

Inclusive App Design

Best practices for being world-ready

Session 801

Caroline Cranfill Designer and Production Manager, Human Interface











Why should I be inclusive?

67%

Of sales of the second quarter were international

285 Million

Individuals are blind or low vision, worldwide

Over 1 Billion

Individuals have a disability, worldwide

How can I be more inclusive?

Agenda

Agenda

Typography

Agenda

Typography

Dynamic layouts

Agenda

Typography

Dynamic layouts

Color

Agenda

Typography

Dynamic layouts

Color

Iconography

Typography

Inclusive App Design

Best practices for being world-ready

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Inclusive App Design

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being world-ready

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being world-ready

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100 pt —

Inclusive App Design

70 pt —

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being world-ready

50 pt —

Caroline Cranfill

Black

Inclusive App Design

Semibold

Best practices for
being world-ready

Regular

Caroline Cranfill

Capitals —

INCLUSIVE APP DESIGN

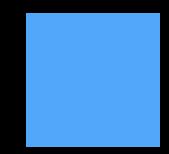
**Best practices for
being world-ready**

Caroline Cranfill

INCLUSIVE APP DESIGN

**Best practices for
being world-ready**

Italics — *Caroline Cranfill*



Color —

INCLUSIVE APP DESIGN

**Best practices for
being world-ready**

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**Best practices for
being world-ready**

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**兼收并蓄，面向世界
国际化应用设计范例**
柯嘉琳

INCLUSIVE APP DESIGN

**Best practices for
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**兼收并蓄
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国际化应用设计范例

柯嘉琳

INCLUSIVE APP DESIGN

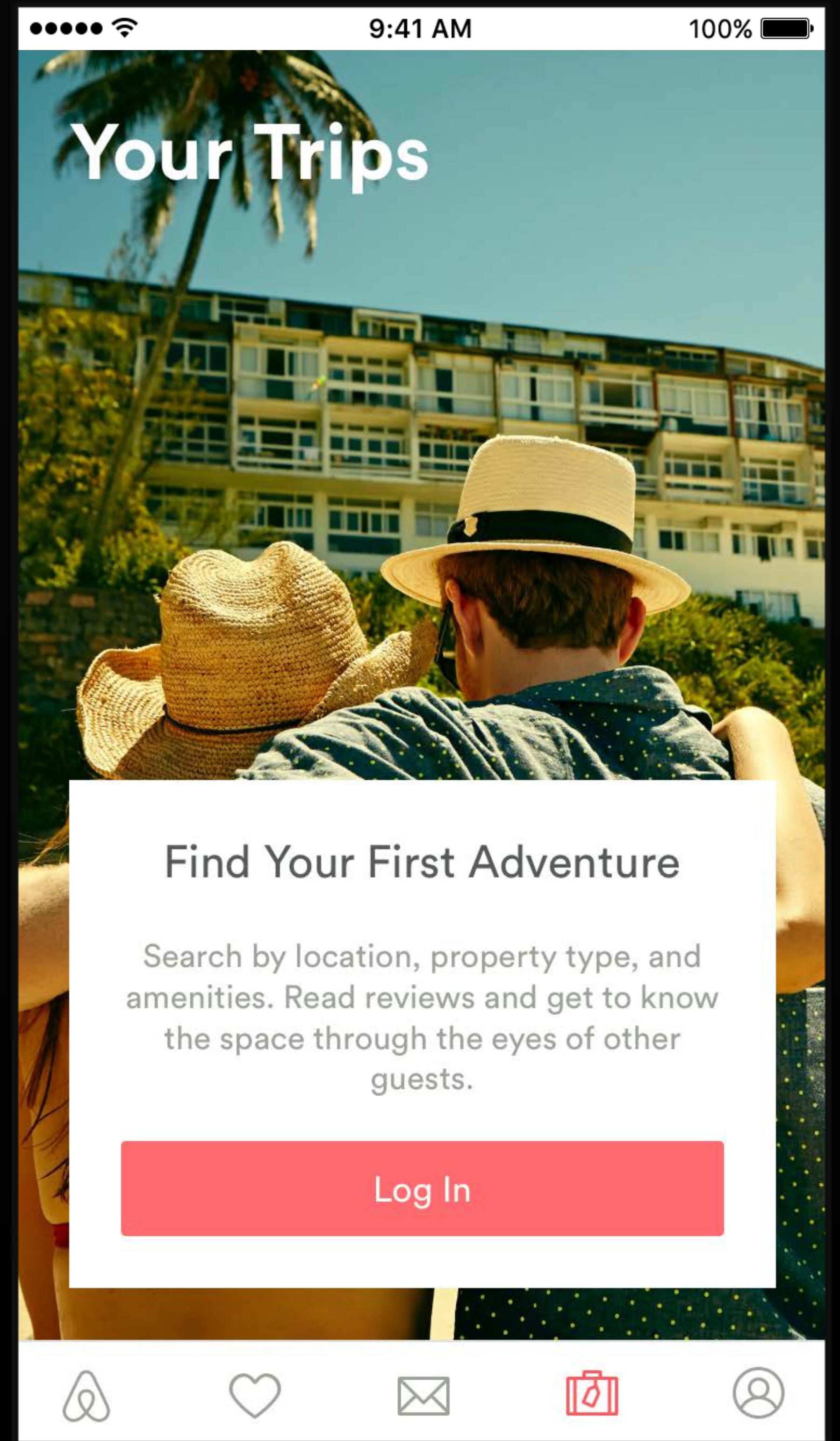
**Best practices for
being world-ready**

Caroline Cranfill

**兼收并蓄
面向世界**

国际化应用设计范例

柯嘉琳



Typography Considerations

Typography Considerations

Non-Latin writing systems

Hello!

Latin

Å Ä Å Å Ö Ç

Extended Latin

Hello!

Latin

Здравствуйте!

Cyrillic

Γεια σου!

Greek

こんにちは！

Japanese

您好！

Chinese

안녕하세요!

Korean

مرحباً !

Arabic

שלום!

Hebrew

ສະວັດທິ!

Thai

नमस्ते!

Devanagari

HELLO!

Latin

ЗДРАВСТВУЙТ

Cyrillic

ΓΕΙΑ ΣΟΥ!

Greek

こんにちは！

Japanese

您好！

Chinese

안녕하세요!

Korean

مرحباً !

Arabic

שלום!

Hebrew

สวัสดี!

Thai

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Devanagari

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Devanagari

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Arabic

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Hebrew

สวัสดี!

Thai

नमस्ते!

Devanagari

Typography Considerations

Non-Latin writing systems

Typography Considerations

Non-Latin writing systems

Different numbers of font weights per script

Ultralight Hello!

Thin Hello!

Light Hello!

Regular Hello!

Medium Hello!

Semibold Hello!

Bold Hello!

Heavy Hello!

Black Hello!

Ultralight	Hello!	您好!	안녕하세요!					
Thin	Hello!	您好!	안녕하세요!					
Light	Hello!	您好!	안녕하세요!	!םָלַע	สวัสดี!	নমস্তে!		
Regular	Hello!	こんにちは!	您好!	안녕하세요!	!םָלַע	مرحباً	สวัสดี!	নমস্তে!
Medium	Hello!		您好!	안녕하세요!				নমস্তে!
Semibold	Hello!		您好!	안녕하세요!	!םָלַע	مرحباً	สวัสดี!	নমস্তে!
Bold	Hello!	こんにちは!		안녕하세요!				নমস্তে!
Heavy	Hello!			안녕하세요!				
Black	Hello!			안녕하세요!				

Ultralight	Hello!		您好!	안녕하세요!				
Thin	Hello!		您好!	안녕하세요!				
Light	Hello!		您好!	안녕하세요!	!םאַלְעָן	สวัสดี!	নমস্তে!	
Regular	Hello!	こんにちは!	您好!	안녕하세요!	!םאַלְעָן	مرحباً	สวัสดี!	নমস্তে!
Medium	Hello!		您好!	안녕하세요!				নমস্তে!
Semibold	Hello!		您好!	안녕하세요!	!םאַלְעָן	مرحباً	สวัสดี!	নমস্তে!
Bold	Hello!	こんにちは!	您好!	안녕하세요!				নমস্তে!
Heavy	Hello!			안녕하세요!				
Black	Hello!			안녕하세요!				

Typography Considerations

Non-Latin writing systems

Different numbers of font weights per script

Typography Considerations

Non-Latin writing systems

Different numbers of font weights per script

Larger text sizes are more universal

A

A

A

A

A

A

A

龜

75pt

A

龜

40pt

A

龜

17pt

A

龜

11pt

A

龜

8pt

A

龜

6pt

A

龜

5pt

A

龜

75pt

A

龜

40pt

A

龜

17pt

A

龜

11pt

A

龜

8pt

A

龜

6pt

A

龜

5pt

A



Typography Considerations

Non-Latin writing systems

Different numbers of font weights per script

Larger text sizes are more universal

Typography Considerations

Non-Latin writing systems

Different numbers of font weights per script

Larger text sizes are more universal

Tall writing systems

Tall Writing Systems

Ang ลูกน้ำ شوان ଲକ୍ଷ୍ମୀ

Vietnamese

Thai

Arabic

Hindi

Ang ល្ងាច ឬ ស៊ុន ពេជ្រ

ascender

baseline

descender

Ang ລູກນໍ້າ ຫຼວມ ລັດ

ascender

baseline
descender

Ang ລູກນໍ້າ ຫຼວມ ພັດ

ascender

baseline

descender

Ang ລູກນໍ້າ ຫຼວານ ລັດ

ascender

baseline

descender

Ang ລູກນໍ້າ ຫຼວານ ລັດ

ascender

baseline

descender

Ang ລູກນໍ້າ ຫຼວານ ລັດ

ascender

baseline
descender

Ang ລູກນໍ້າ ຫຼວມ ລັດ



Ang ល្ងាចា នៃ ពួក



Ang ល្ងាចា ឬ ស៊ុន លក្ខ

How does this affect layout?

Lorem ipsum dolor sit amet

**Lorem ipsum dolor sit amet, persius
bonorum constituam eam, ubique
platinum, qui feugiat dissentias ei.**

LOREM

ปฏิบัติประพฤติกฎกำหนด

เป็นมนุษย์สุดประเสริฐเลิศคุณค่า^๗
กว่าบรรดาฝูงสัตว์เดชีจัน
จะฝ่าฟันพัฒนาวิชาการ

พุดจา ให้จัง

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, persius bonorum constituam eam, ubique platinum, qui feugiat dissentias ei.

LOREM

ปฏิบัติประพฤติกฎกำหนด

เป็นมุนุษย์สุดประเสริฐเลิศคุณค่า
กว่าบรรดาผู้สัตว์เดชีจัน
จะฝ่าฟันพัฒนาวิชาการ

พูดจาให้จะ



Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, persius bonorum constituam eam, ubique platinum, qui feugiat dissentias ei.

LOREM

ปฏิบัติประพฤติกฎกำหนด

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พูดจาให้จะ



Lorem ipsum dolor sit amet

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ปฏิบัติประพฤติกฎกำหนด

เป็นมนุษย์สุดประเสริฐเลิศคุณค่า
กว่าบรรดาผู้สัตว์เดชีจวน
จะฝ่าฟันพัฒนาวิชาการ

พูดจาให้จะ



Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, persius bonorum constituam eam, ubique platinum, qui feugiat dissentias ei.

LOREM

ปฏิบัติประพฤติกฎกำหนด

เป็นมนุษย์สุดประเสริฐแล้วคุณค่า
กว่าบรรดาผู้สัตหีบ ด้วยจิต
จะฝ่าฟันพัฒนาวิชาการ

พูดจาให้จะ

Things to Remember

Things to Remember

Maintain clear hierarchy

Hello

HELLO

Hello

Hello

Things to Remember

Maintain clear hierarchy

Large font sizes

龜

75pt

A

龜

40pt

A

龜

17pt

A

龜

11pt

A

Things to Remember

Maintain clear hierarchy

Large font sizes

Do the right thing for the text



Ång ទូរសព្ទ ការណ៍

Agenda

Typography

Dynamic layouts

Color

Iconography

Typography and Fonts

Presidio

Wednesday 9:00AM

Agenda

Typography

Dynamic layouts

Color

Iconography

Dynamic Layouts

English **Edit**

English **Edit**

Russian **Редактир**

English **Edit**

Russian **Редактировать**

3x

English Edit

Russian Редактировать

English Press home to open

Greek Πατήστε το κουμπί Αφετηρίας για άνοιγμα

2x

English

Press home to open

Greek

Πατήστε το κουμπί Αφετηρίας για άνοιγμα

English

Photos creates rich collections from
the best moments in your library.

German

Mit „Fotos“ werden sehenswerte
Sammlungen der schönsten
Fotomomente in deiner Mediathek
erstellt.

1.3X

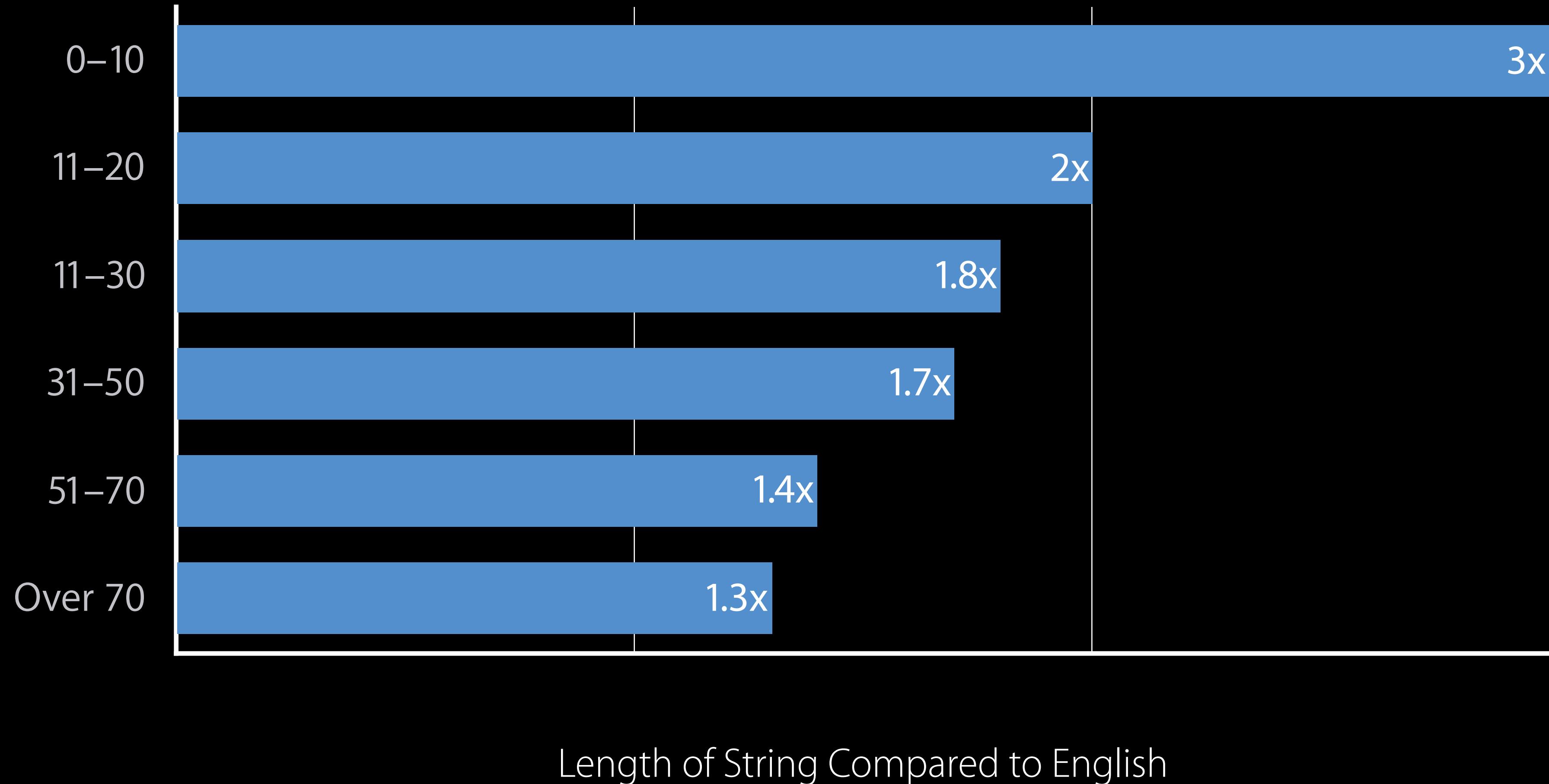
English

Photos creates rich collections from
the best moments in your library.

German

Mit „Fotos“ werden sehenswerte
Sammlungen der schönsten
Fotomomente in deiner Mediathek
erstellt.

Text Length



You would hate for the end of a
very important message to be

lost.

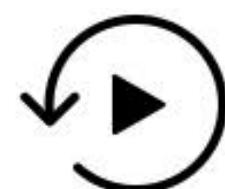
I need a dynamic layout!



9:41 AM

100%

What's New in Photos



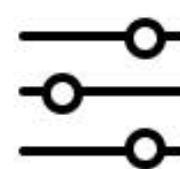
Relive Your Best Memories

Photos creates rich collections from the best moments in your library.



All Your People in One Place

Photos automatically scans your library to create a People album of familiar faces.



Edit Live Photos

Now you can filter, crop, adjust, and rotate any Live Photo you take.

Continue



9:41 AM

100%

“照片”新功能



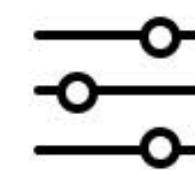
让美好回忆再次鲜活

“照片”从图库中摘选最佳时刻，
为您创建丰富的精选回忆。



集中管理所有人物

“照片”将自动扫描图库，为熟悉的
面孔创建“人物”相簿。



编辑 Live Photo

现在您可以裁剪、调整或旋转您拍
摄的 Live Photo，或添加滤镜。

继续



9:41 AM

100%

Neu in „Fotos“



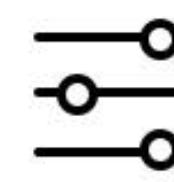
Die besten Andenken noch einmal erleben

Mit „Fotos“ werden sehenswerte Sammlungen der schönsten Fotomomente in deiner Mediathek erstellt.



Alle Personen an einer Stelle

Mit „Fotos“ wird deine Mediathek automatisch gescannt, um ein Personenalbum voll bekannter Gesichter zu erstellen.



Live Photos bearbeiten

Alle von dir aufgenommen Live Photos können jetzt mit Filtern versehen, beschnitten, angepasst oder gedreht werden.

Fortfahren

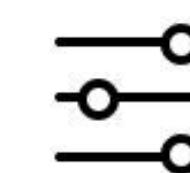
มีอะไรใหม่ในแอปรูปภาพ



ชูนความทรงจำที่น่าประทับใจอีกรัง
แอปรูปภาพจะสร้างคอลเลคชั่นของค
ความทรงจำที่ดีที่สุดจากคลังของคุณ



ผู้คนทั้งหมดของคุณอยู่ในที่เดียวกัน
แล้ว
แอปรูปภาพจะสแกนคลังของคุณโดย
อัตโนมัติเพื่อสร้างอัลบั้มผู้คนจาก
ใบหน้าต่างๆ ที่คล้ายกัน

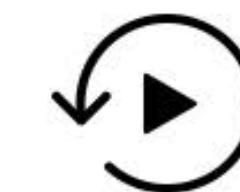


แก้ไข Live Photo
คุณสามารถพิลเตอร์ ครอบตัด ปรับ
แต่ง และหมุน Live Photo ที่คุณถ่าย^{ได้แล้ว}

ดำเนินการต่อ

ما الجديد في الصور

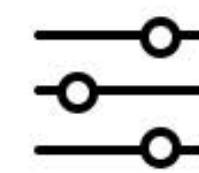
عش لحظاتك المفضلة من جديد
يقوم "الصور" بإنشاء تشكيلة غنية من أفضل
اللحظات الموجودة في مكتبك.



جميع الأشخاص لديك في مكان واحد
يقوم "الصور" تلقائياً بفحص مكتبك لإنشاء
ألبوم "الأشخاص" الذي يضم الوجوه المألوفة
لك.



قم بتحرير صور
بإمكانك الآن إضافة فلاتر إلى صور
Live Photo التي تلتقطها، كما يمكنك
قصها وتعديلها وتدويرها.



متابعة

One more reason . . .

Dynamic Type



9:41 AM

100%

Settings

- Cellular >
- Personal Hotspot >
- VPN 
- Notifications >
- Control Center >
- Do Not Disturb >
- General >
- Display & Brightness >
- Wallpaper >
- Sounds >
- Siri >
- Touch ID & Passcode >

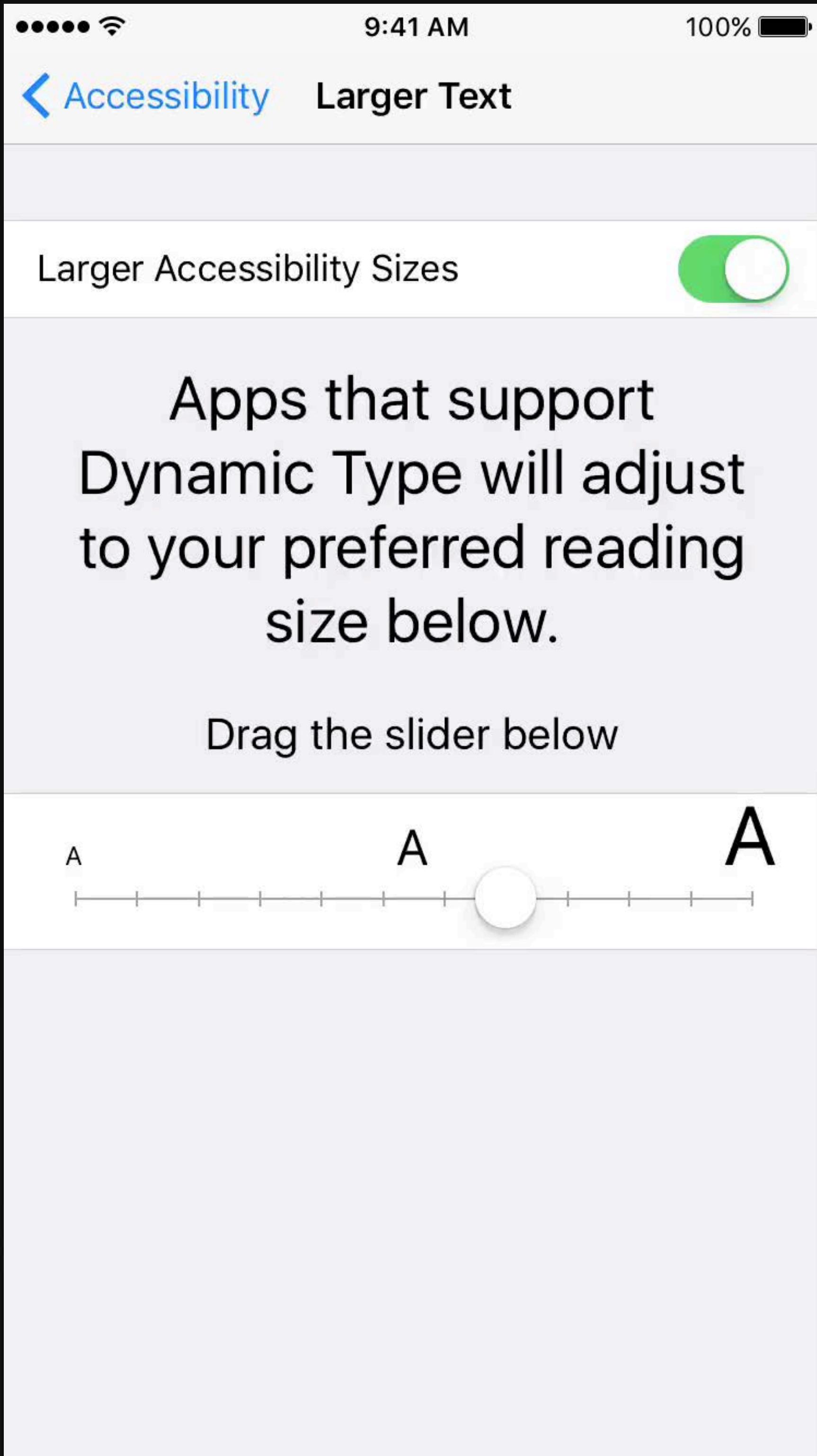


9:41 AM

100%

Settings

- Cellular >
- Personal Hotspot >
- VPN 
- Notifications >
- Control Center >
- Do Not Disturb >
- General >
- Display & Brightness >
- Wallpaper >
- Sounds >
- Siri >
- Touch ID & Passcode >



9:41 AM 100%

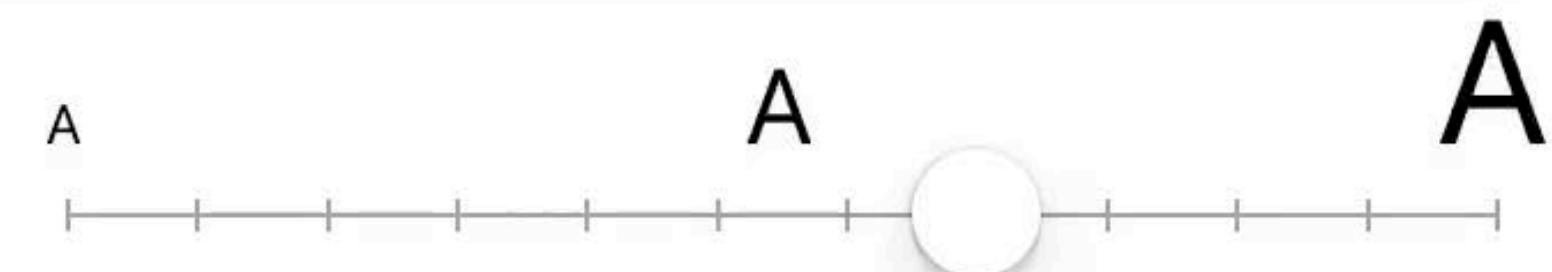
Accessibility Larger Text

Larger Accessibility Sizes



Apps that support
Dynamic Type will adjust
to your preferred reading
size below.

