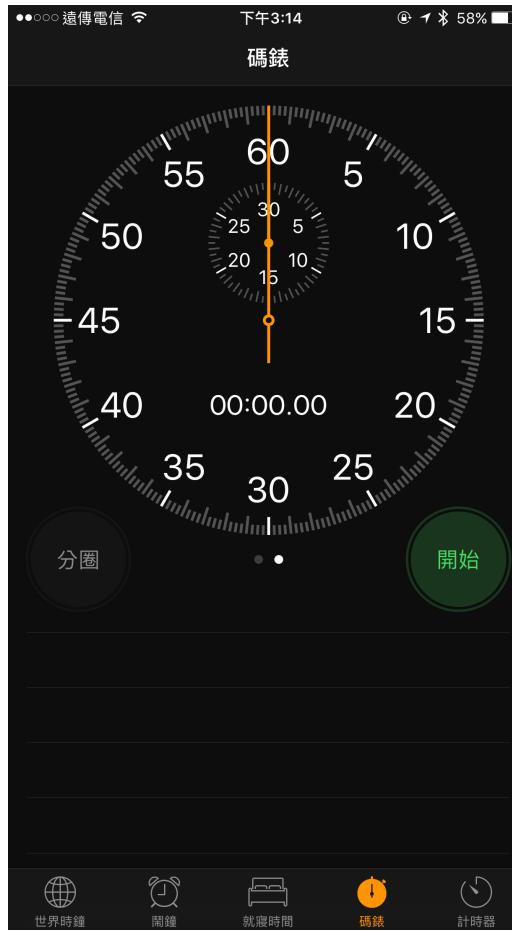
Progress Bars

# Page Controls

– Center page controls at the bottom of the screen.

– Don't display too many pages.

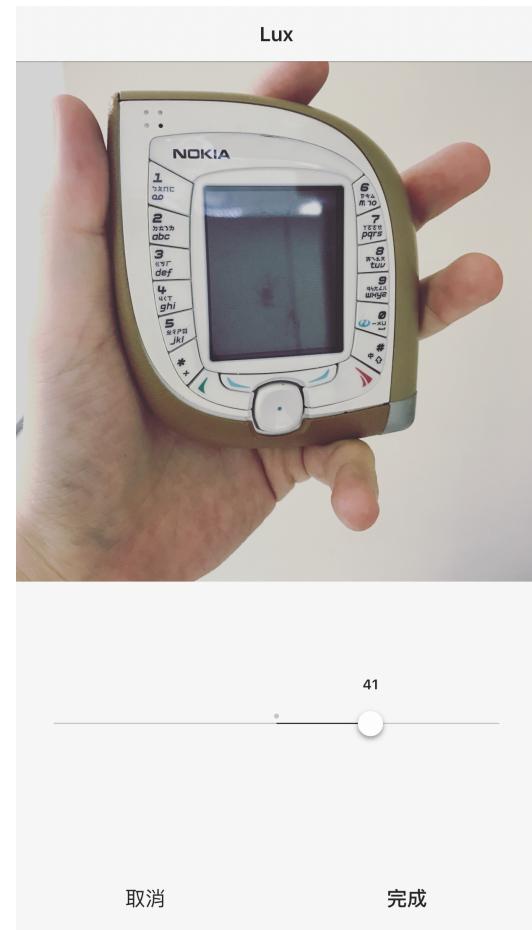
More than about 10 dots are hard to count at a glance, and more than about 20 open pages are time-consuming to visit in sequence.