Drag the slider below



The screenshot shows the 'Introduction' screen of the Ulysses app on an iPhone. At the top, there's a navigation bar with a back arrow pointing to 'Introduction', the time '9:41 AM', and a battery level of '100%'. Below the navigation bar are four blue icons: a gear (Settings), an upward arrow (Upload), a pencil (Edit), and a paperclip (Share). The main content area has a light gray background. At the top of this area, the text '#² Overview' is displayed in blue. Below it, a paragraph of text reads: 'Welcome to Ulysses for iPhone! If you're familiar with Ulysses for Mac or iPad, you can probably skip this introduction and head straight to the Details and Tips section. This is Ulysses after all, you should get around easily.' Further down, another paragraph says: 'If you're entirely new to this, or if you're coming over from Daedalus – welcome aboard! Let's cover some basic concepts to get you started.' Three numbered points follow: 1. We believe that writing is about content, about what you want to say – not about fancy formatting. This is why writing in Ulysses means writing plain text, but at the same time more than plain text. We call it "plain text enhanced". We will come back to this later. 2. Ulysses is a single-library app, and all your texts live in this single library. There is no "Open", no "Save" – it all happens right here, in this app only. 3. Ulysses utilizes iCloud for storing your texts, if you allow it to do so. This is especially nice if you also use Ulysses on your Mac or iPad, in case you want to ...'. At the bottom of the screen, there's a search icon, the character count '1,606 Characters', and a scroll indicator.

Overview

Welcome to Ulysses for iPhone! If you're familiar with Ulysses for Mac or iPad, you can probably skip this introduction and head straight to the Details and Tips section. This is Ulysses after all, you should get around easily.

If you're entirely new to this, or if you're coming over from Daedalus – welcome aboard! Let's cover some basic concepts to get you started.

1. We believe that writing is about content, about what you want to say – not about fancy formatting. This is why writing in Ulysses means writing plain text, but at the same time more than plain text. We call it "plain text enhanced". We will come back to this later.
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3. Ulysses utilizes iCloud for storing your texts, if you allow it to do so. This is especially nice if you also use Ulysses on your Mac or iPad, in case you want to ...

1,606 Characters

••••• ⌘ 9:41 AM 100% 🔋

◀ Introduction ⚙️ ⌂ ✎ ⌂

Overview

Welcome to Ulysses for iPhone! If you're familiar with Ulysses for Mac or iPad, you can probably skip this introduction and head straight to the Details and Tips section. This is Ulysses after all, you should get around easily.

If you're entirely new to this, or if you're coming over from Daedalus – welcome aboard! Let's cover some basic concepts to get you started.

🔍 1,606 Characters ↕

How do I specify a design
to be dynamic?

watchOS

iOS

Apple TV

Headline

Body

Caption 1

Caption 2

Footnote 1

Footnote 2

Title 1

Title 2

Title 3

Headline

Body

Callout

Subhead

Footnote

Caption1

Caption2

Title 1

Title 2

Title 3

Headline

Subtitle 1

SUBTITLE 2

Subtitle 3

Callout

Body

SUBHEAD

Footnote

Caption 1

Caption 2

iOS Human Interface Guidelines Beta

Visual Design ▾

- Animation
- Branding
- Color
- Layout
- Typography
- Graphics
- UI Bars
- UI Views
- UI Controls
- Extensions
- Technologies
- Resources

xSmall · Small · Medium · Large (Default) · xLarge · xxLarge · xxxLarge

Large (Default)

Style	Weight	Point Size	Leading	Tracking
Title 1	Light	28pt	34pt	13pt
Title 2	Regular	22pt	28pt	16pt
Title 3	Regular	20pt	24pt	19pt
Headline	Semi-Bold	17pt	22pt	-24pt
Body	Regular	17pt	22pt	-24pt
Callout	Regular	16pt	21pt	-20pt
Subhead	Regular	15pt	20pt	-16pt
Footnote	Regular	13pt	18pt	-6pt
Caption 1	Regular	12pt	16pt	0pt
Caption 2	Regular	11pt	13pt	6pt

Prioritize content when responding to text-size changes. Not all content is equally important. When someone chooses a larger size, they want to make the content they care about easier to read; they don't always want every word on the screen to be larger.

Font Usage and Tracking

Use the correct font variant in interface mockups. Use SF UI Text for text 19 points or smaller. Use SF UI Display for text 20 points or larger. Adjust tracking appropriately, as follows.

SF UI Text · SF UI Display

SF UI Text

Point Size @2x(144 ppi) · Tracking



watchOS

iOS Large (Default)

Apple TV

Headline

Title 1

Title 1

Body

Title 2

Title 2

Caption 1

Title 3

Title 3

Caption 2

Headline

Headline

Footnote 1

Body

Subtitle 1

Footnote 2

Callout

SUBTITLE 2

Subhead

Subtitle 3

Footnote

Callout

Caption1

Body

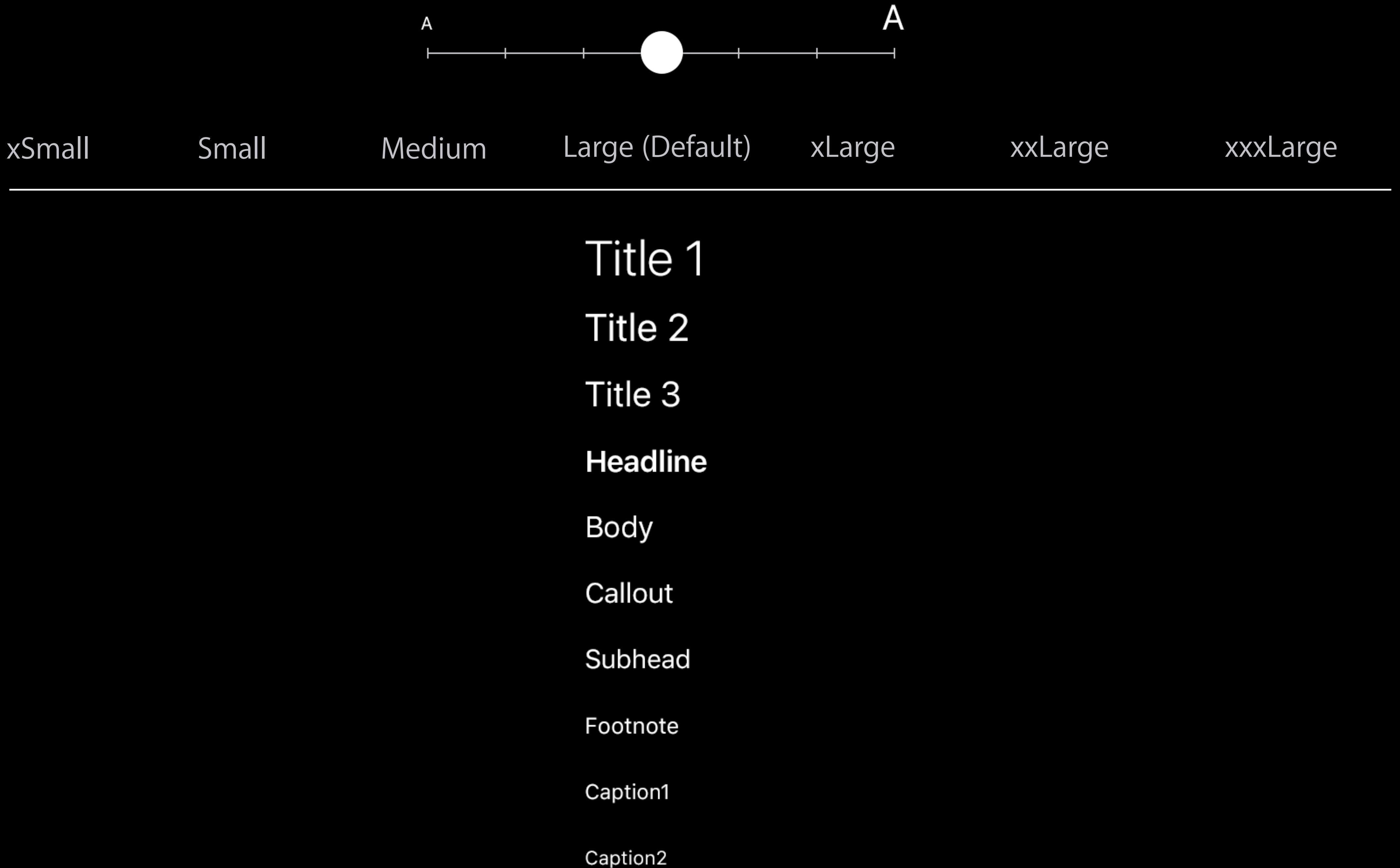
Caption2

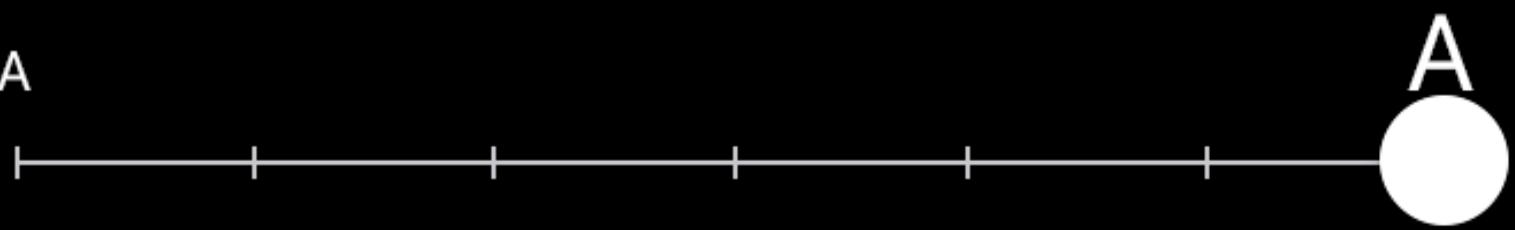
SUBHEAD

Footnote

Caption 1

Caption 2





[All Inboxes](#)**John Appleseed**

To: Derek Cc: Emily & 2 more

[Details](#)**Yosemite Trip**

Today at 9:41 AM

Hey All!

We finally booked the Yosemite cabin! The manager has 24 hours to confirm our reservation. The total cost came out to \$1,299.10 for 3 nights. It's located on Far Meadow's Base Camp near Yosemite's south entrance and Bass Lake. There's opportunities to ski, fish, snowshoe, & stargaze around there!



1

Headline

Headline

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more [Details](#) 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Back Edit

1

Headline

Headline

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< All Inboxes ^ v

John Appleseed
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Yosemite Trip
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Flag Folder Delete Back Edit

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John Appleseed
To: Derek Cc: Emily & 2 more [Details](#) 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Back Edit

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John Appleseed
To: Derek Cc: Emily & 2 more [Details](#) 

Yosemite Trip
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Flag Folder Delete Back Edit

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John Appleseed
To: Derek Cc: Emily & 2 more Details 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Back Edit

Body

1

1

Body

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more Details 

Yosemite Trip
Today at 9:41 AM

Hey All!

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Flag Folder Delete Back Edit

32 pts, Leading of Headline
20 pts, Leading of Subhead

2

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more Details

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Back Edit

20 pts, Leading of Headline

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more Details 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Back Forward

2

2

Vertically centered

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek, Cc: Emily & 2 more... Details

Yosemite Trip
Today at 9:41 AM

Hey All!

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Flag Folder Delete Reply Write

32 pts, Leading of Headline
20 pts, Leading of Subhead
20 pts, Leading of Headline
32 pts, Leading of Body

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more Details 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Trash Share Edit

2

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more [Details](#) 

Yosemite Trip
Today at 9:41 AM

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Flag Folder Delete Reply Write

3

4

9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek Cc: Emily & 2 more 15 Details 15 

Yosemite Trip
Today at 9:41 AM

Hey All!

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Flag Folder Delete Back Edit

[All Inboxes](#)**John Appleseed**

To: Derek Cc: Emily & 2 more

[Details](#)**Yosemite Trip**

Today at 9:41 AM

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9:41 AM 100%

< All Inboxes ^ v

John Appleseed
To: Derek & 3 more **Details** 

Yosemite Trip
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Flag Folder Delete Reply Write

..... ⚡ 9:41 AM 100%

[All Inboxes](#) ^ v

John Appleseed
To: Derek & 3 more [Details](#) 

Yosemite Trip
Today at 9:41 AM

Hey All!

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Flag Folder Delete Reply Edit

पू १:४९ १००%

इनबॉक्स ^ v

पापा
प्रति : करन मिश्र विवरण

विवरण

वंश वृक्षावली
परसों, पू ११:२९

प्रिय कनू

मैं वंश वृक्षावली भेज रहा हूँ, समयानुसार
इसको एक चार्ट का रूप दे देना।
उम्मीद है कि तुम बीजिंग समय पर पहुँच
गये होगे और आराम करने का वक्त भी
मिल गया होगा। धीरे धीरे मैं कोशिश
करँगा कि सभी लोगों से सम्बन्धित तारीखें
भी मिल जायें।

FLAG FOLDER TRASH SHARE EDIT

iPad 9:41 AM 100%

Mailboxes < ▲ ▼

John Appleseed
To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff

Details

Yosemite Trip
Today at 9:41 AM

Hey All,

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iPad 9:41 AM 100% Mailboxes

John Appleseed
To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff Details

Yosemite Trip
Today at 9:41 AM

Hey All,

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Mailboxes < ▲ ▼

John Appleseed
To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff Details

Yosemite Trip
Today at 9:41 AM

Hey All,

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iPad 9:41 AM 100%

Mailboxes Flag File Delete Reply Edit

John Appleseed
To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff Details 

Yosemite Trip
Today at 9:41 AM

Hey All,

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Mailboxes < Details

John Appleseed
To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff

Yosemite Trip
Today at 9:41 AM

Hey All,

We finally booked the Yosemite cabin! The manager has 24 hours to confirm our reservation. The total cost is \$1,400 for 3 nig.
It's located on Far meadow's Base Camp near Yosemite's south entrance and Bass Lake. There's opportunities to swim, fish, hike, & stargaze around there!



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Mailboxes

John Appleseed

To: Derek Parker Cc: Emily Parker, Katie Ball and Adam Gooseff

Details

Yosemite Trip

Today at 9:41 AM

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< Mailboxes

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iPad 9:41 AM 100%

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Right-to-Left Languages

9:41 AM 100%

Tweets Mentions Likes

CNN @CNN 2h
It's real. Scientists have created transparent wood -- and it could be stronger than steel cnn.it/25cOwd7 pic.twitter.com/AJ3MI8IPKr

CNN @CNN Joy really is viral, experts say cnn.it/1OTdSIM pic.twitter.com/xmx48QpmB0

CNN @CNN 3h
Will the new overtime rules actually hurt workers? cnn.it/25cLN3v pic.twitter.com/kwiwR8cY6U

CNN @CNN 3h
Sub-Saharan Africa's apparel and footwear market is worth \$31 billion cnn.it/25cLzcH pic.twitter.com/i43qvRIJmo

CNN @CNN 3h
#BeautyAndTheBeast trailer teases Emma Watson as Belle cnn.it/1OTeYvV pic.twitter.com/l

Reply Compose

100% ٩:٤١

إعجابات الإشارات التغريدات

بالعربة CNN @cnnarabic ١٤س شاهد.. ما هو مهرجان "قارب التنين" بهونغ كونغ cnn.it/1XbYb2c

CNNArabic... CNNArabic Travel هل تخطط للسفر هذا الصيف؟
عليك قراءة هذا المقال cnn.it/1XH8JHm

بالعربة CNN @cnnarabic ١٦س ما هو "الجوع العاطفي" وكيف تتخلص منه؟ cnn.it/1WGgBbb

بالعربة CNN @cnnarabic ١٩س من بينها نافورة في مدينة عربية بالصور... 15 نافورة من بين الأجمل في العالم cnn.it/1Yb8zX3 pic.twitter.com/14AeX902yJ

بالعربة CNN @cnnarabic ١٨س بالصور.. الصيام: تقاليد وممارسات روحانية وطرق عبادة مختلفة بين دين وأخر

Numerals

يوجد خصم ٢٥٪ من السعر الأساسي

מחר הTEMPERATURE יהיה עד 26° צלזיות

Numerals

Phone Numbers

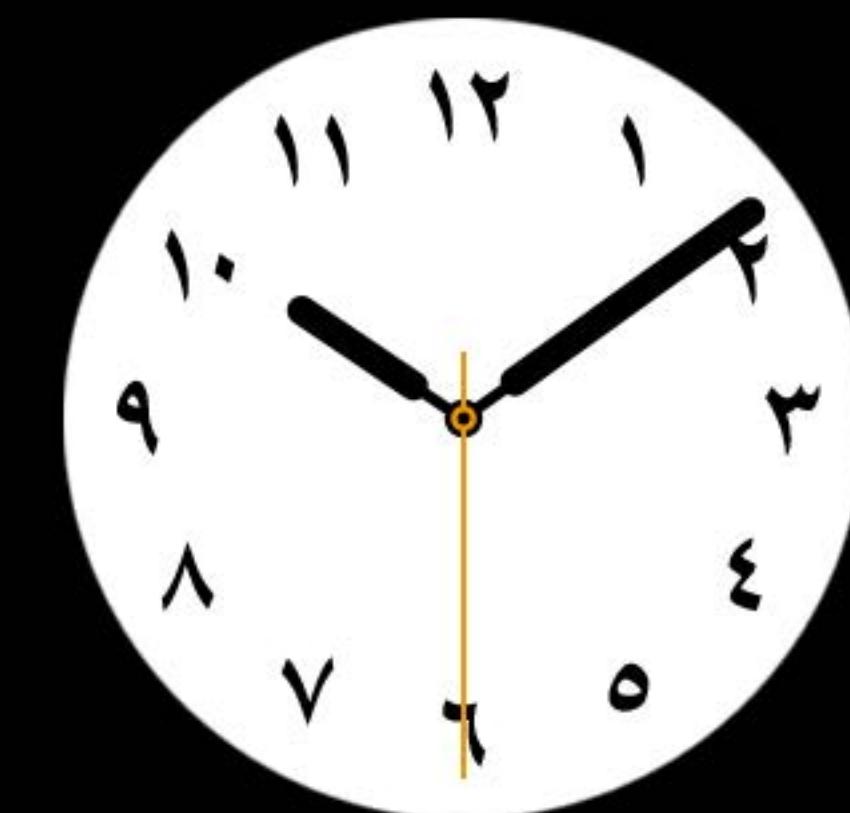
+1-800-854-3680

+٩٦٠٨٥٤٣٦٨٠

Numerals

Phone Numbers

Clocks

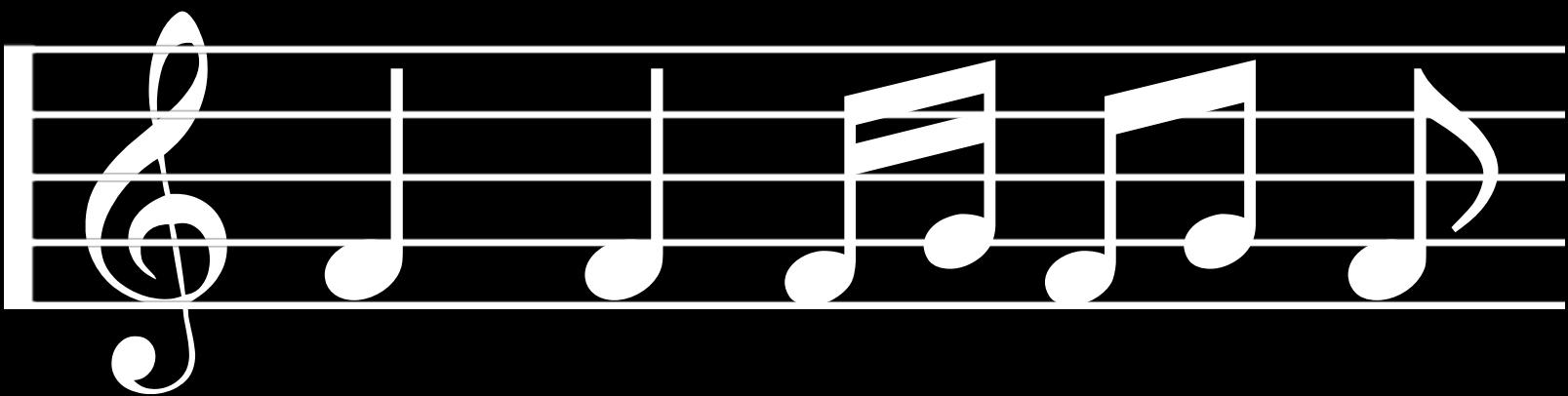


Numerals

Phone Numbers

Clocks

Music Notes



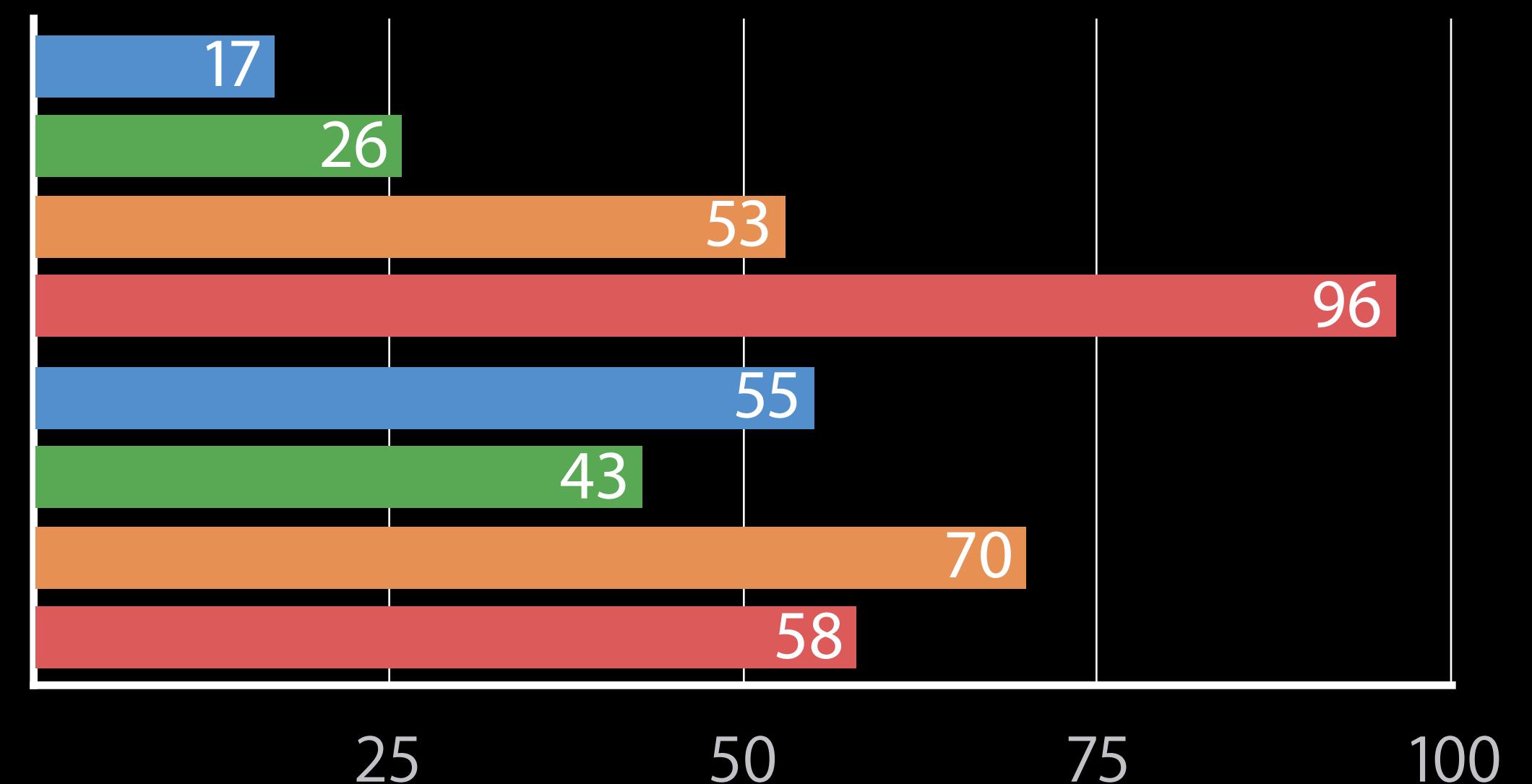
Numerals

Phone Numbers

Clocks

Music Notes

Graphs



Numerals

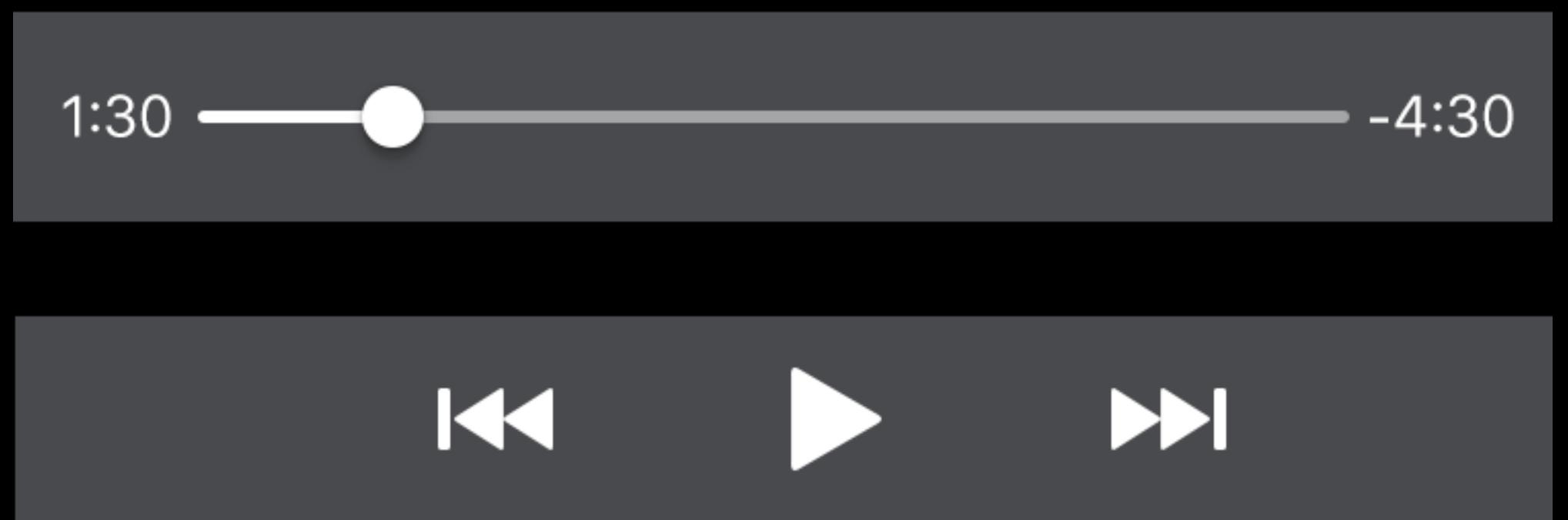
Phone Numbers

Clocks

Music Notes

Graphs

Video Playback Controls



Numerals

Phone Numbers

Clocks

Music Notes

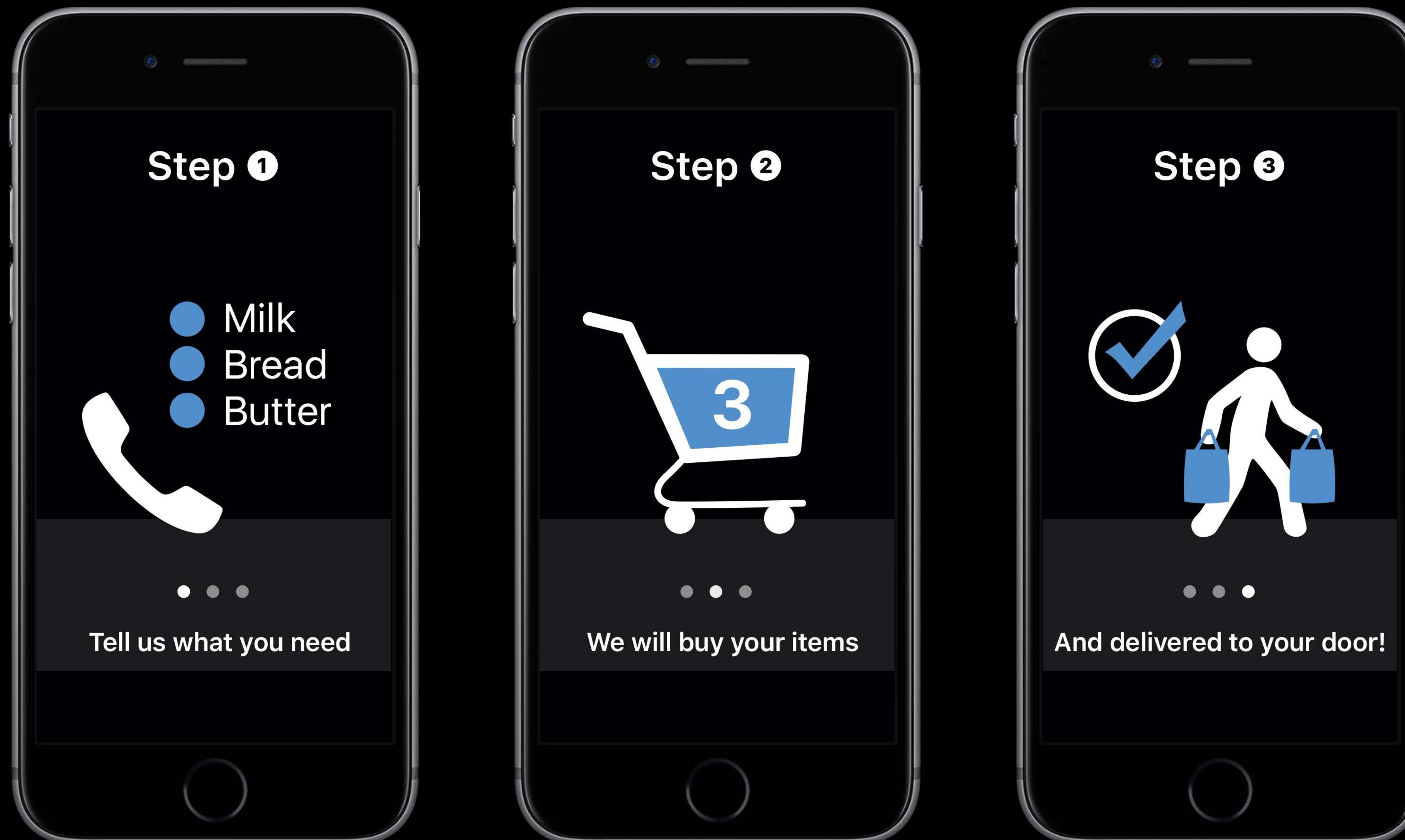
Graphs

Video Playback Controls

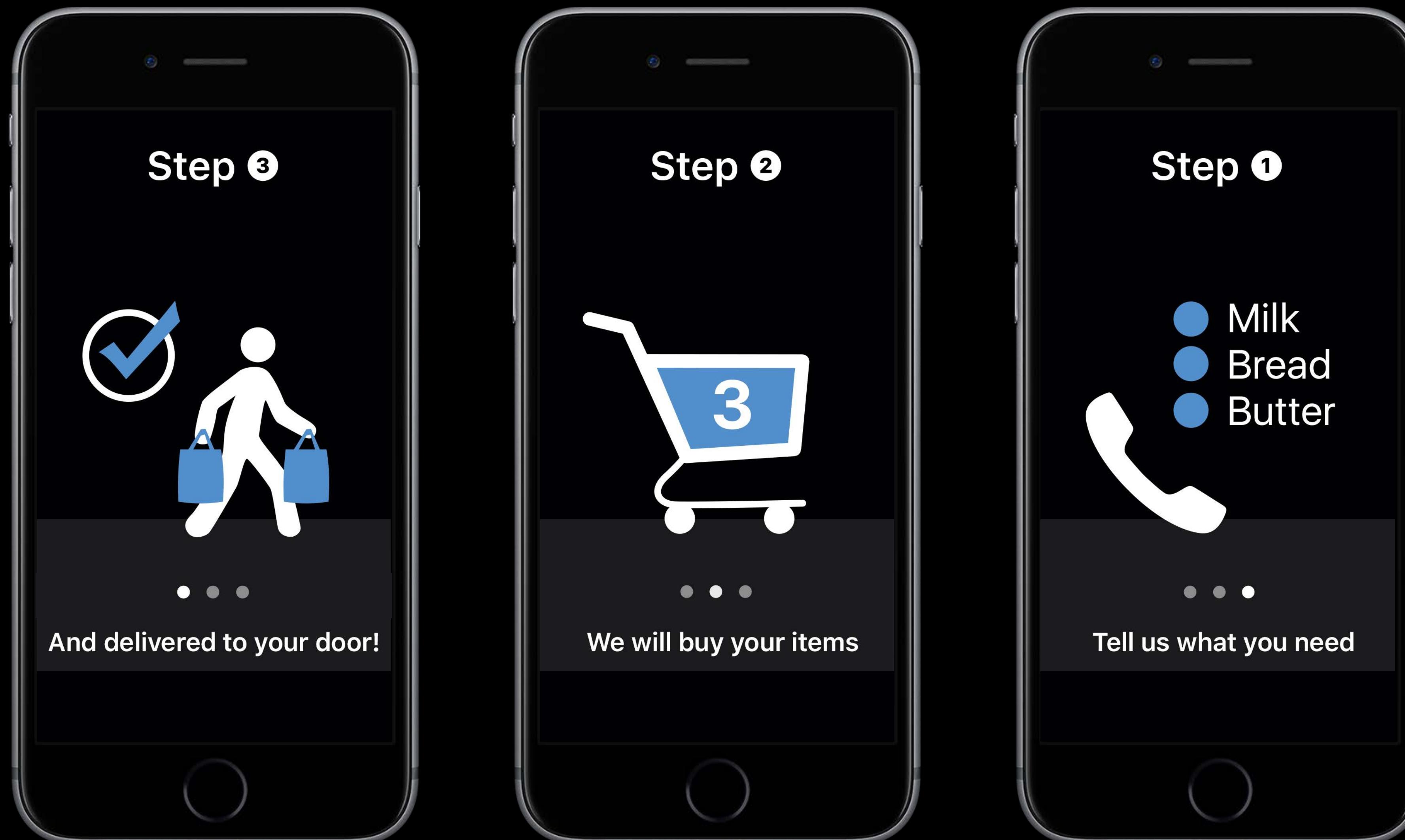
Images



Left-to-Right Languages



Right-to-Left Languages



Right-to-Left Languages



Right-to-Left Languages



Right-to-Left Languages



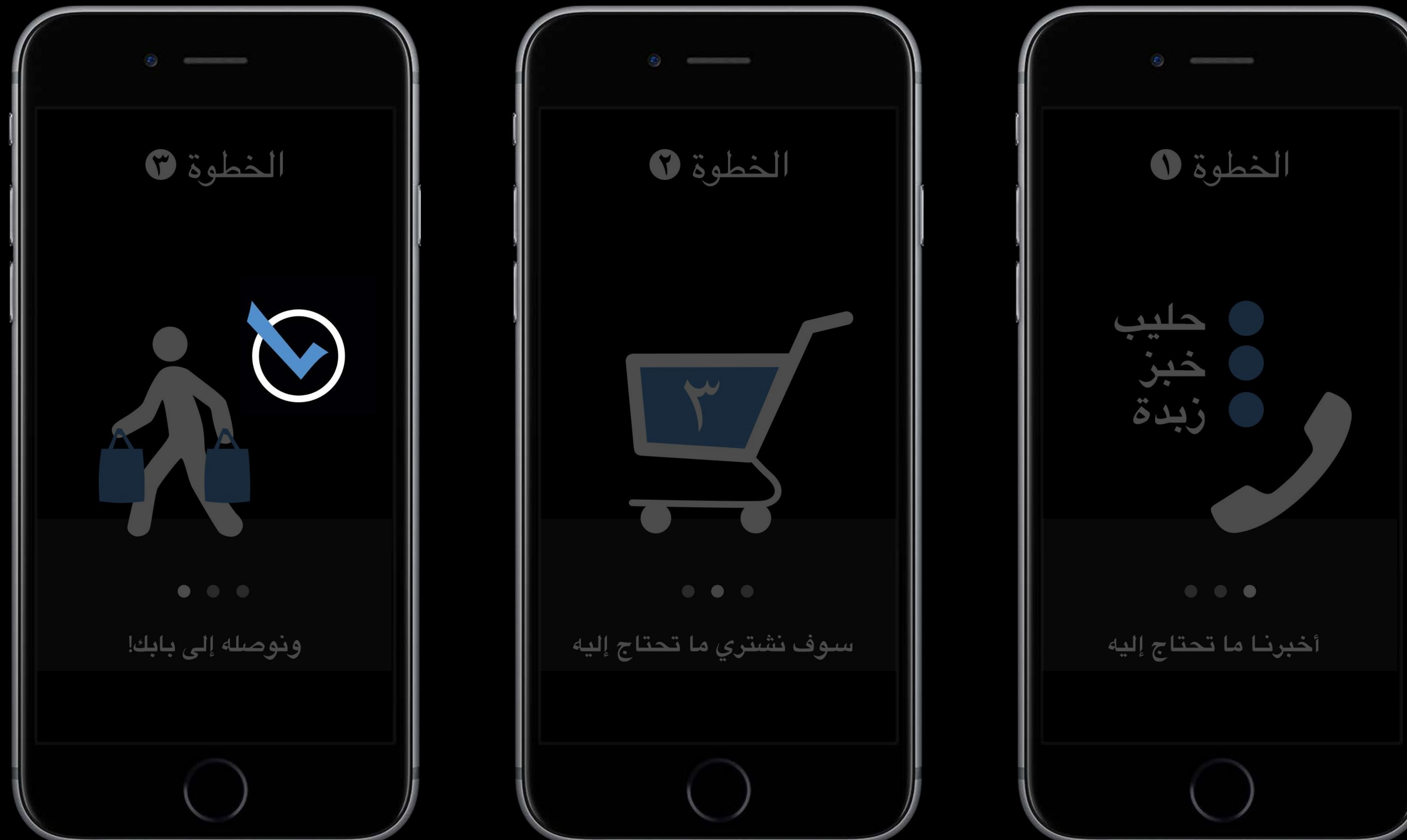
Right-to-Left Languages



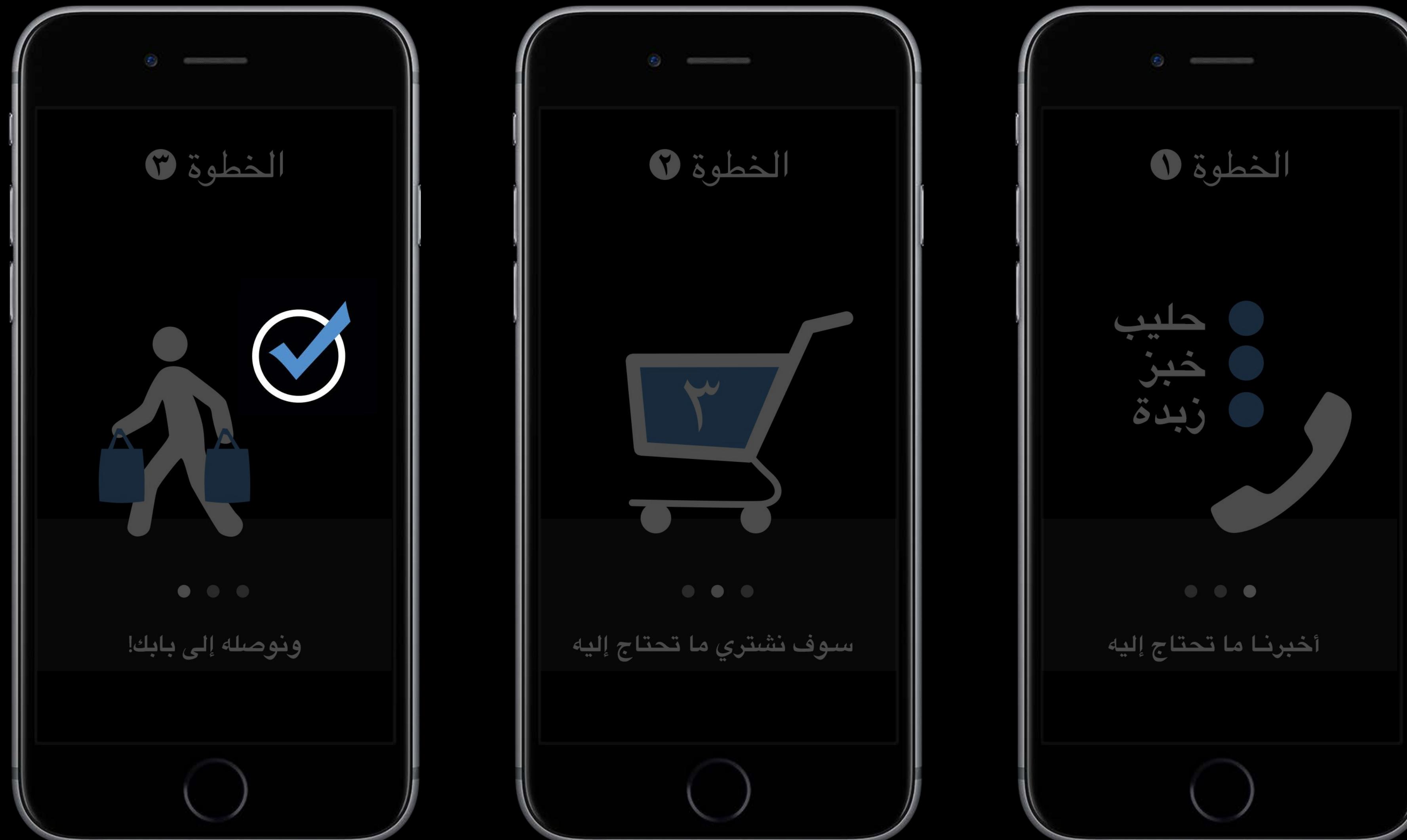
Right-to-Left Languages



Right-to-Left Languages



Right-to-Left Languages



Right-to-Left Languages



Things to Remember

Things to Remember

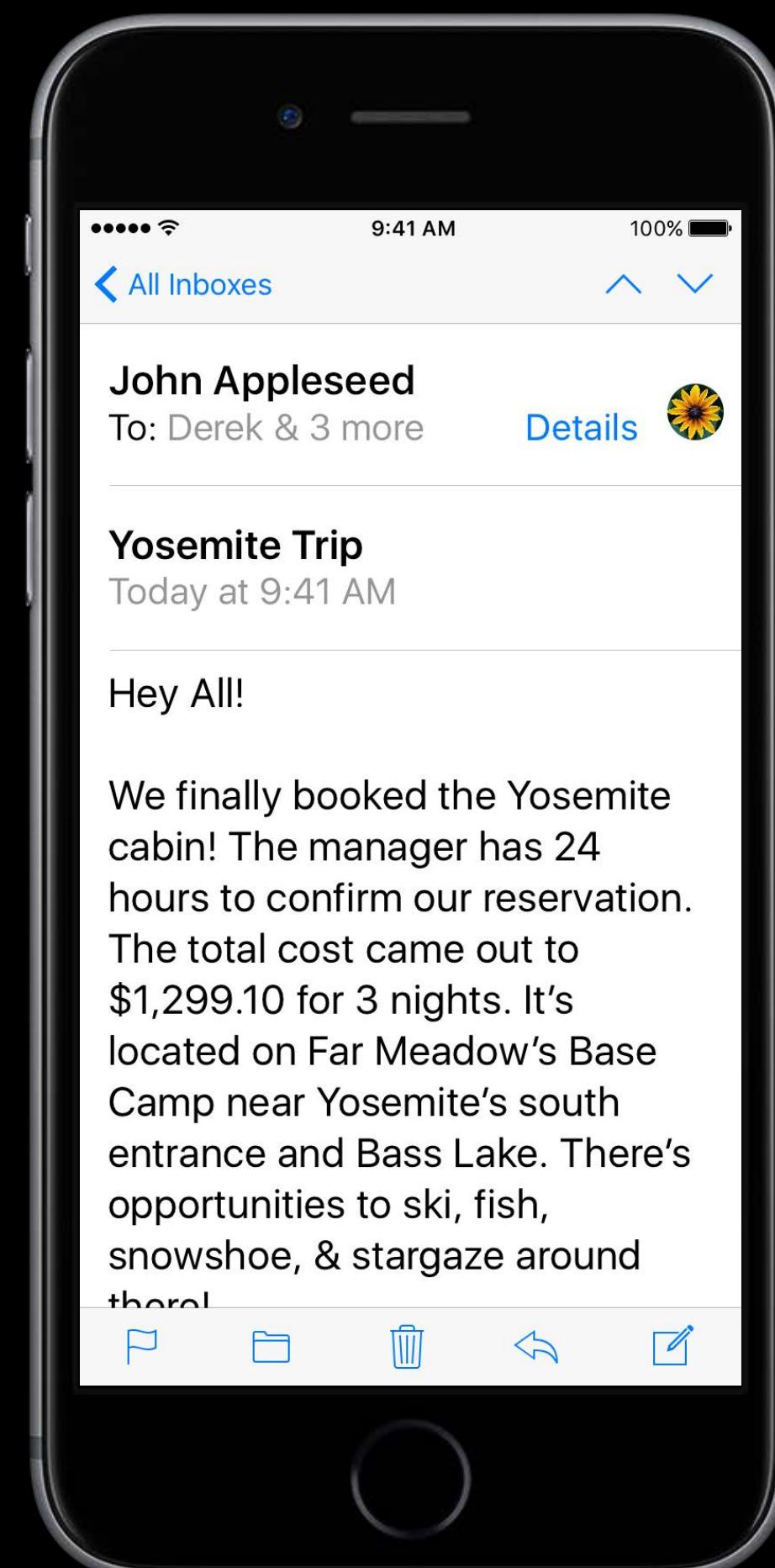