# Sliders

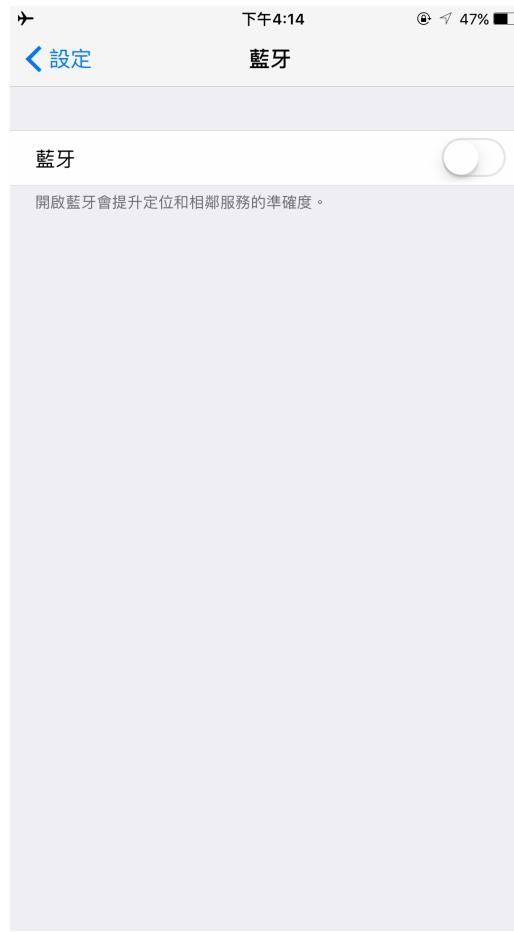
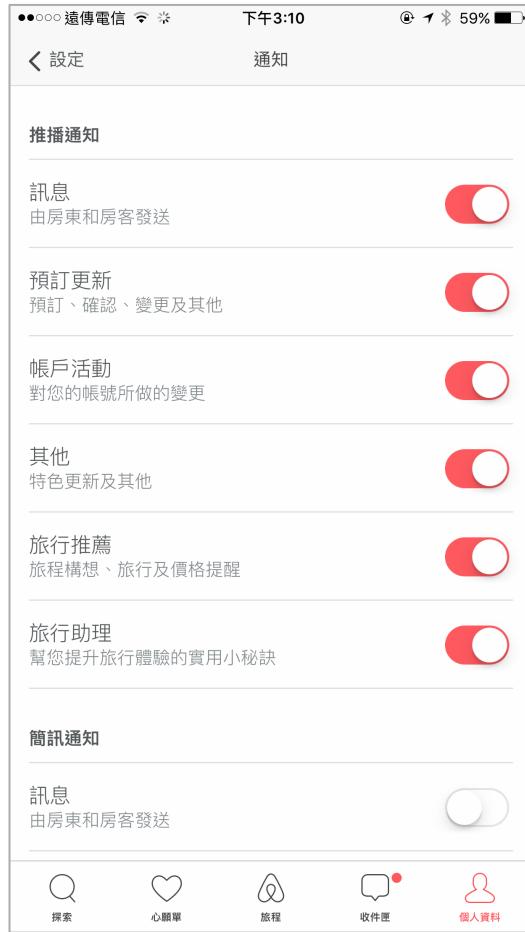
– Customize a slider's appearance if it adds value.

A slider that adjusts image size, for example, could show a small image icon on the left and a large image icon on the right.



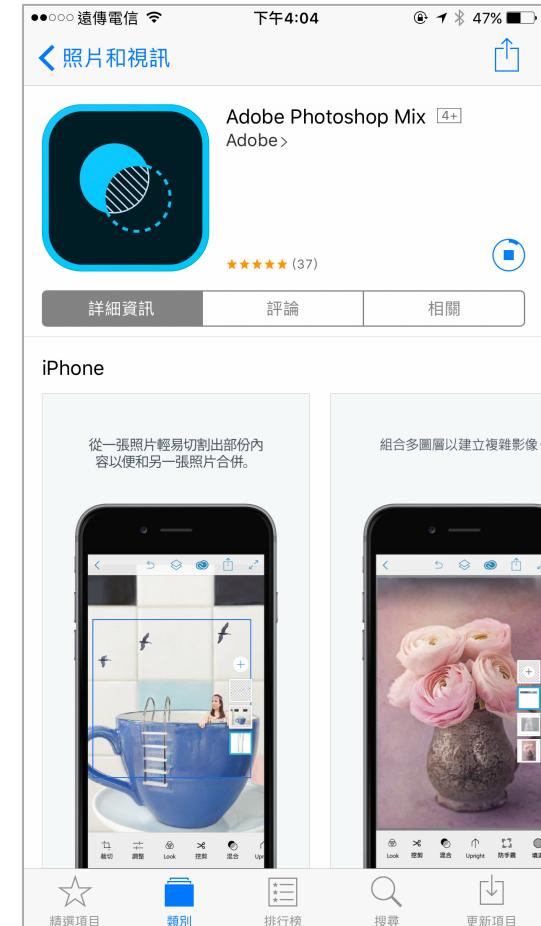
# Switches

- Consider adjusting a switch's appearance to match the style of your app.
- Consider using switches to manage the availability of related interface elements.