Translation lengths will vary



Things to Remember

Translation lengths will vary

Dynamic Type will adjust type and layout

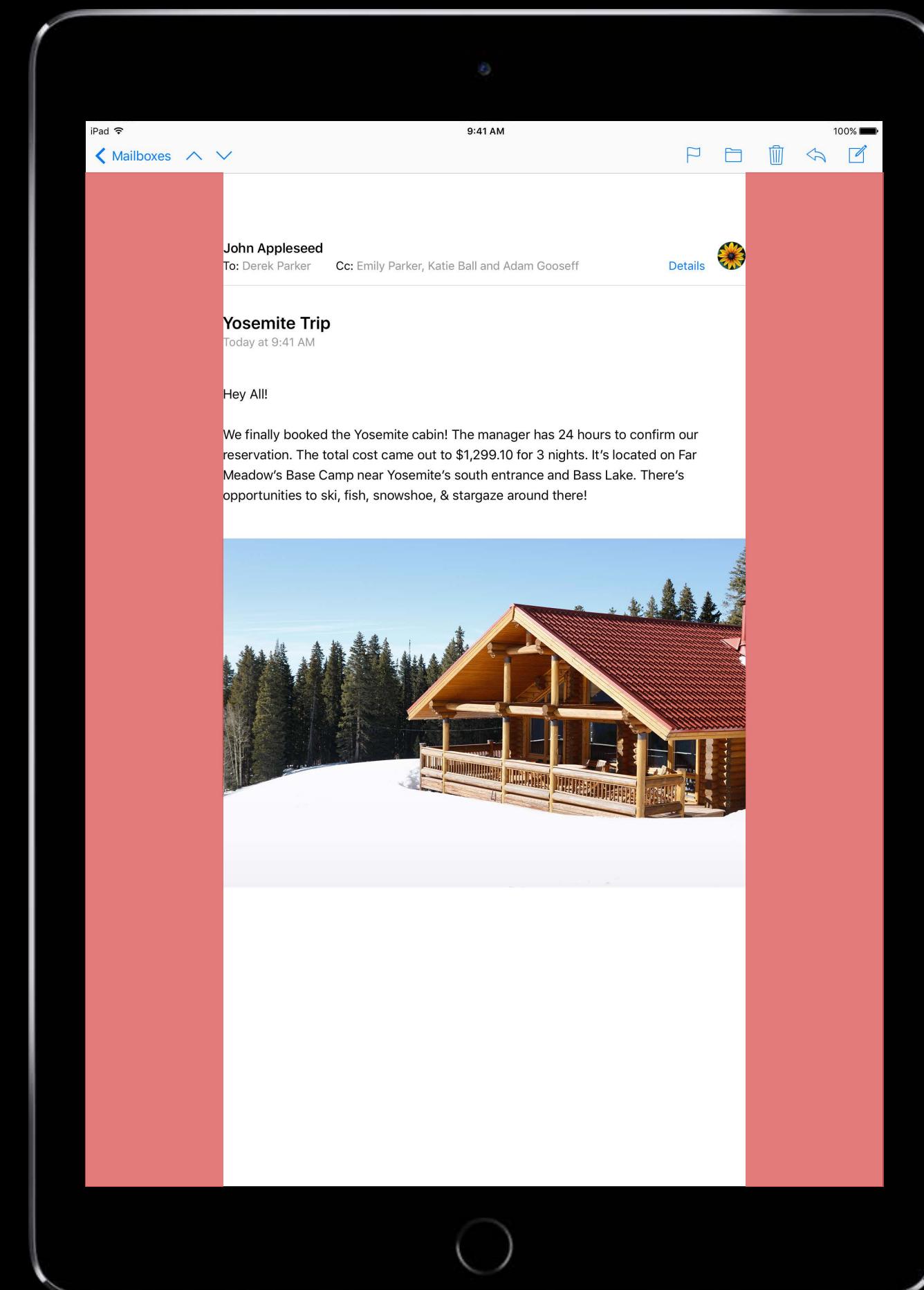


Things to Remember

Translation lengths will vary

Dynamic Type will adjust type and layout

Readability margins maintain line lengths on iPads



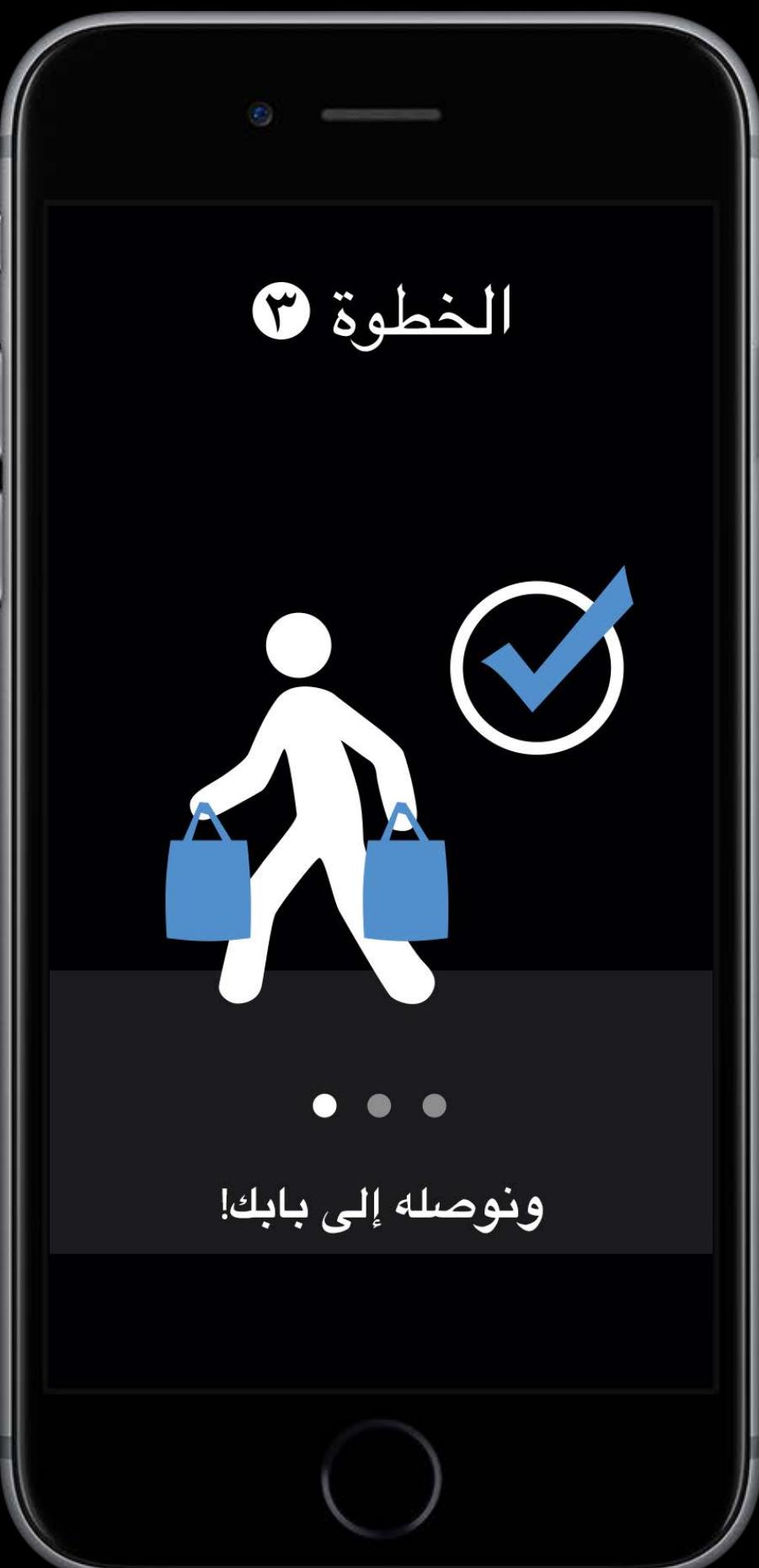
Things to Remember

Translation lengths will vary

Dynamic Type will adjust type and layout

Readability margins maintain line lengths on iPads

Right-to-left languages should mirror UI



Agenda

Typography

Dynamic layouts

Color

Iconography

Auditing Your Apps for Accessibility

Nob Hill

Wednesday 10:00AM

Making Apps Adaptive, Part 2

Presidio

Friday 9:00AM

What's New in International User Interfaces

Nob Hill

Friday 9:00AM

Agenda

Typography

Dynamic layouts

Color

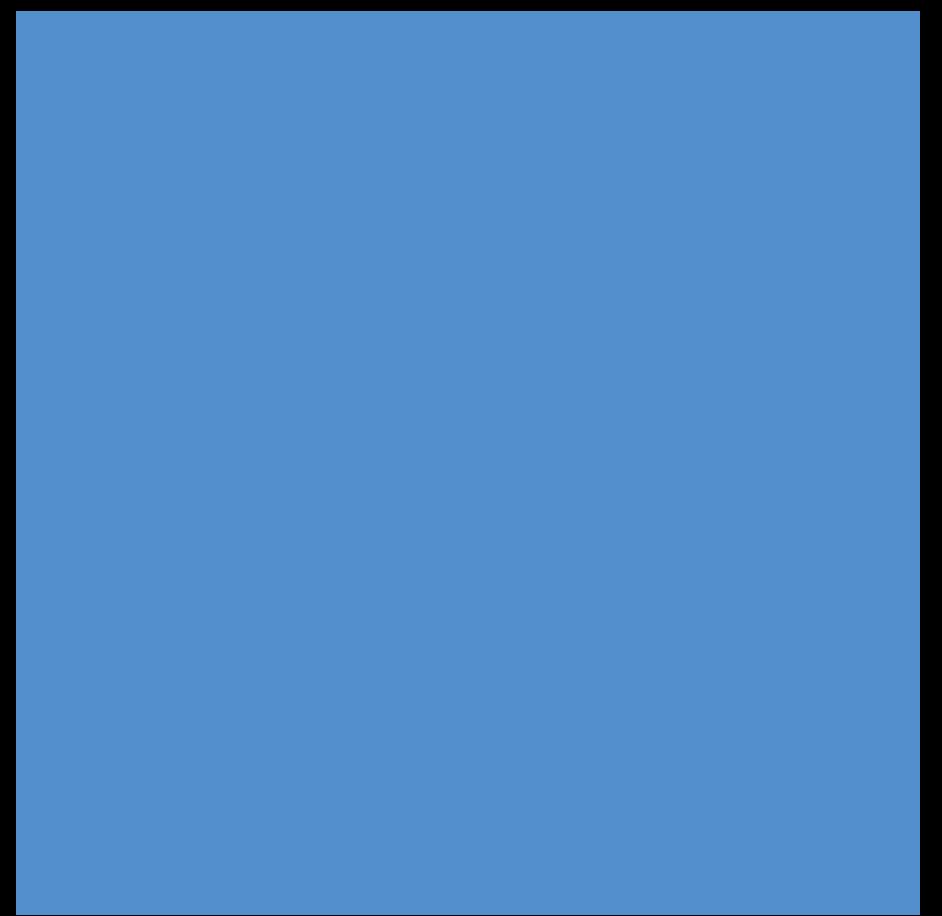
Iconography

Color

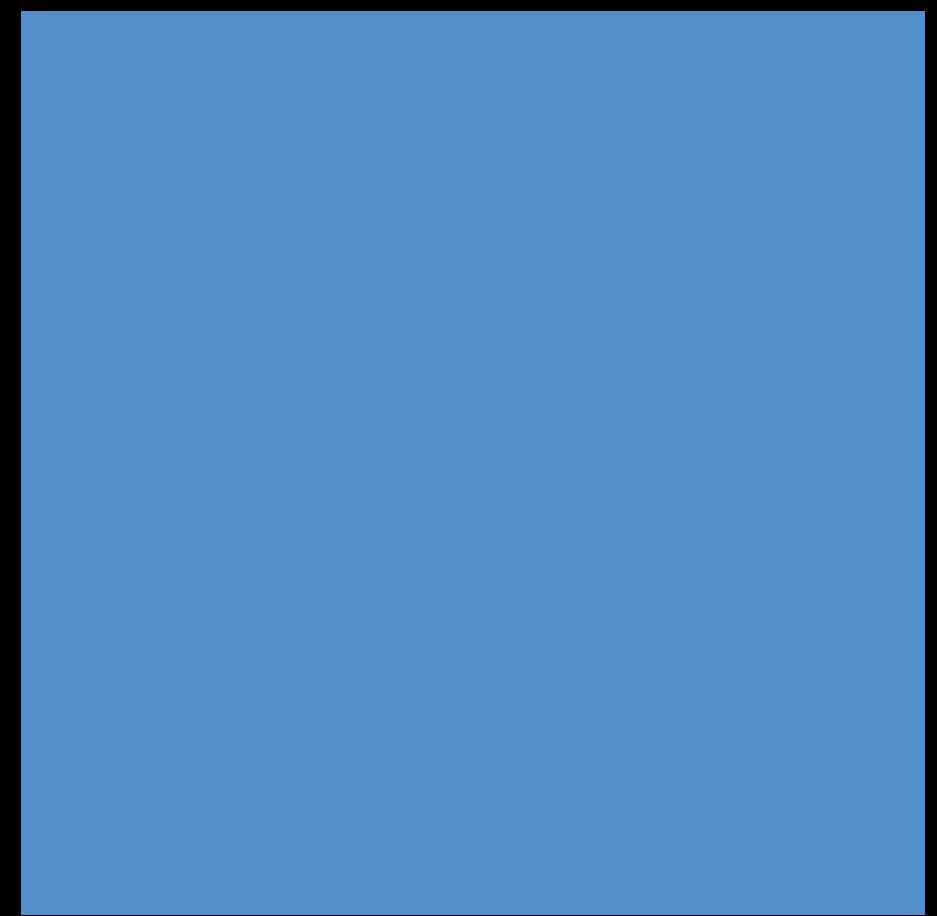
Color Considerations

Colors elicit emotions

Blue



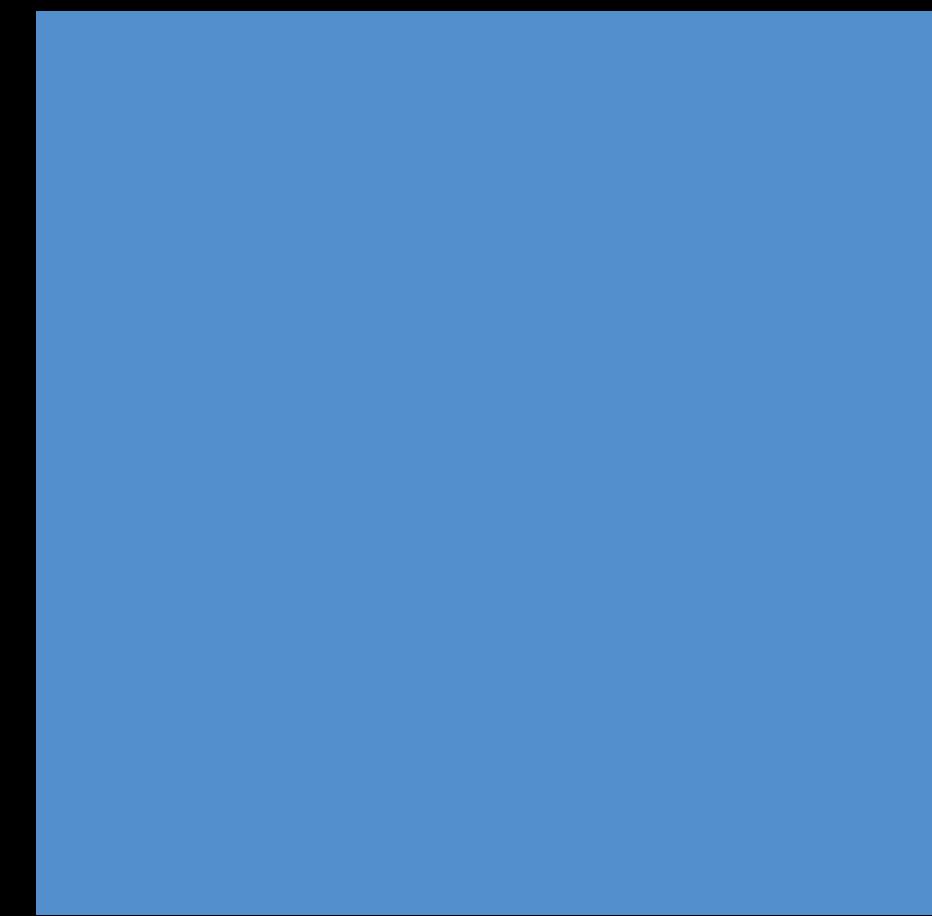
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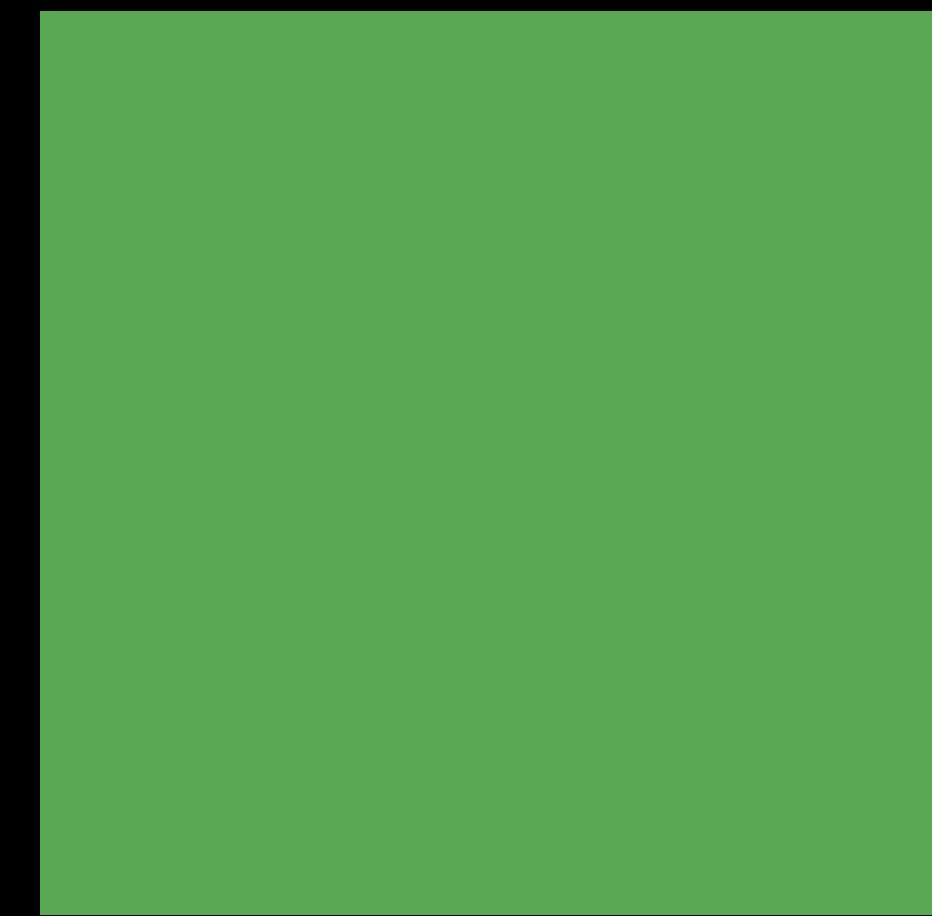
Green



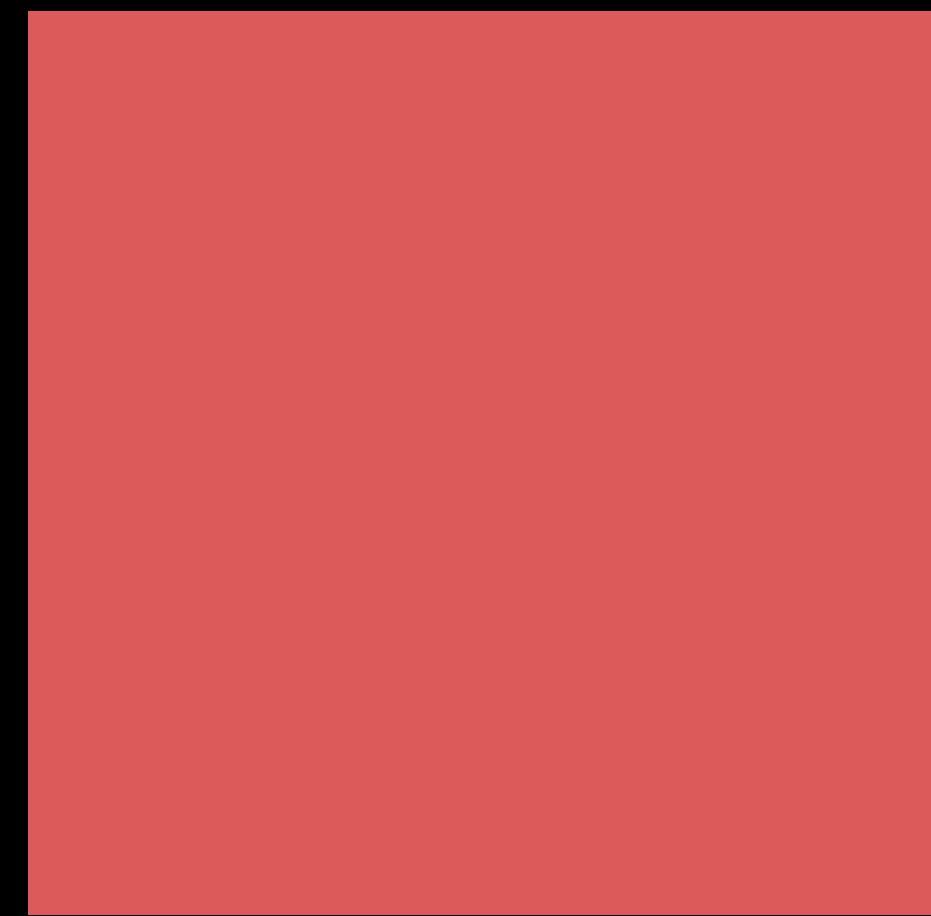
Blue



Green



Red



Blue

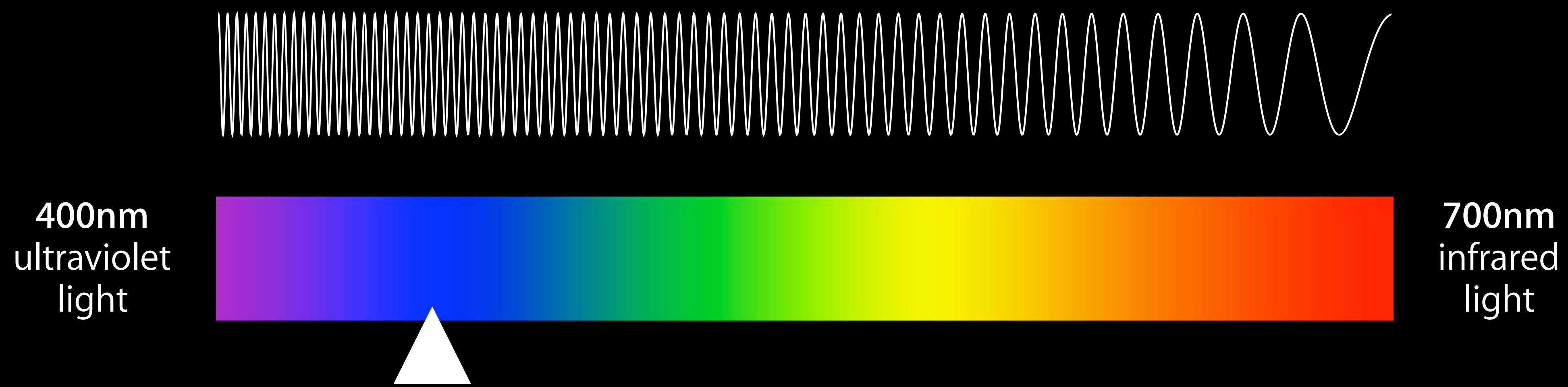


Green



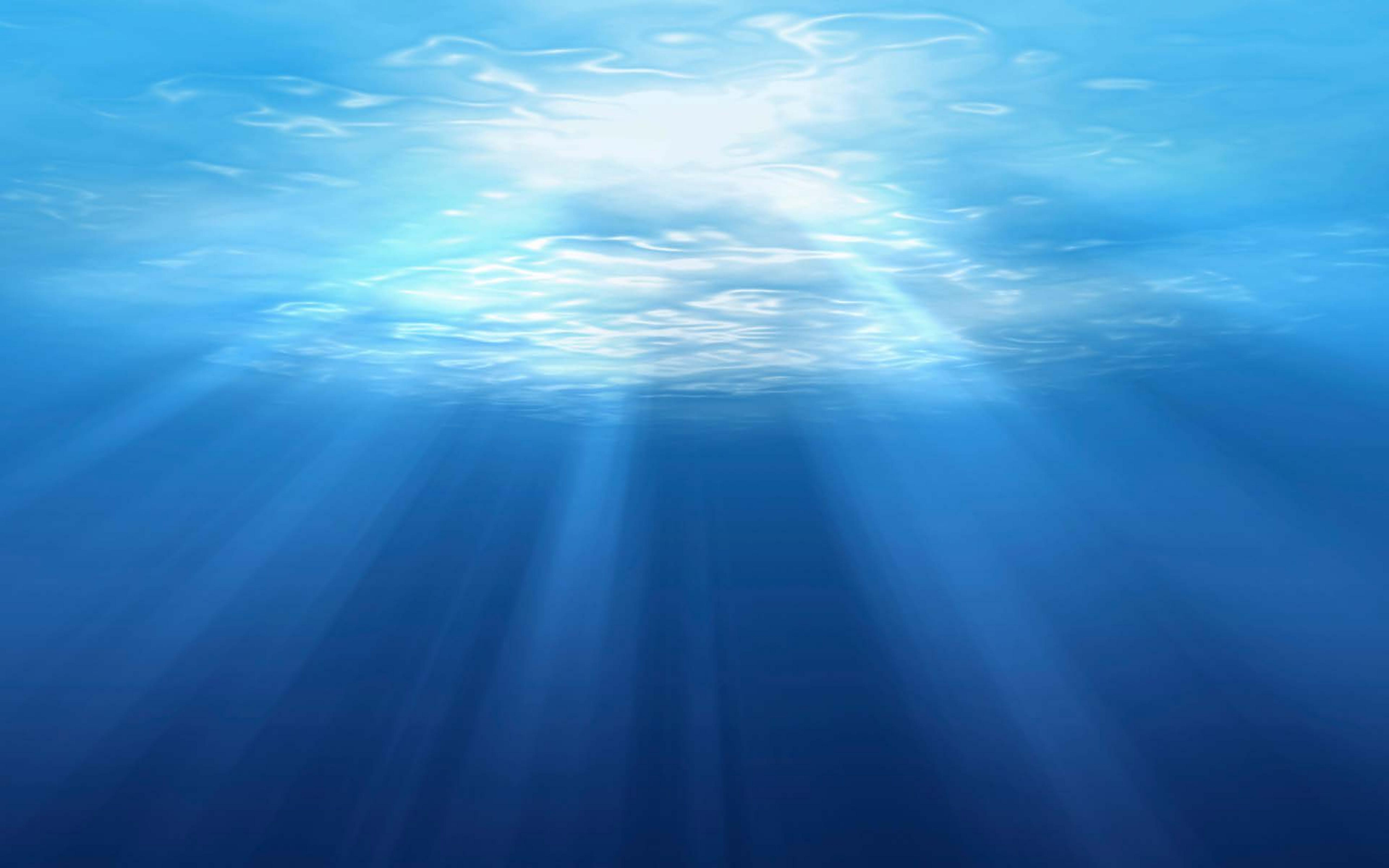
Red











Blue



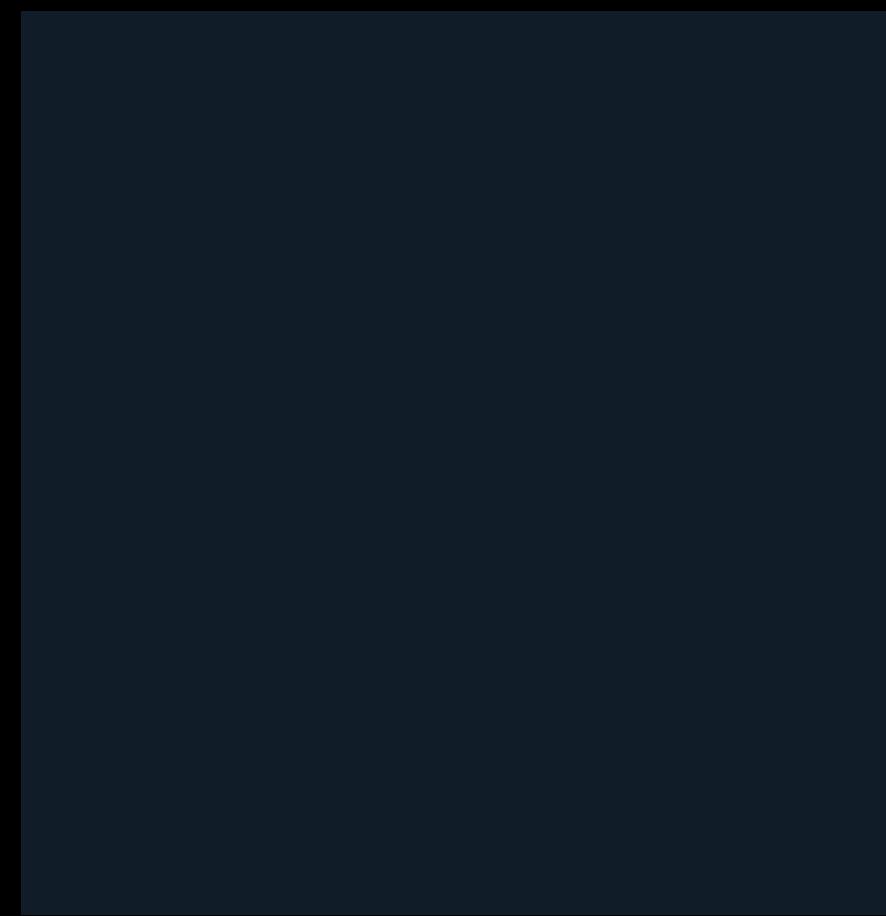
Green



Red



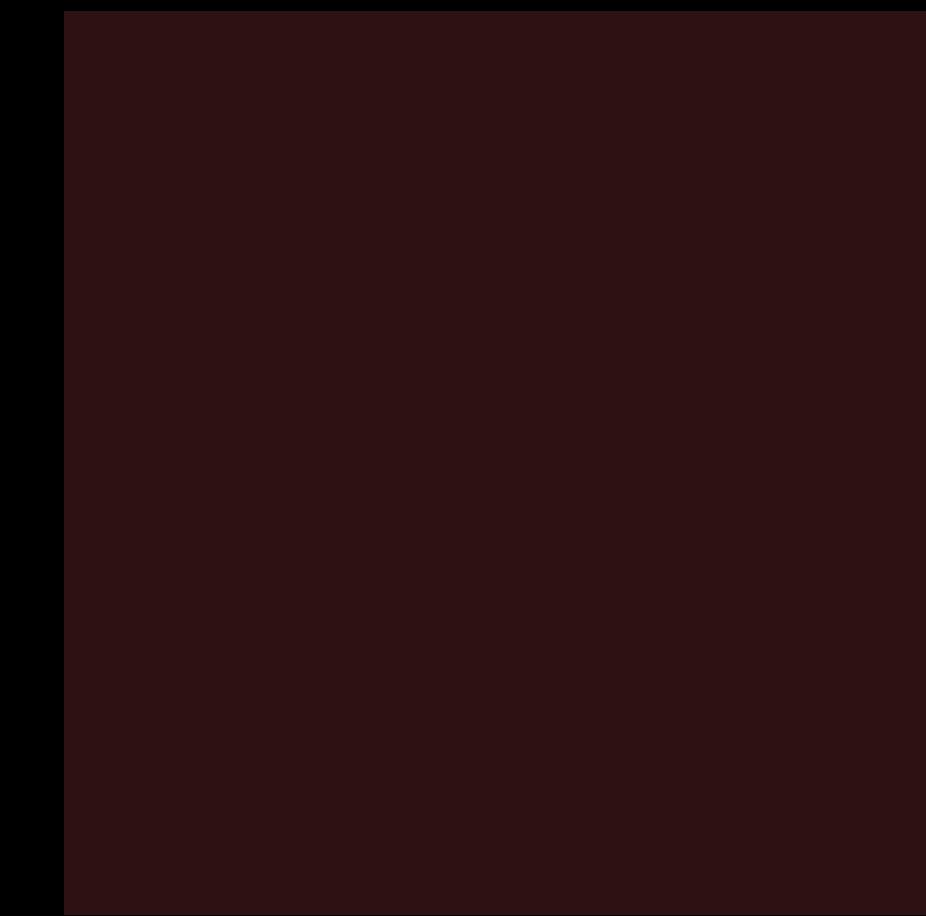
Blue



Green



Red

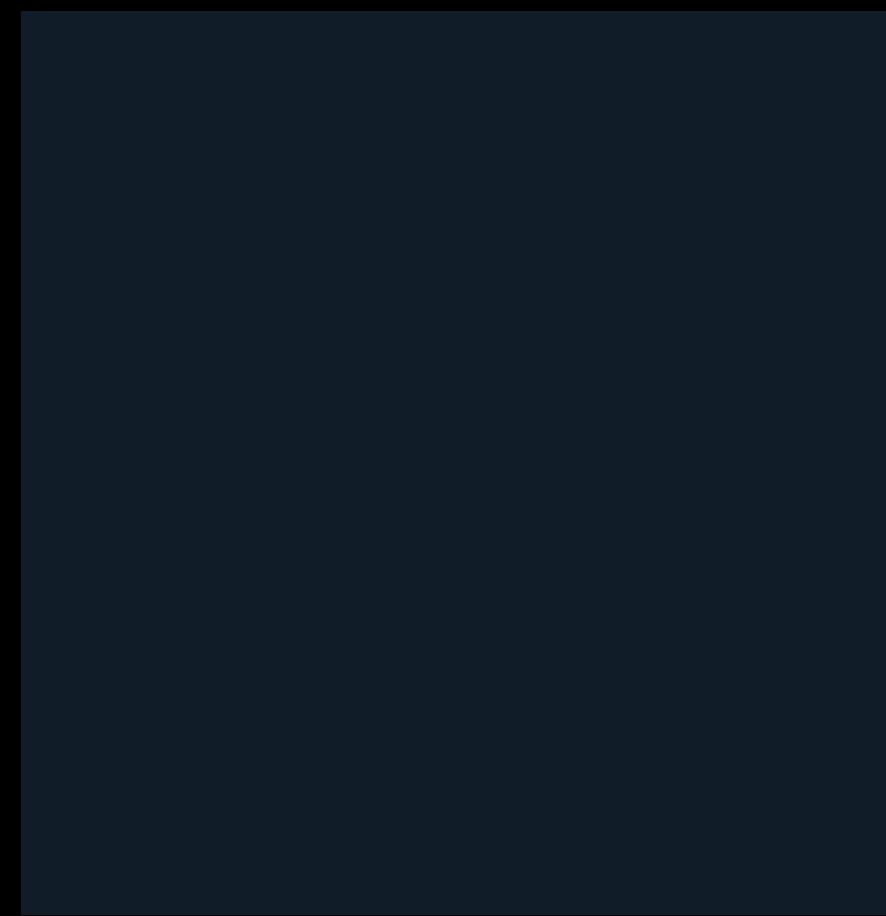








Blue



Green



Red



Blue

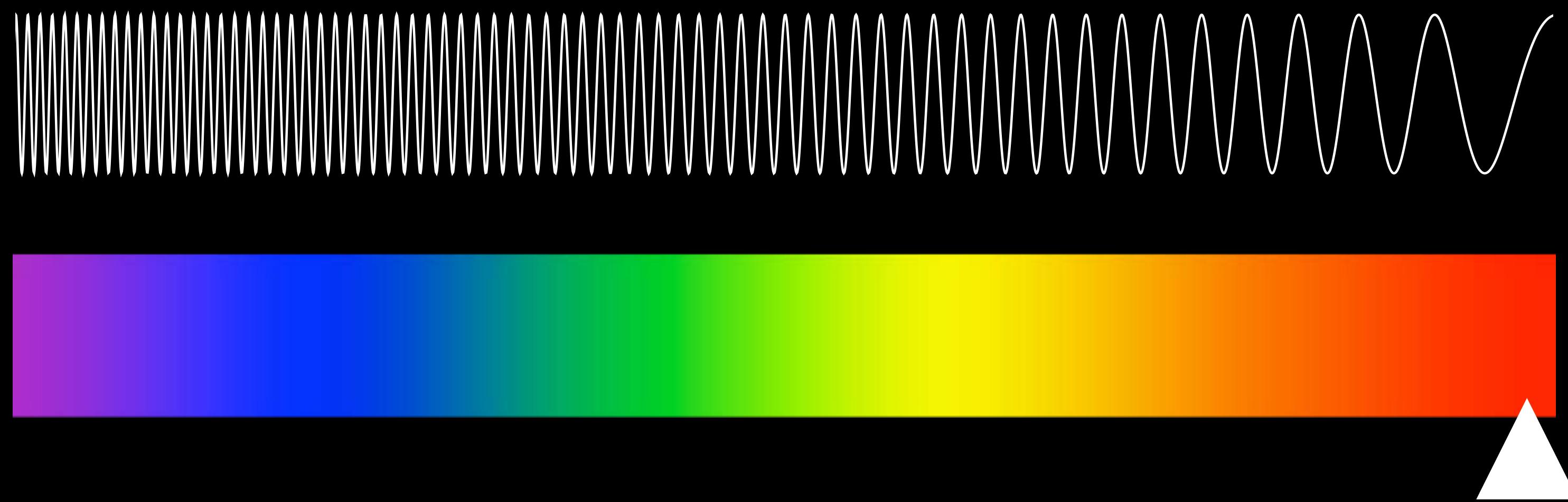


Green



Red











9:41 AM 100%

000001.SS 2,934.10 - 4.58

399001.SZ 10,363.09 + 18.18

DOW J 17,904.03 + 94.97

AAPL 98.81 + 0.89

SBUX 55.30 + 0.69

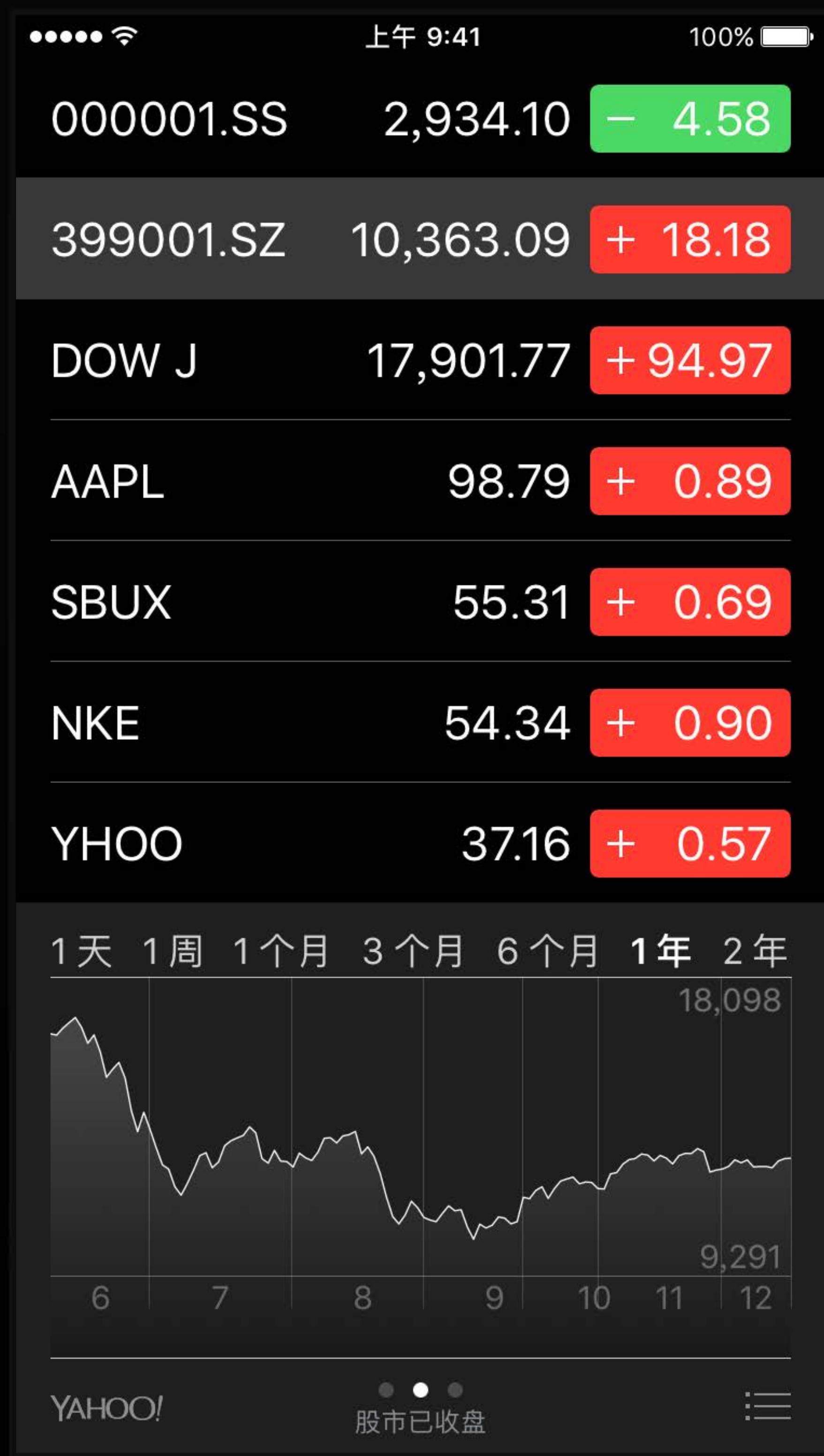
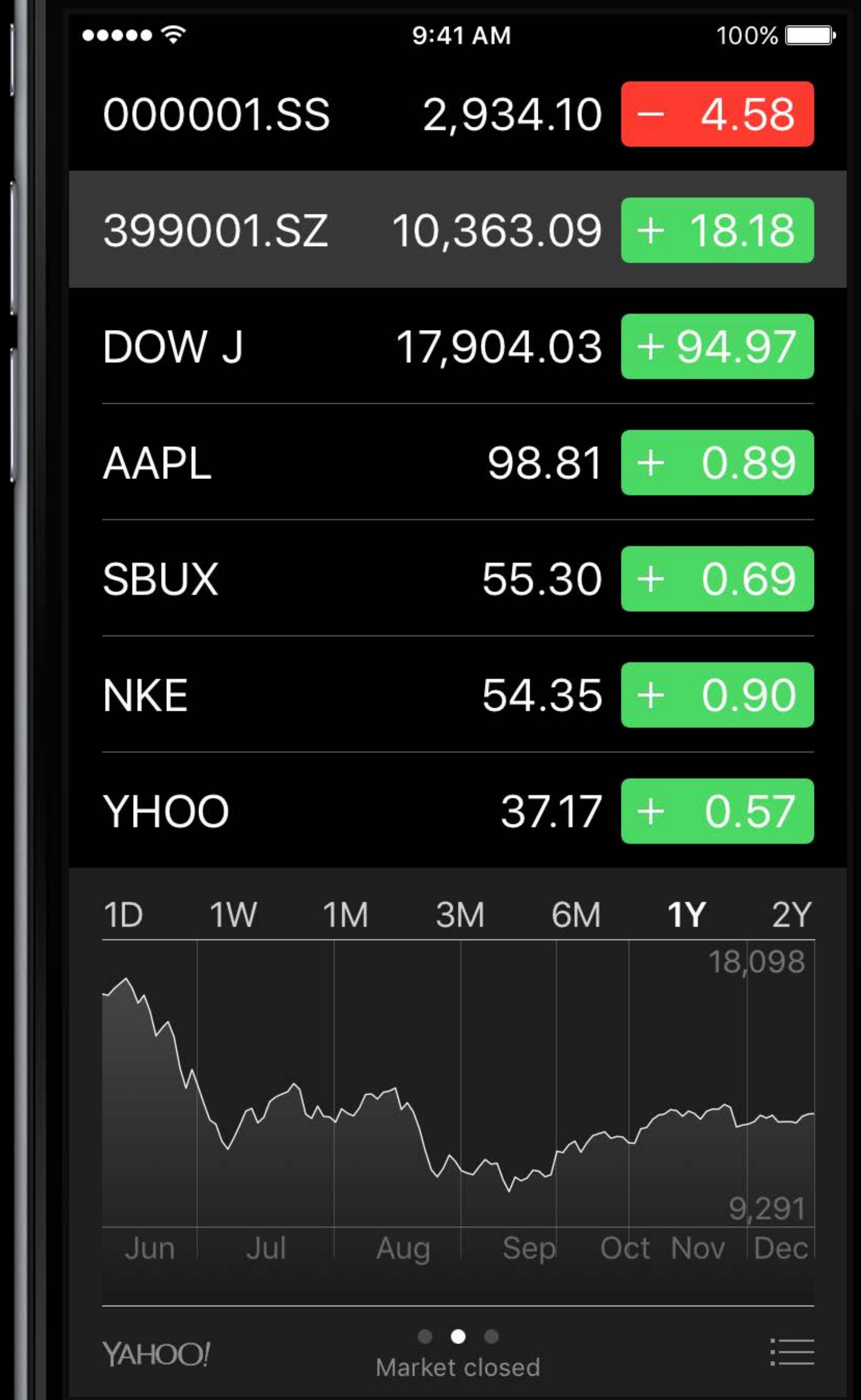
NKE 54.35 + 0.90

YHOO 37.17 + 0.57



YAHOO!