# Progress Indicators

- Always report progress accurately.
- Keep activity indicators moving.
- Consider customizing a progress bar's appearance to match your app.



Carrier 12:00 PM 100%

Carrier 12:00 PM 100%

Title

Back Title Edit

Back Title Done

Cancel Title Done

Cancel Longer Short Done

Cancel Title Done

Cancel Title Done

Title Done

Search

Search Cancel

Search Cancel

Search Cancel

Label Value

Label Value

Label Value

Label 1 Label 2

Label 1 Label 2 Label 3

Label 1 Label 2 Label 3 Label 4

Label 1 Label 2 Label 3 Label 4 Label 5

5.0x

One Two

One Two Three

One Two Three Four

One Two Three Four

Facebook Test App

MESSAGES now

Priyanka Kodikal

I can't believe this is the second year in a row.

Press for more

MESSENGER 17m ago

Jeff Smith: Jon Snow is alive.

APP 30m ago

Hello from the other side. I must have called a

thousand times.

Press for more

WIDGET NAME Show More

Save

Delete

Save

Delete

Cancel

Save

Edit

Share

Cancel

Alert

Here is a message where we can put absolutely anything we want.

Confirm

Action Sheet Title

Save

Edit

Share

Cancel

Delete "App"?

Deleting this app will also delete its data.

Cancel Delete

Alert

Here is a message where we can put absolutely anything we want.

Yes

No

Cancel

Action Sheet Title

Here is a message that's going to be two lines, so we see the text as it wraps.

Save

Edit

Share

Cancel

Alert

Confirm

Action Sheet Title

AirDrop Tap to turn on Wi-Fi and Bluetooth to share with Androp.

Message Mail Add to Notes Facebook

Add to Favorites Add Bookmark Add to Reading List Add to Home Screen

Cancel

Sign in to iCloud

Enter the password for your Apple ID "jhenny@appleseed.com".

Password

Cancel OK

Tap to share with Androp

MacBook Pro

iPad iPhone

Message Mail Add to Notes Facebook

Add to Favorites Add Bookmark Add to Reading List Add to Home Screen

Cancel

Search

Write Post

Upload Photo/Video

Go Live

Instagram

Facebook

Twitter

LinkedIn

YouTube

Tumblr

StumbleUpon

Reddit

Evernote

Dropbox

Google Photos

Google Sheets

Google Slides

Google Docs

Google Forms

Google Sheets

Google Slides

Google

# 10 general principles for interaction design



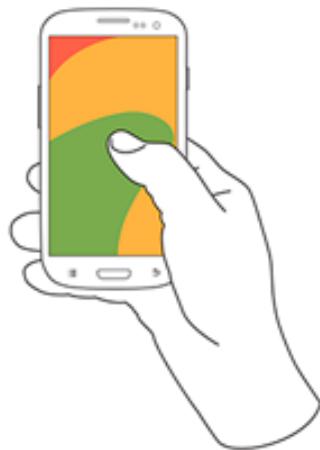
Jakob Nielsen

Jakob Nielsen's 10 general principles for interaction design. They are called "heuristics" because they are broad rules of thumb and not specific usability guidelines.

- 01 系統狀態能見度
- 02 系統與真實世界的關聯性
- 03 使用者的操控自由
- 04 一致性和標準
- 05 預防錯誤
- 06 辨識而非記憶
- 07 彈性與使用效率
- 08 美觀與簡化設計
- 09 協助使用者辨識、偵錯並從錯誤中恢復
- 10 幫助與說明文件

# How people are holding their phones

- 85% of observed users working with their phones using one hand.
- Give text-titled buttons enough room.