Market closed



Color Considerations

Colors elicit emotions

Color Considerations

Colors elicit emotions

Color blindness

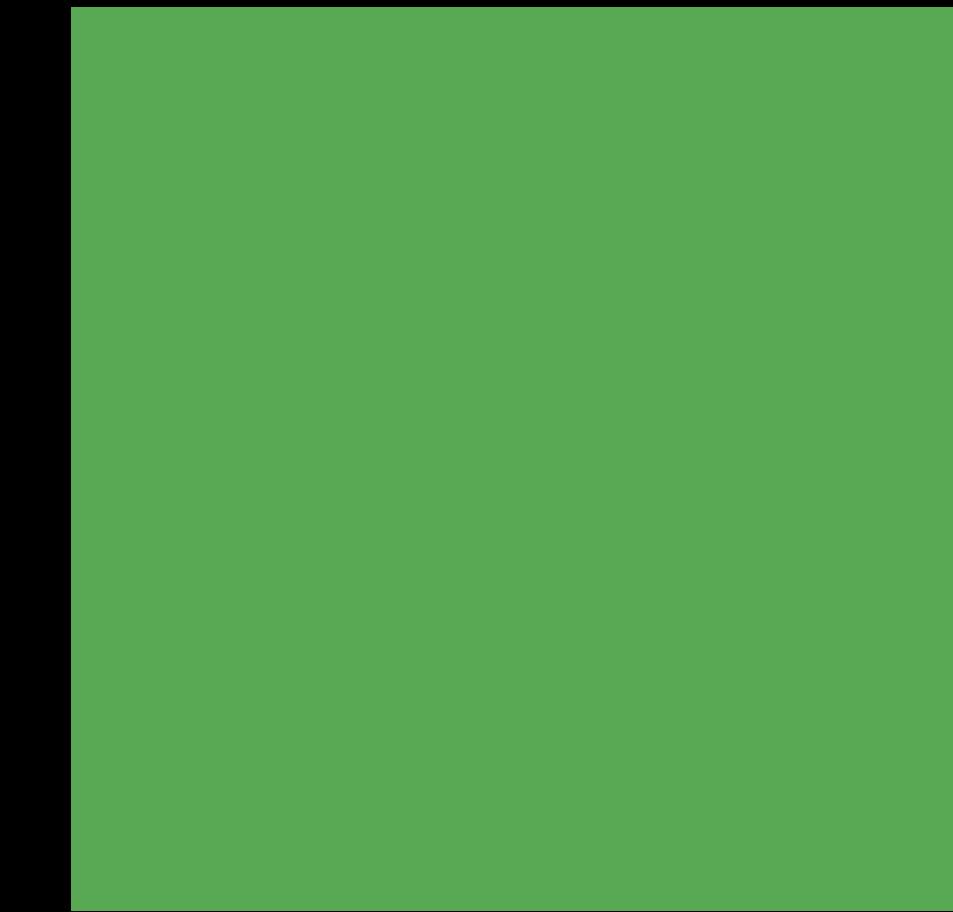
1 in 12

Men are color blind

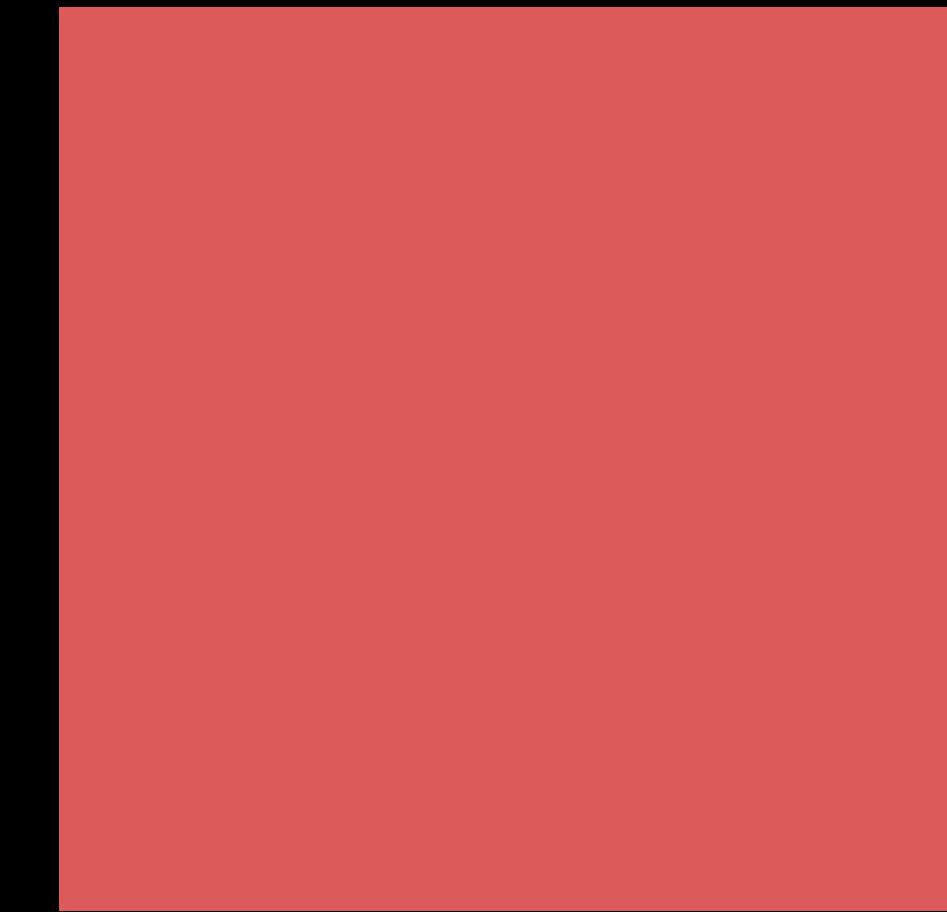
Blue



Green



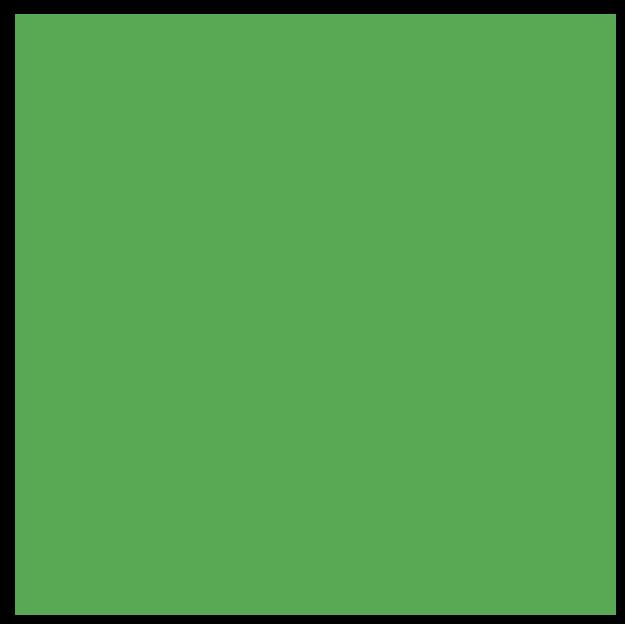
Red



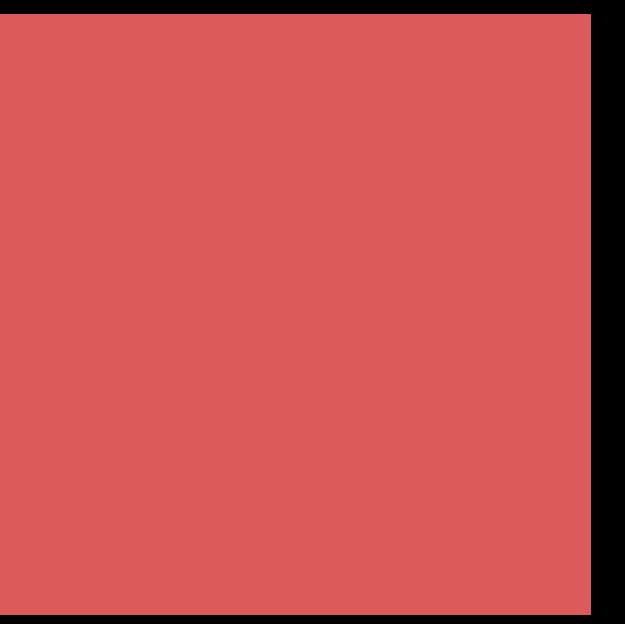
Blue



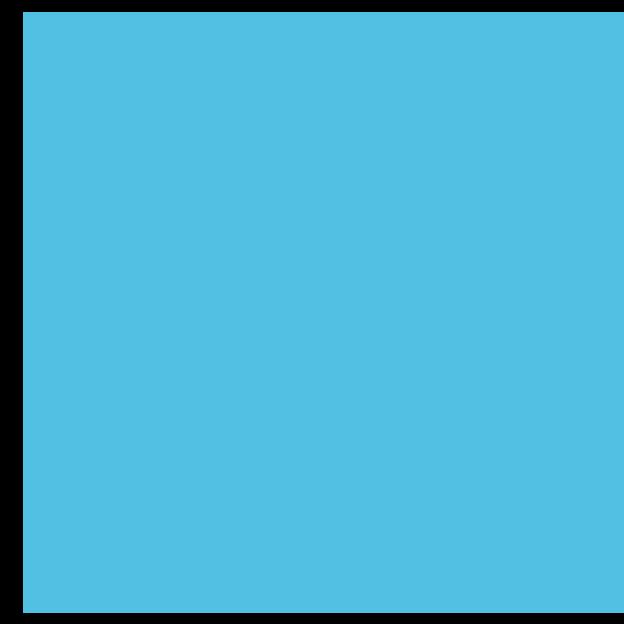
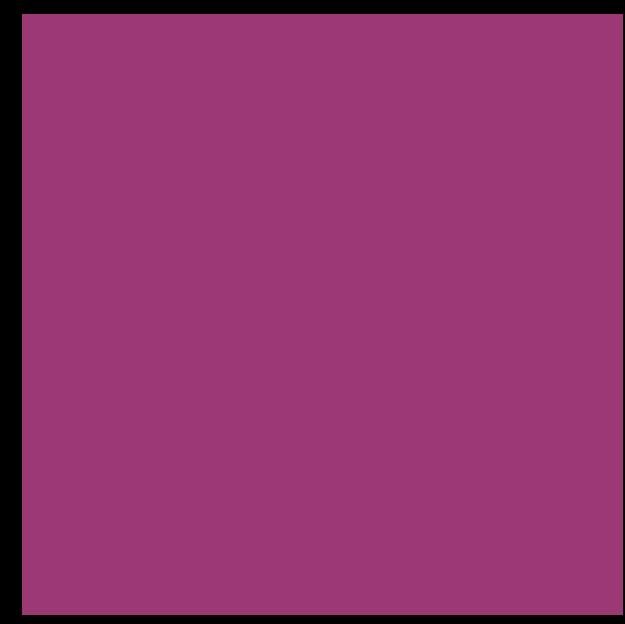
Green



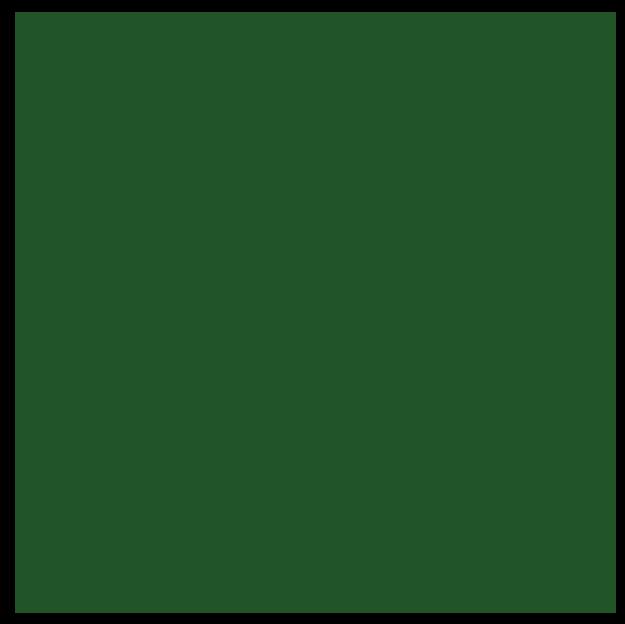
Red



Rose



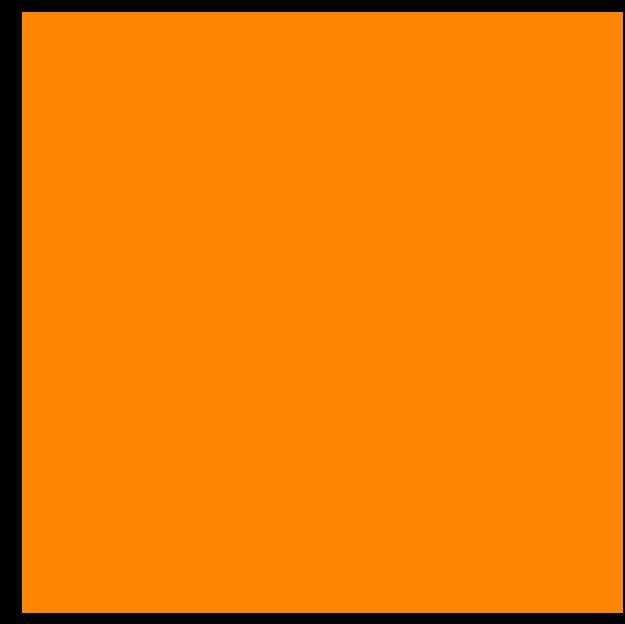
Light Blue



Emerald



Purple

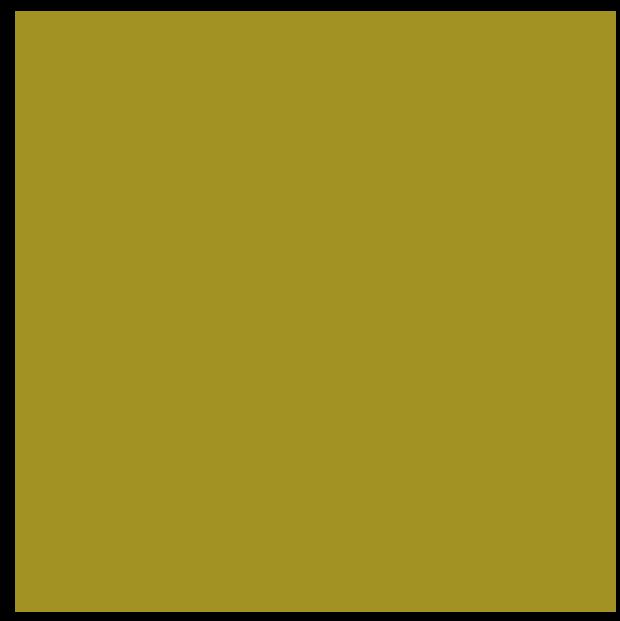


Orange

Blue



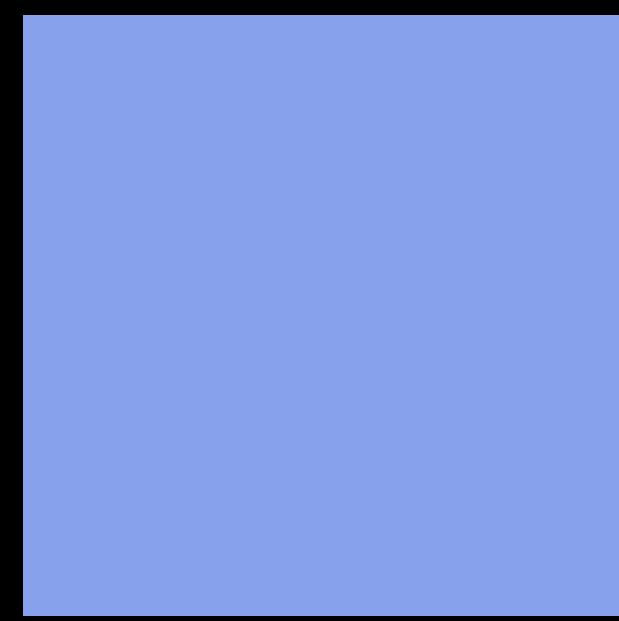
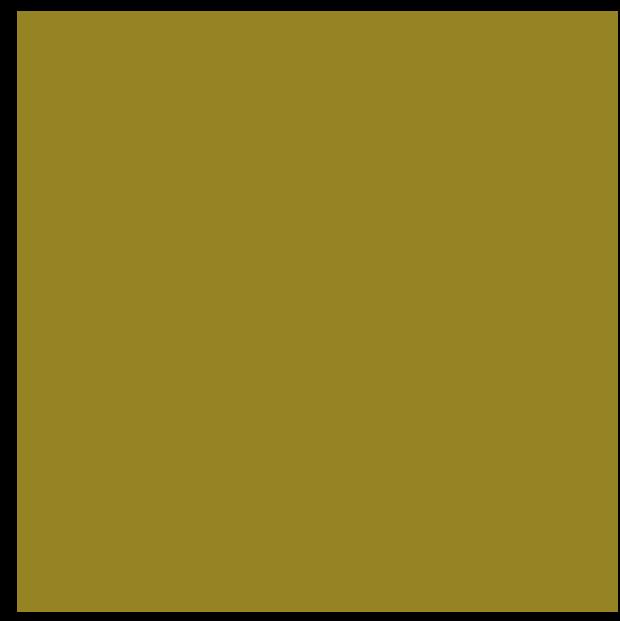
Green



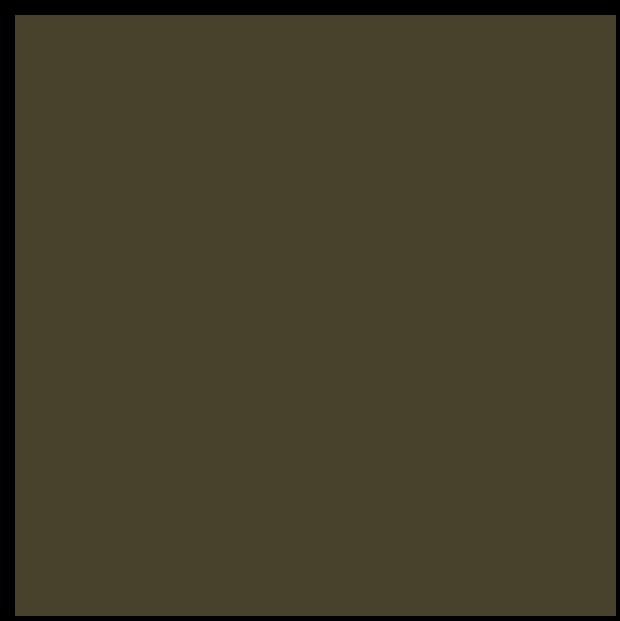
Red



Rose



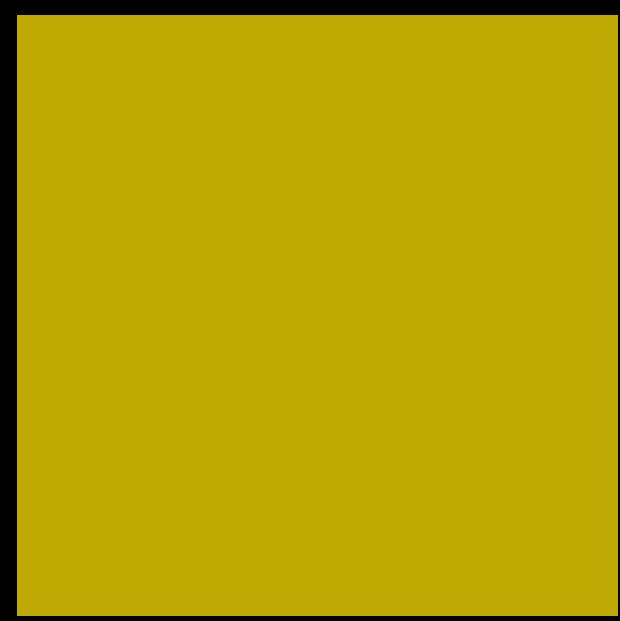
Light Blue



Emerald



Purple



Orange



9:41 AM

100%

[Mail](#)

Flag Style

● Color

■ Shape



9:41 AM

100%

[Apple](#)

Inbox

Edit

Vivian Li 9:20 AM >

Fresh snacks in the kitchen

Help yourself! :) Vivian Li, Executive Assistant |
1 Infinite Loop, Cupertino, CA 95014**● Mani, Tomiwa & Lauren** 8:43 AM >

Mail Platform Work

Sounds good, I'll rejigger the schedule
accordingly and we can discuss in Monday's...**● Steve, Mandy & Chris** 8:37 AM >

Books & Magazines

We just added a few new design books and
magazines to the library. Thanks to everyone...**Luke, Ted & Tiffany** 7:14 AM >

Keynote Slides for Review

Thank you for the quick feedback. I'll send the
vendor the feedback to get fixed. Note, the sh...**Jeremy Sheldon** Yesterday >

Calendar Invites

Can we make this part of the next calendar
meeting instead of having a separate one?**Chella Sapkarov** Yesterday >

Birthday Party!

Hi there! Would you be able to come to my 1st...



Updated Just Now





9:41 AM

100%

[Apple](#)

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Updated Just Now



Color Considerations

Colors elicit emotions

Color blindness

Color Considerations

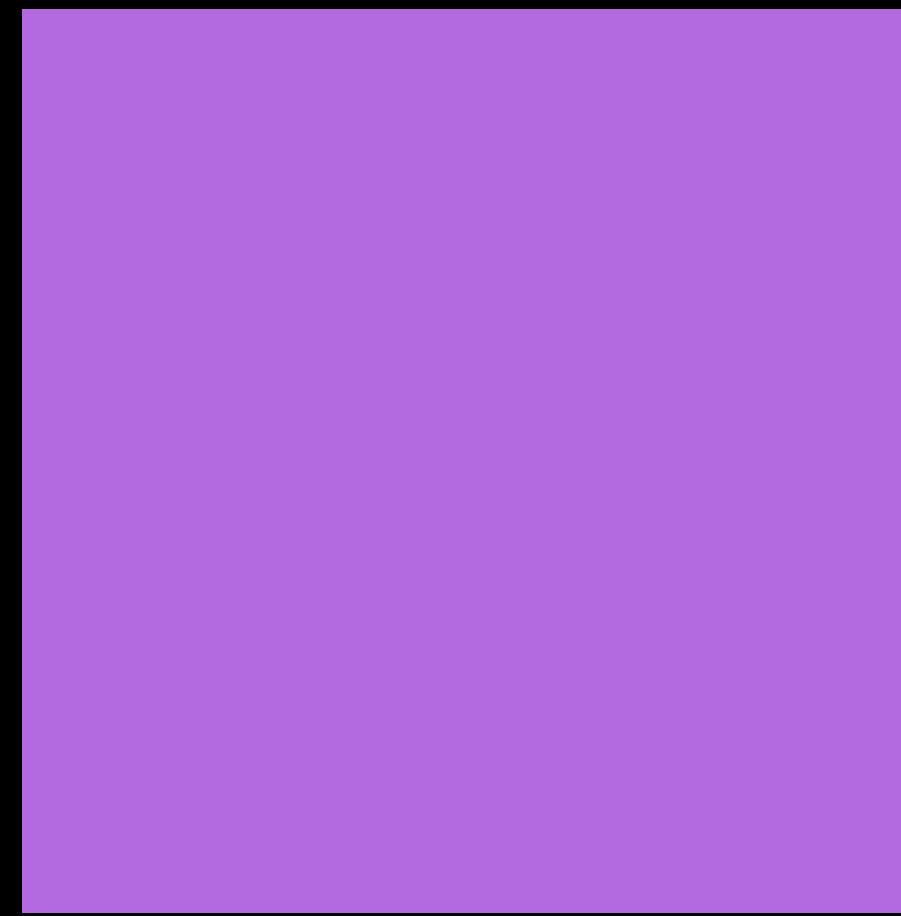
Colors elicit emotions

Color blindness

High color contrast for legibility

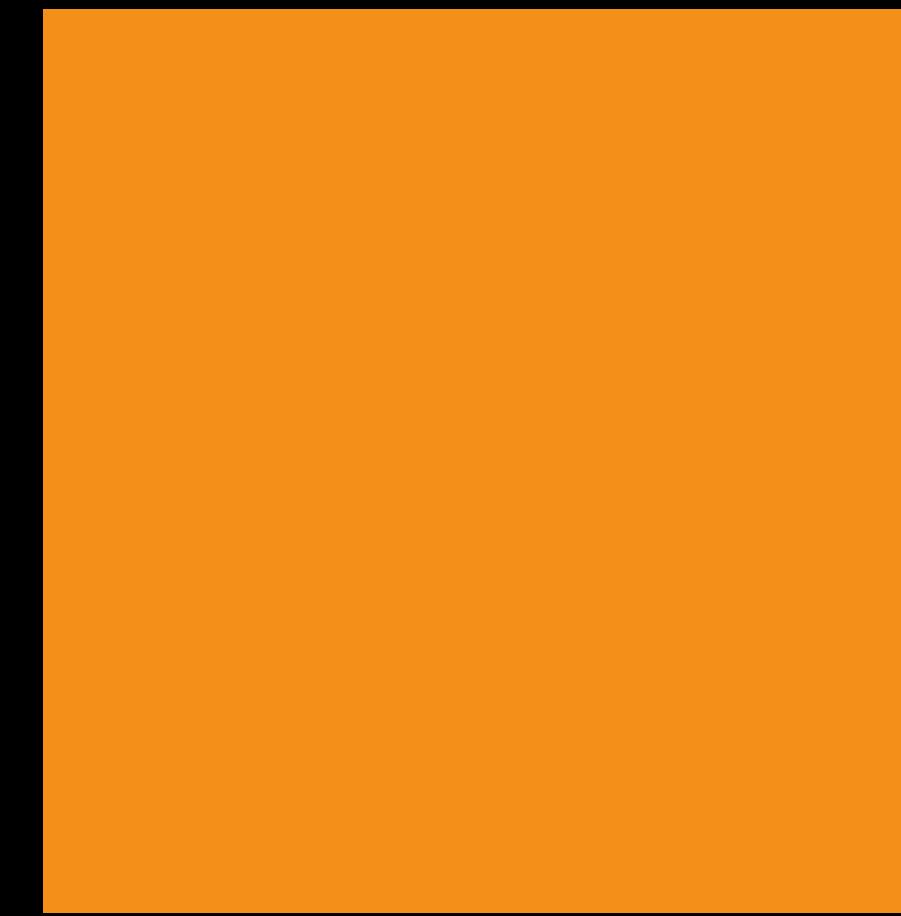
Purple

R: 179
G: 106
B: 226



Orange

R: 238
G: 124
B: 22



Purple

Orange



Color Contrast Calculator

Text Background

Check enhanced conformance (WC3 AAA)

Red 255 Red 117

Green 255 Green 213

Blue 255 Blue 255

Here's to the crazy ones. The misfits. The rebels. The trouble-makers. The round pegs in the square holes. The ones who s...

Text Size: 20 pt

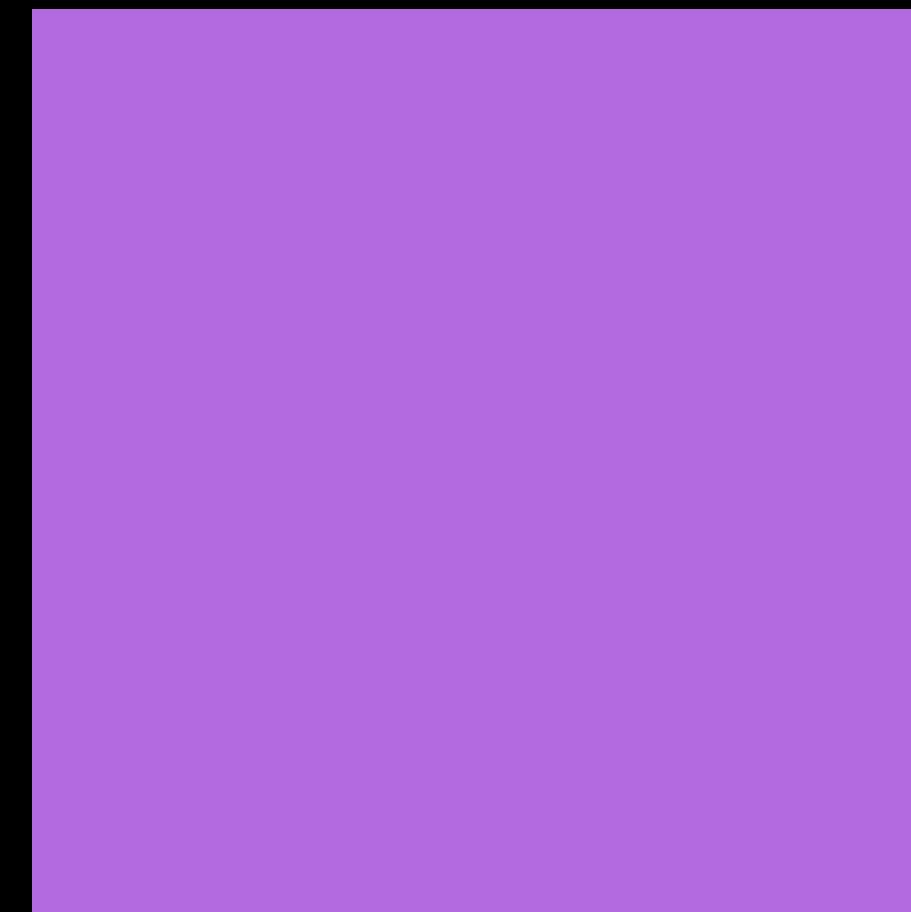
 Basic Conformance
WC3 AA
Fails for all text sizes

1.6 : 1

1.5:1

Purple

R: 179
G: 106
B: 226



Orange

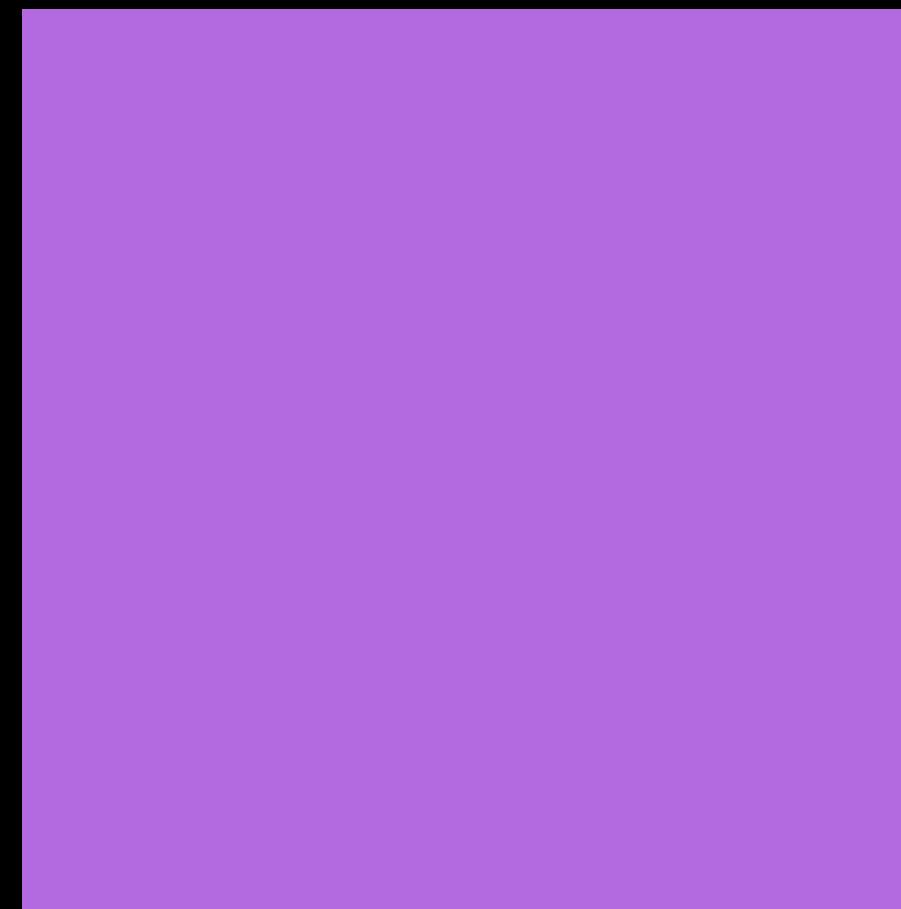
R: 238
G: 124
B: 22



1.5:1

Purple

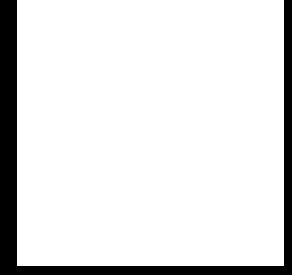
R: 179
G: 106
B: 226



Orange

R: 238
G: 124
B: 22

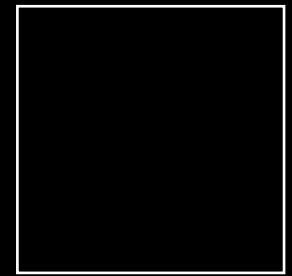




R: 255

G: 225

B: 225



R: 0

G: 0

B: 0

30pt

**Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut.**

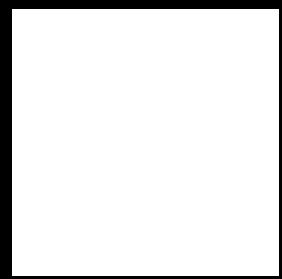
18pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum
dolore eu fugiat nulla pariatur.**

15pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore
eu fugiat nulla pariatur.**

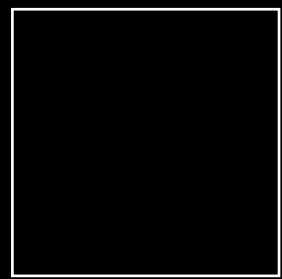
21:1



R: 255

G: 225

B: 225



R: 0

G: 0

B: 0

30pt

**Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut.**

18pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum
dolore eu fugiat nulla pariatur.**

15pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore
eu fugiat nulla pariatur.**



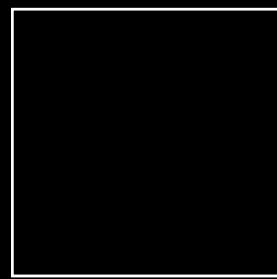
4.4:1



R: 114

G: 114

B: 114



R: 0

G: 0

B: 0

30pt

**Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut.**

18pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum
dolore eu fugiat nulla pariatur.**

15pt

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ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore
eu fugiat nulla pariatur.**



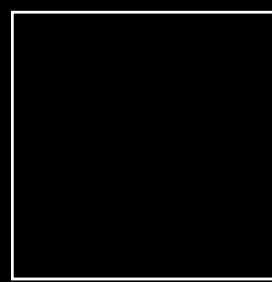
1.9:1



R: 60

G: 60

B: 60



R: 0

G: 0

B: 0

30pt

**Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut.**

18pt

**Ut enim ad minim veniam, nostrud exercitation
ullamco laboris. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum
dolore eu fugiat nulla pariatur.**

15pt

**Ut enim ad minim veniam, nostrud exercitation
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reprehenderit in voluptate velit esse cillum dolore
eu fugiat nulla pariatur.**



Get Started

Get Started

Get Started

Get Started

2.2:1

Get Started

Get Started

2.2:1

9.6:1

Get Started

Get Started

2.2:1

9.6:1

Get Started

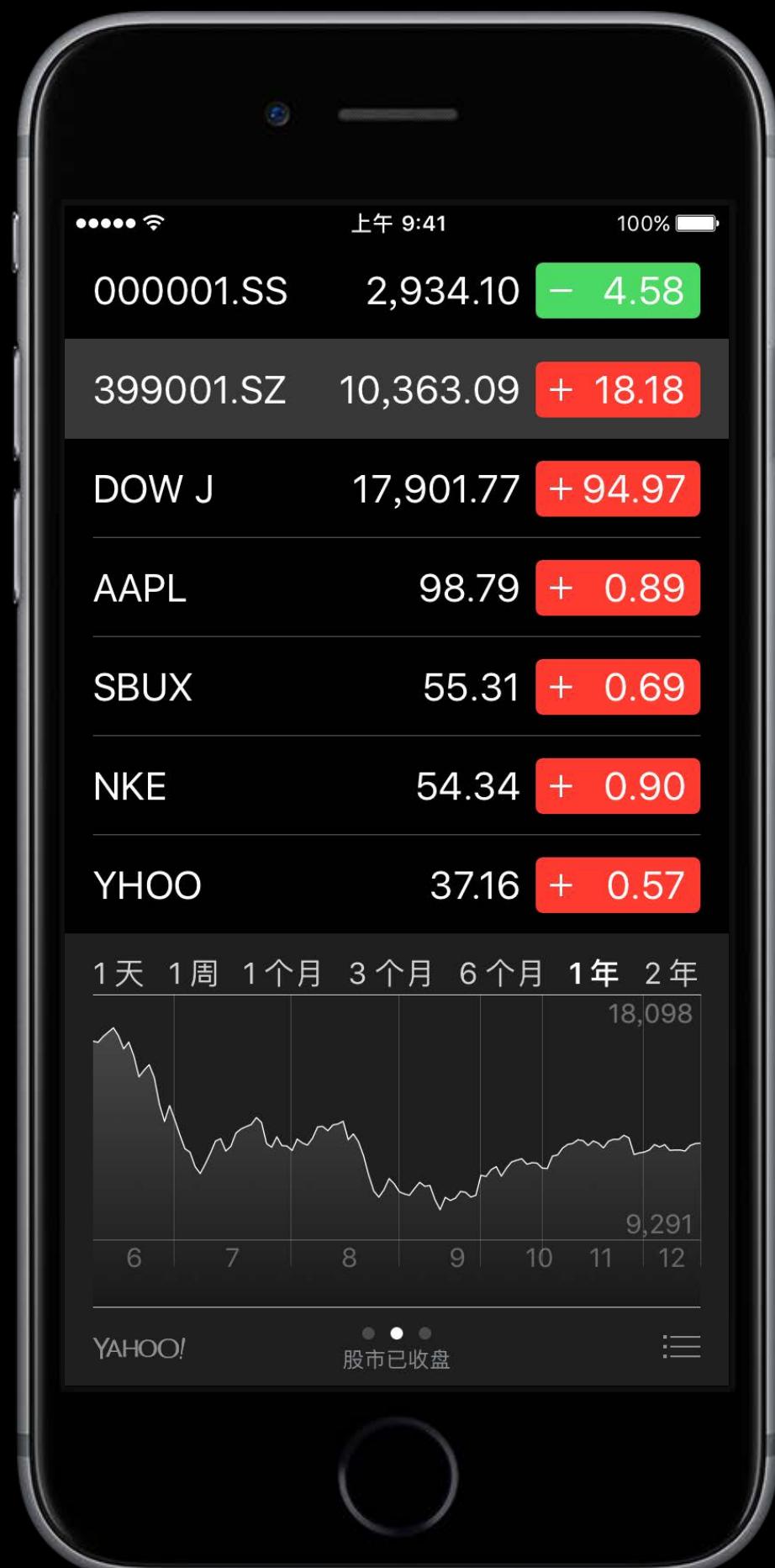
Get Started



Things to Remember

Things to Remember

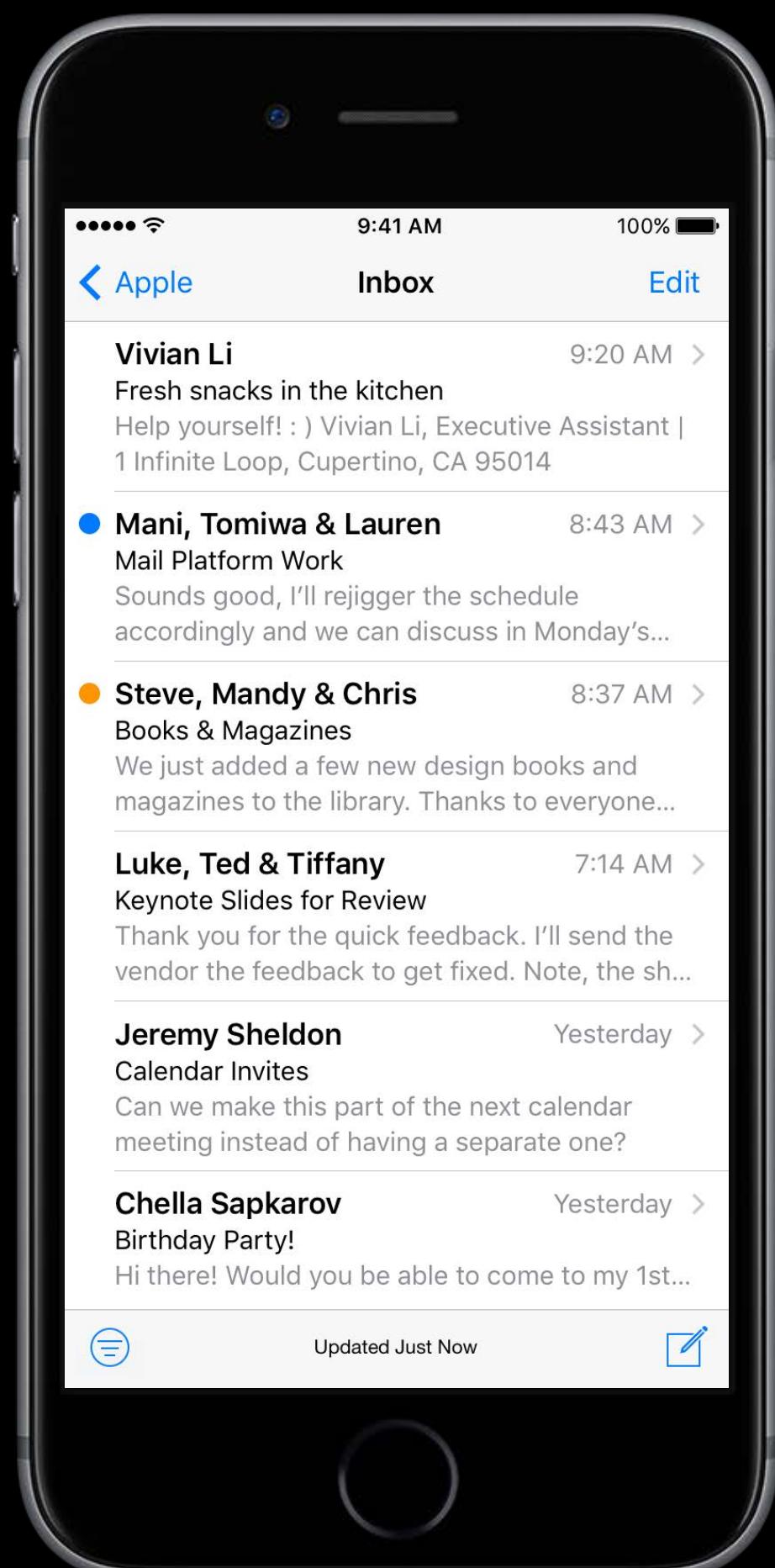
Colors can have different meanings



Things to Remember

Colors can have different meanings

Don't rely on color alone



Things to Remember

Colors can have different meanings

Don't rely on color alone

Need high color contrast for legibility

Get Started

9.6:1 Contrast Ratio



Agenda

Typography

Dynamic layouts

Color

Iconography

Agenda

Typography

Dynamic layouts

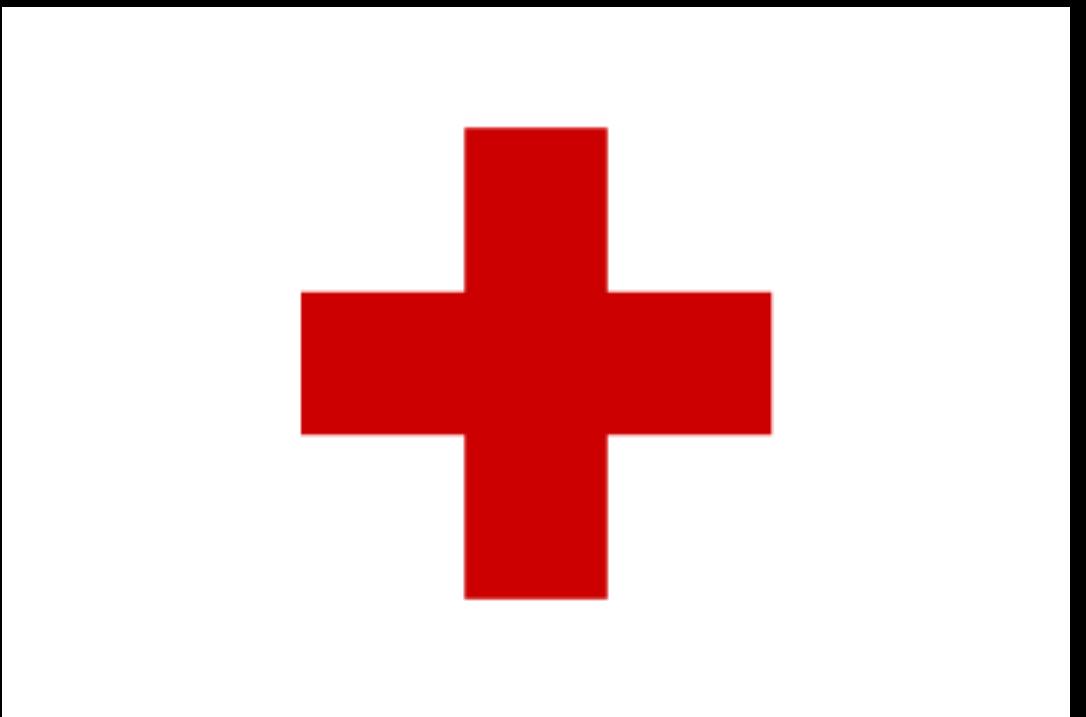
Color

Iconography

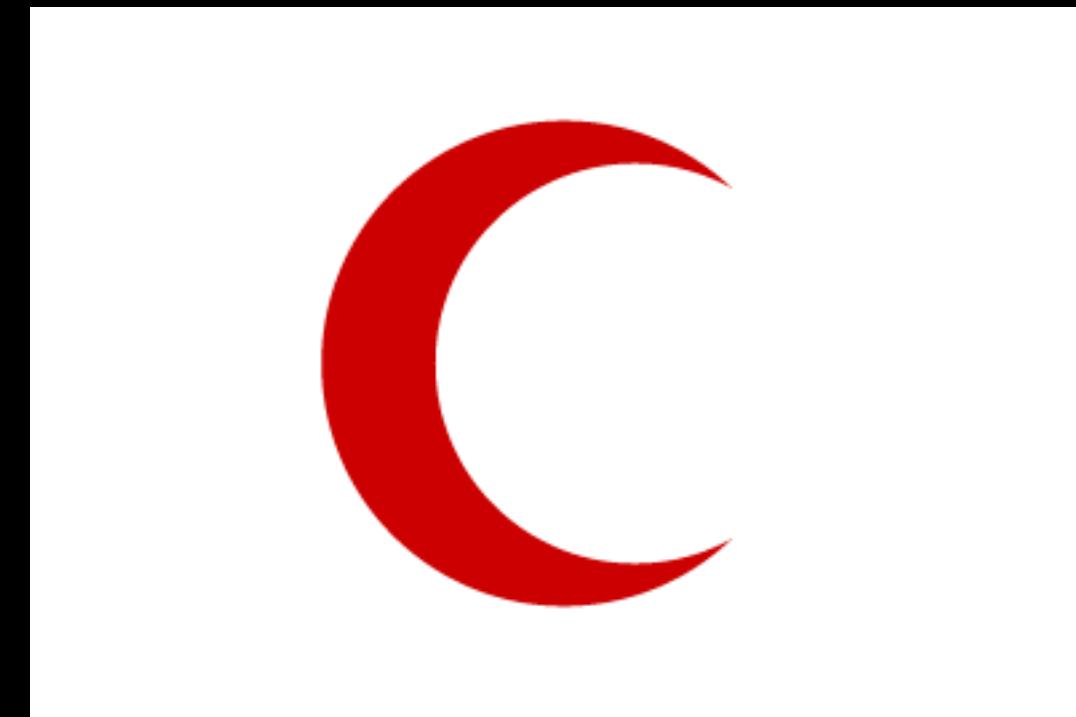
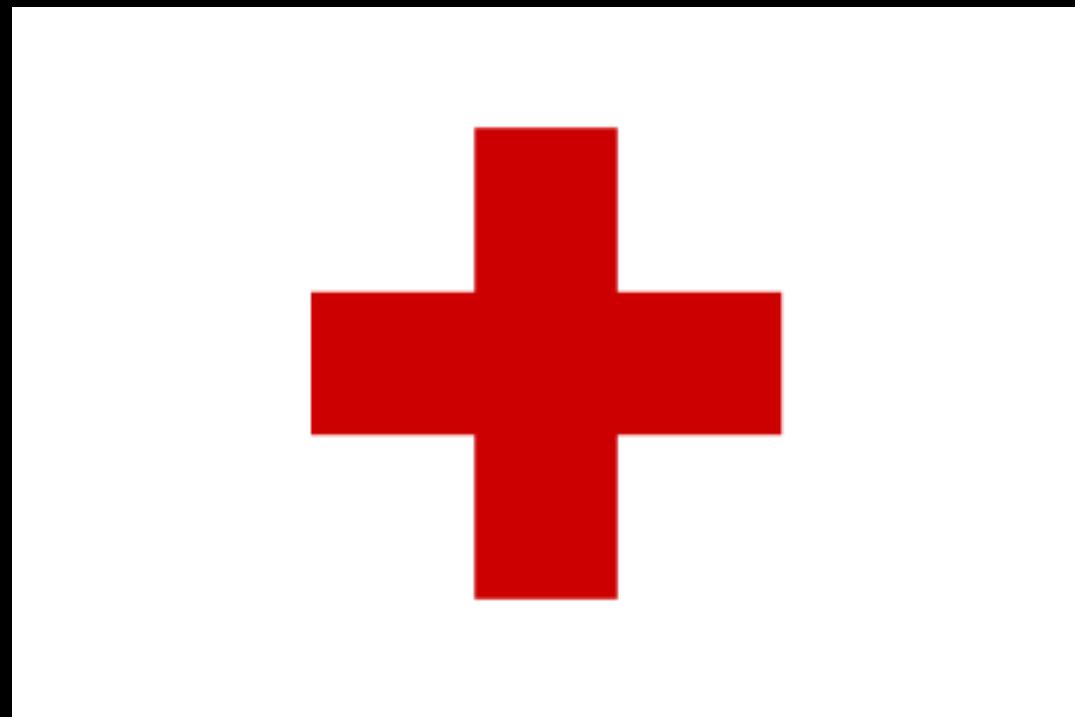
Iconography