49%

one handed



36%

cradled

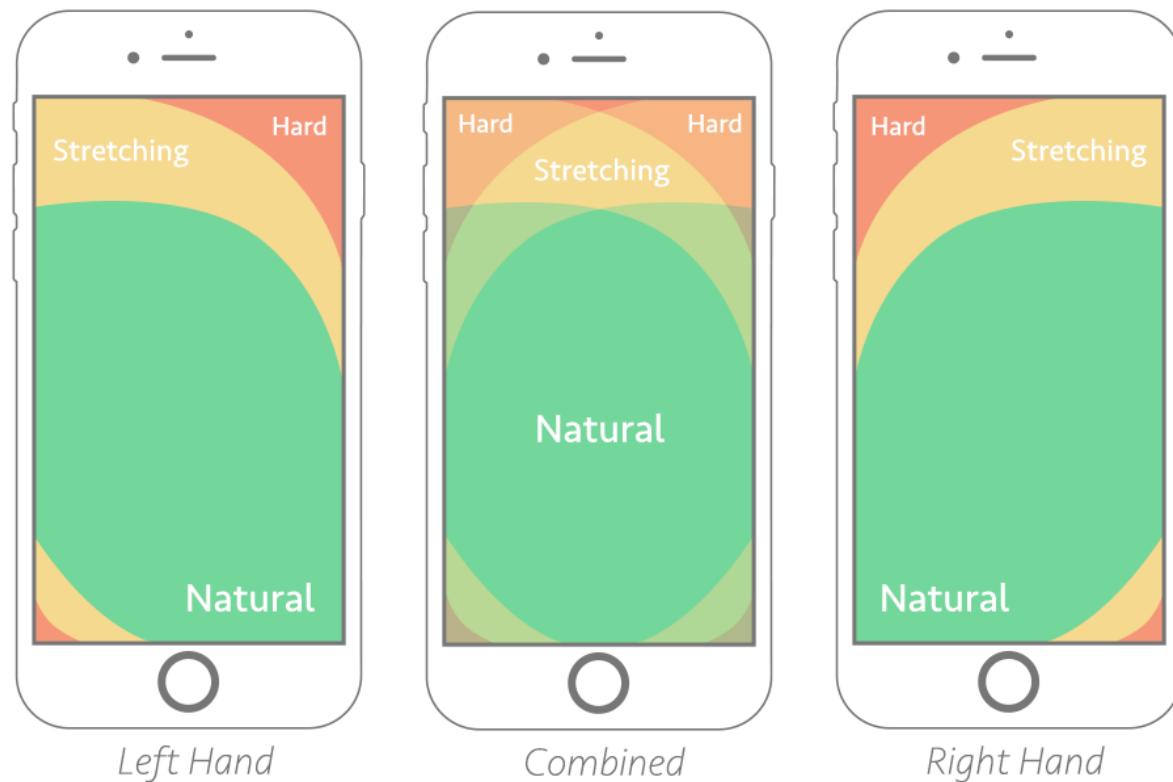


15%

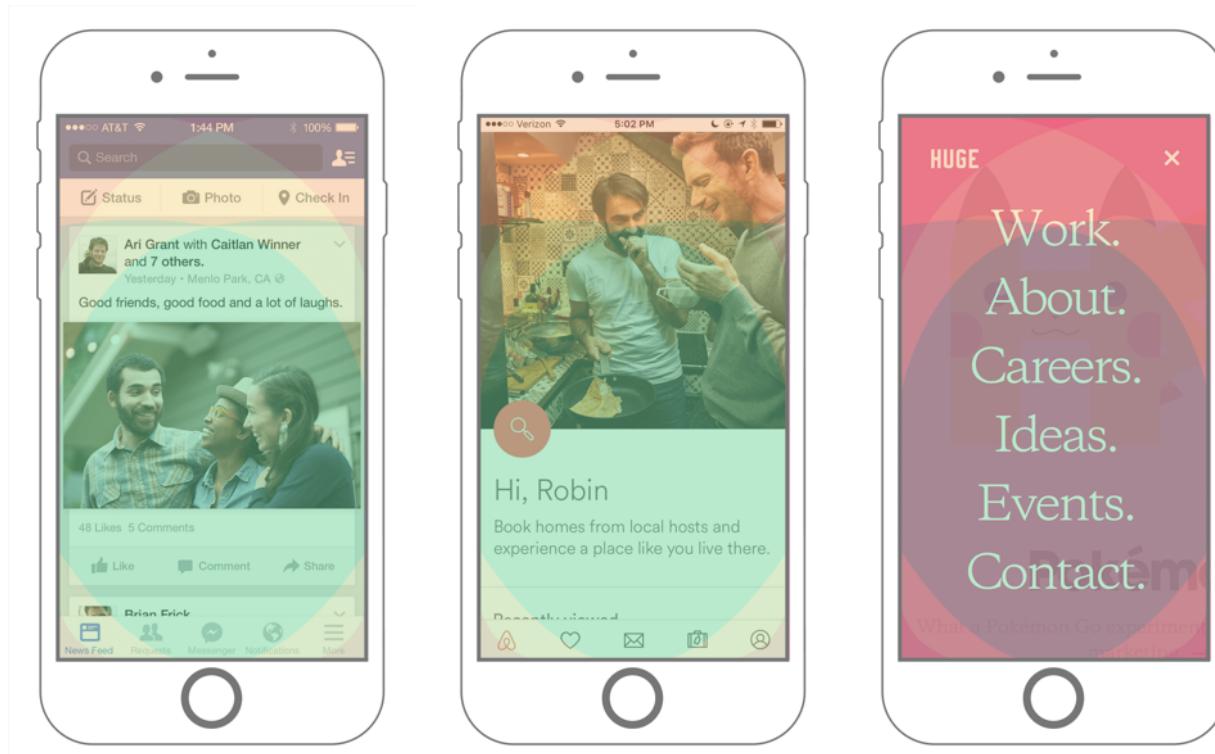
two handed

# Thumb-zone mapping

- The “combined” zone shows the best possible placement areas for most users.

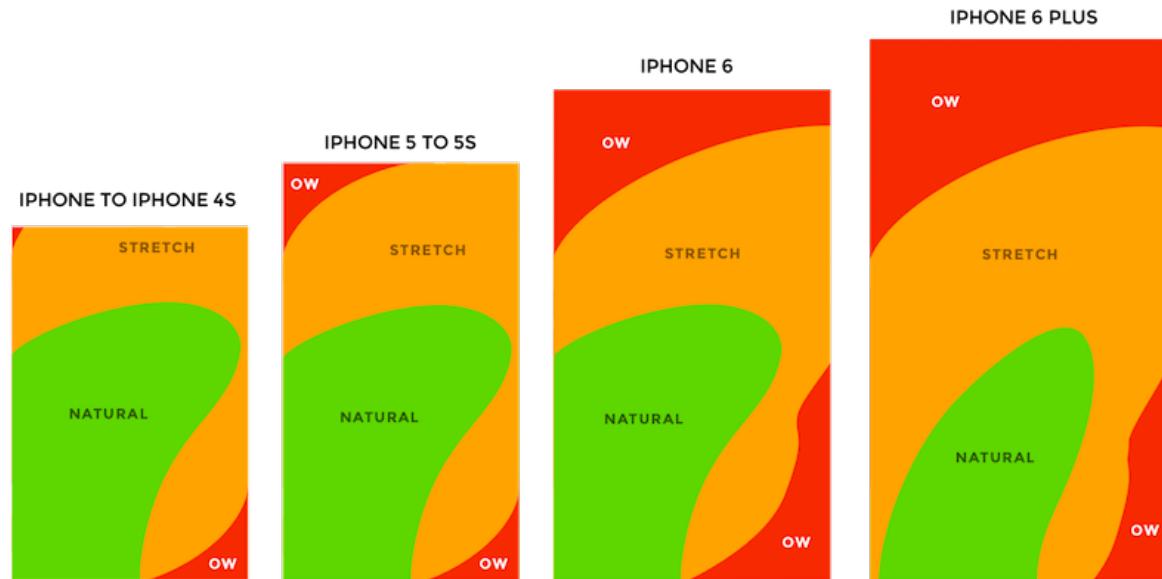


# Thumb-zone mapping



# Applied to every iPhone display size

– the bigger the display is, the less easily-accessible zone is.



# Wireframe Sketch