Semiotics

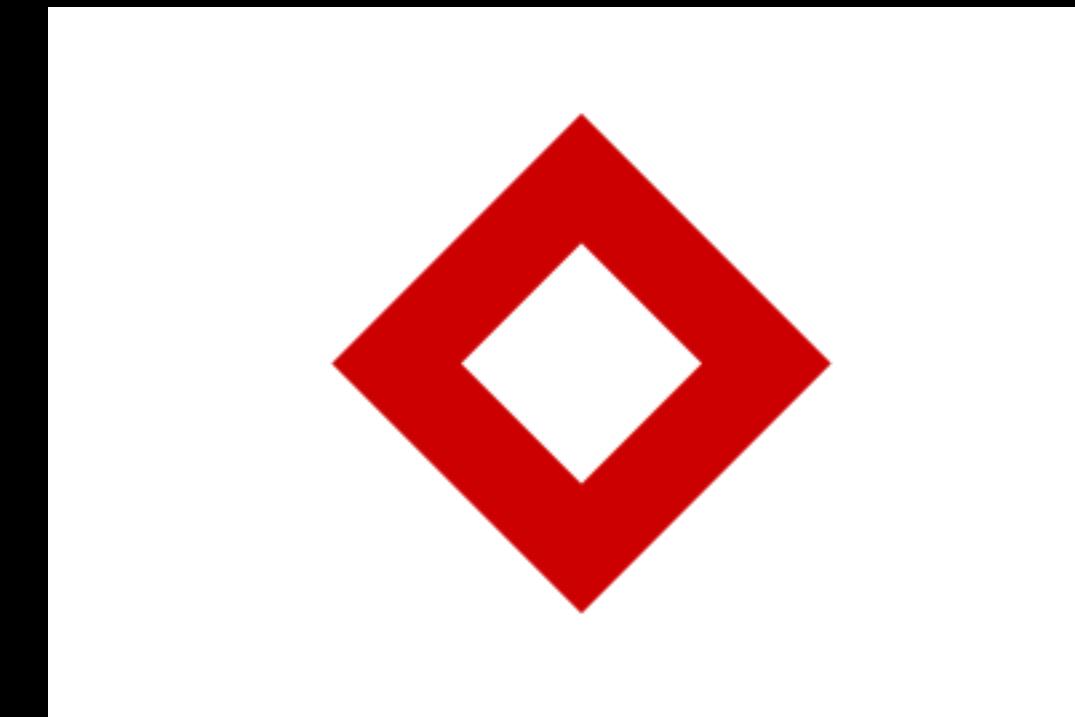
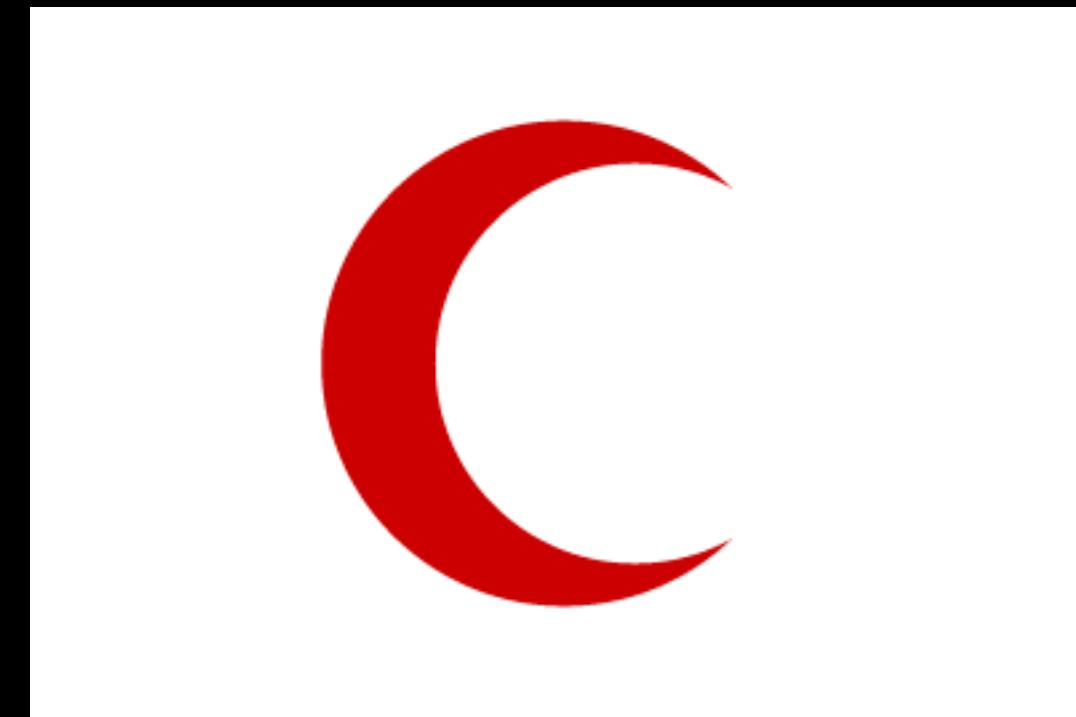
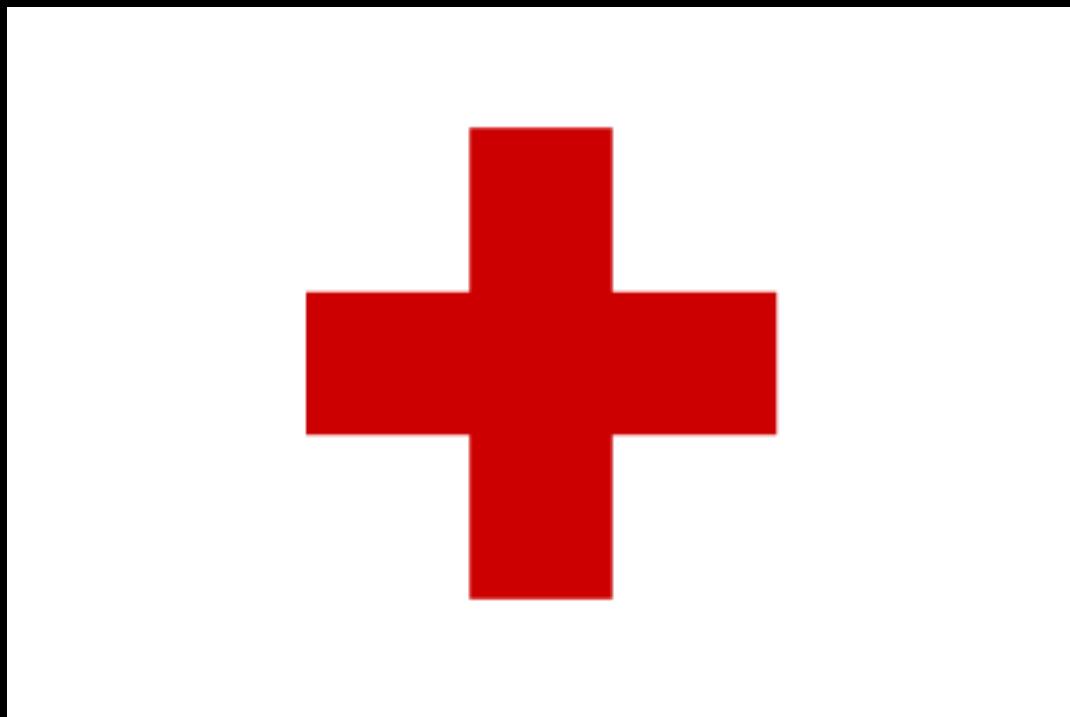
Semiotics



Semiotics



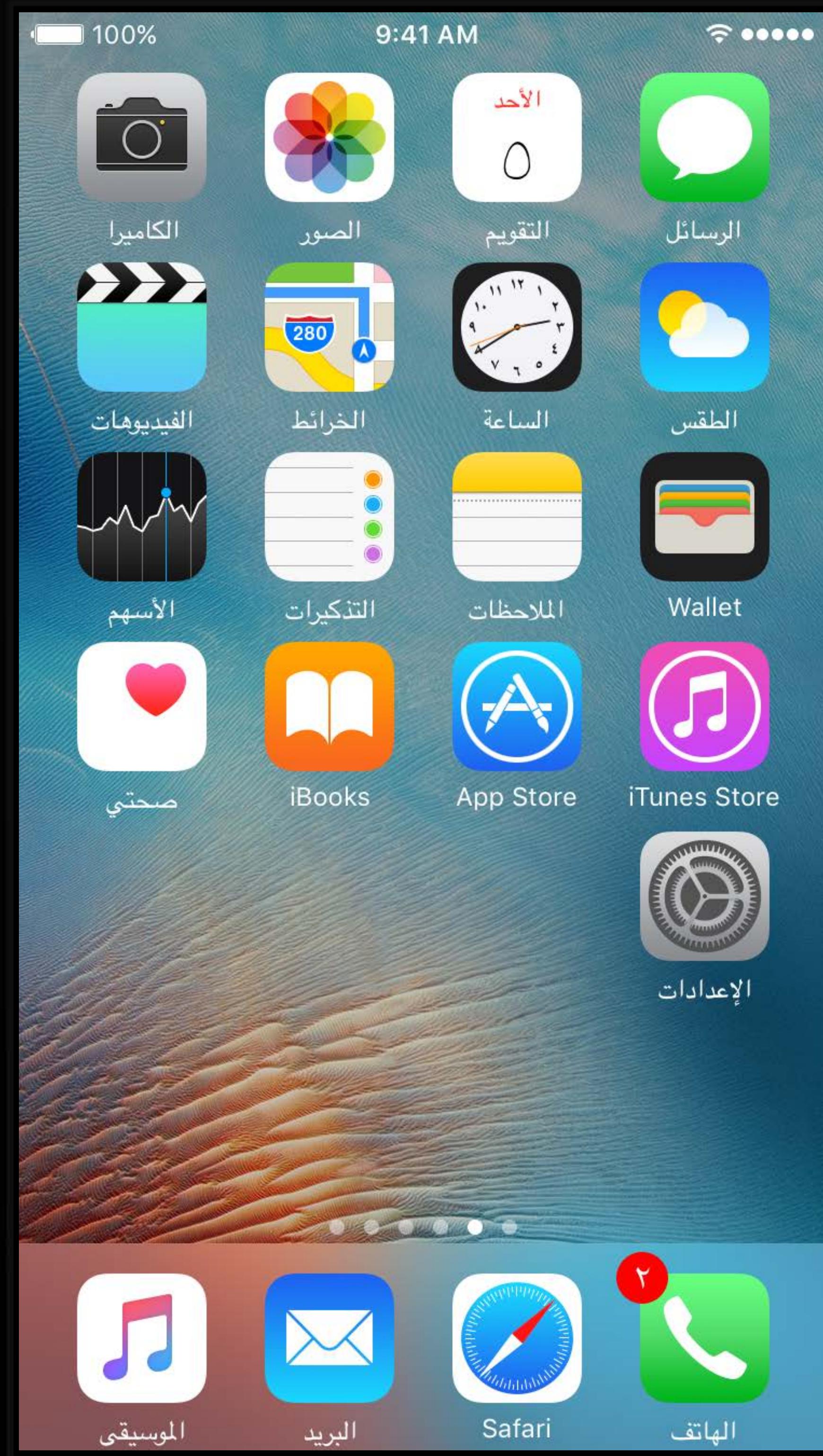
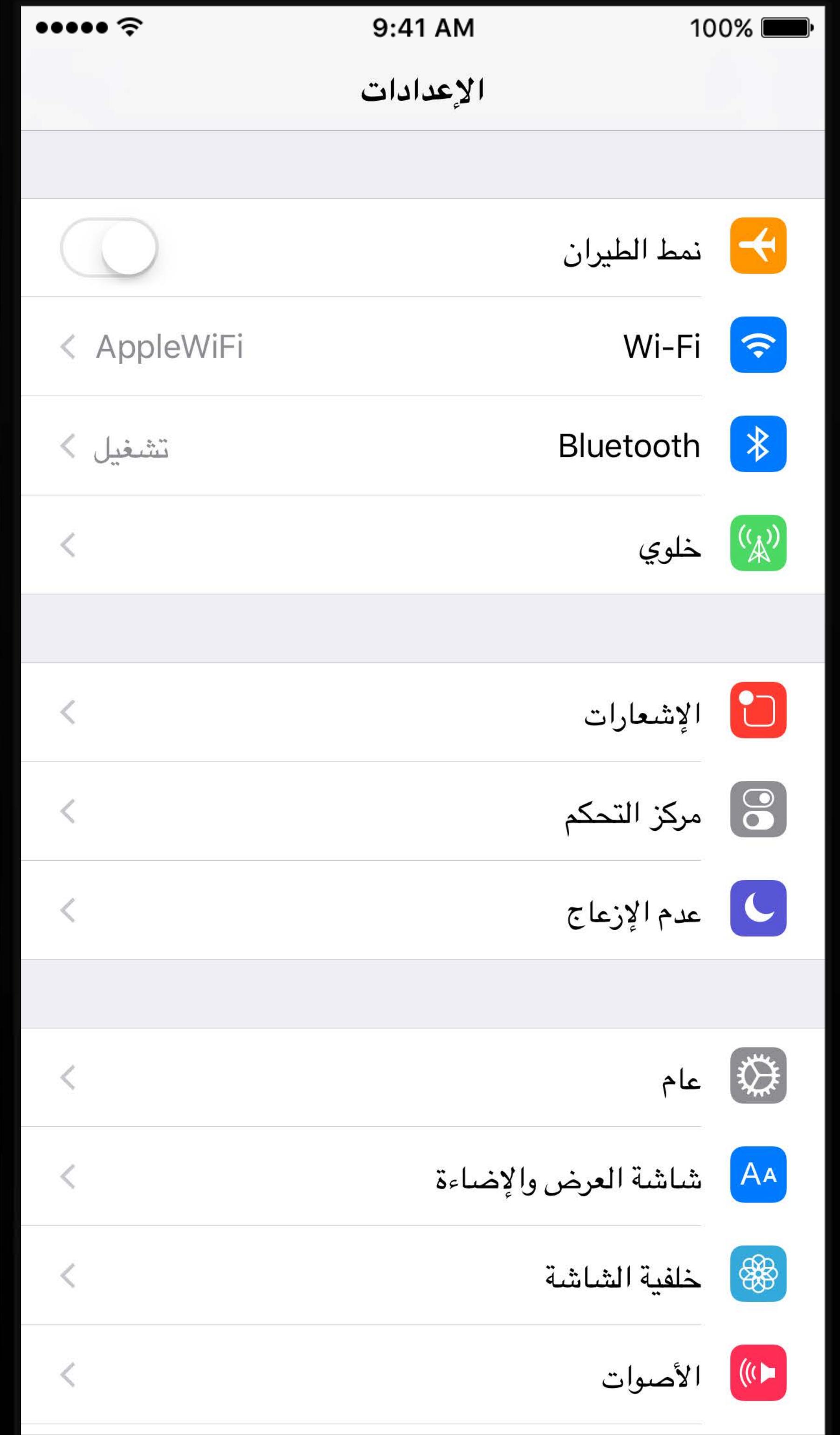
Semiotics

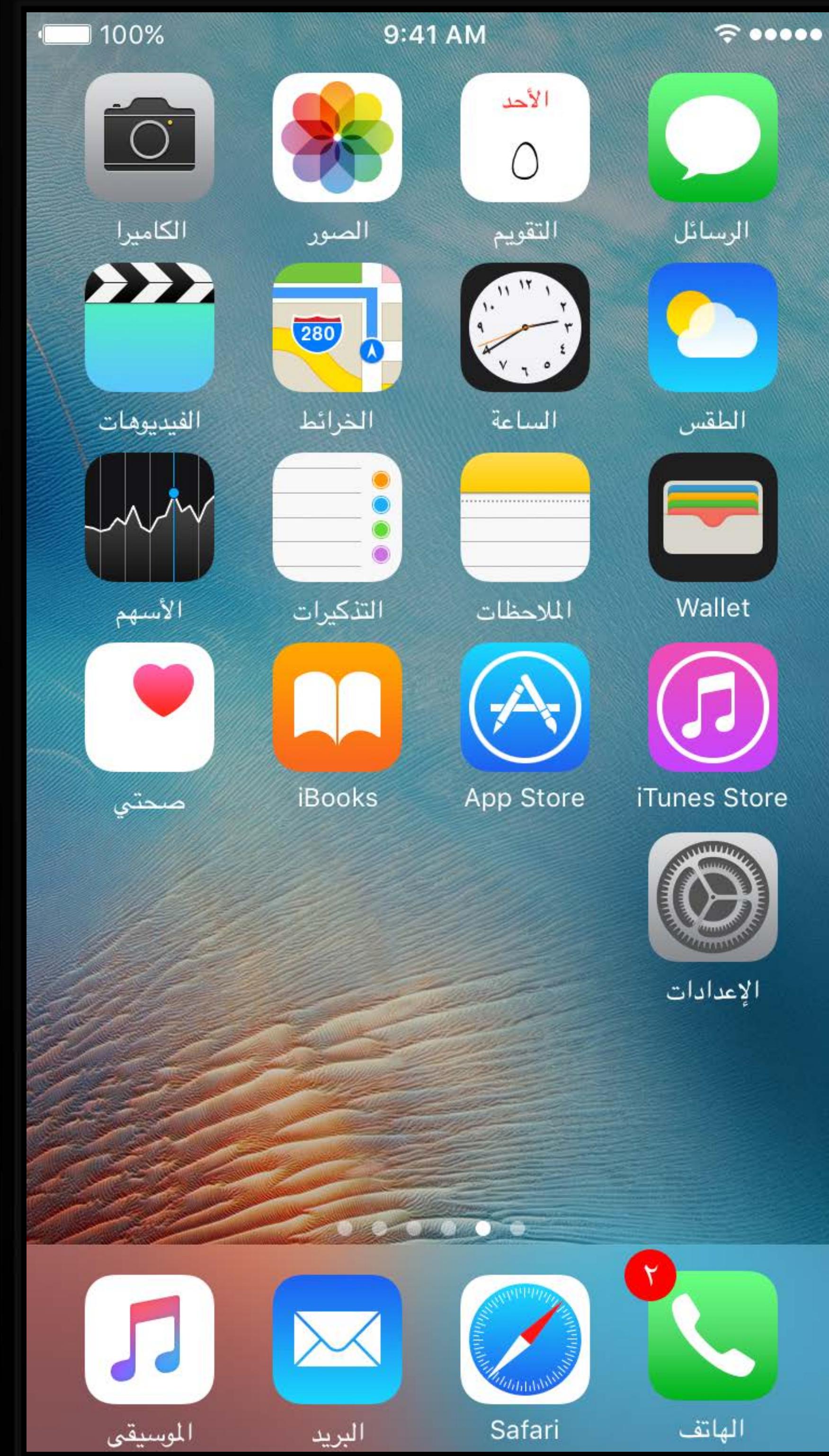


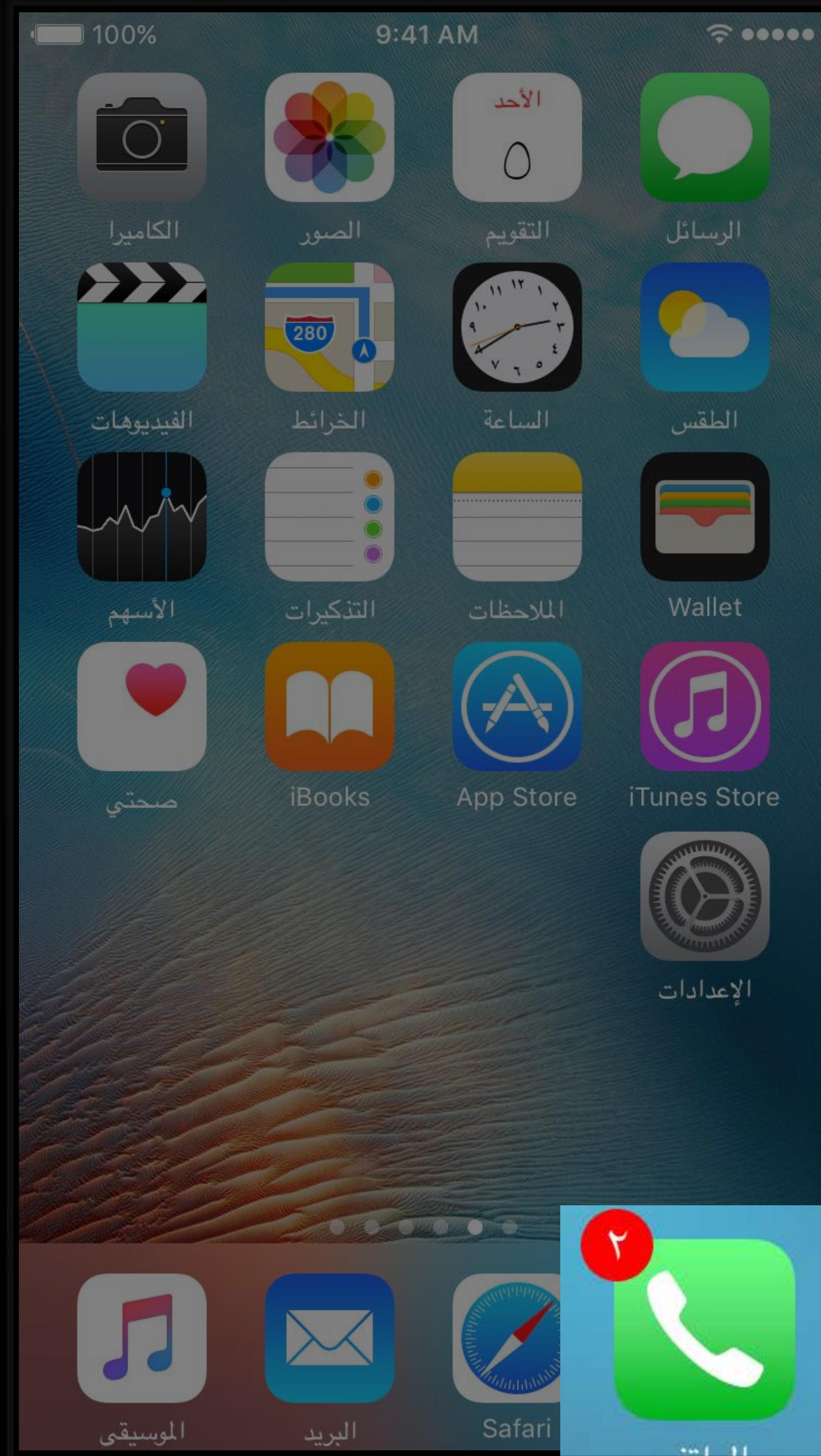
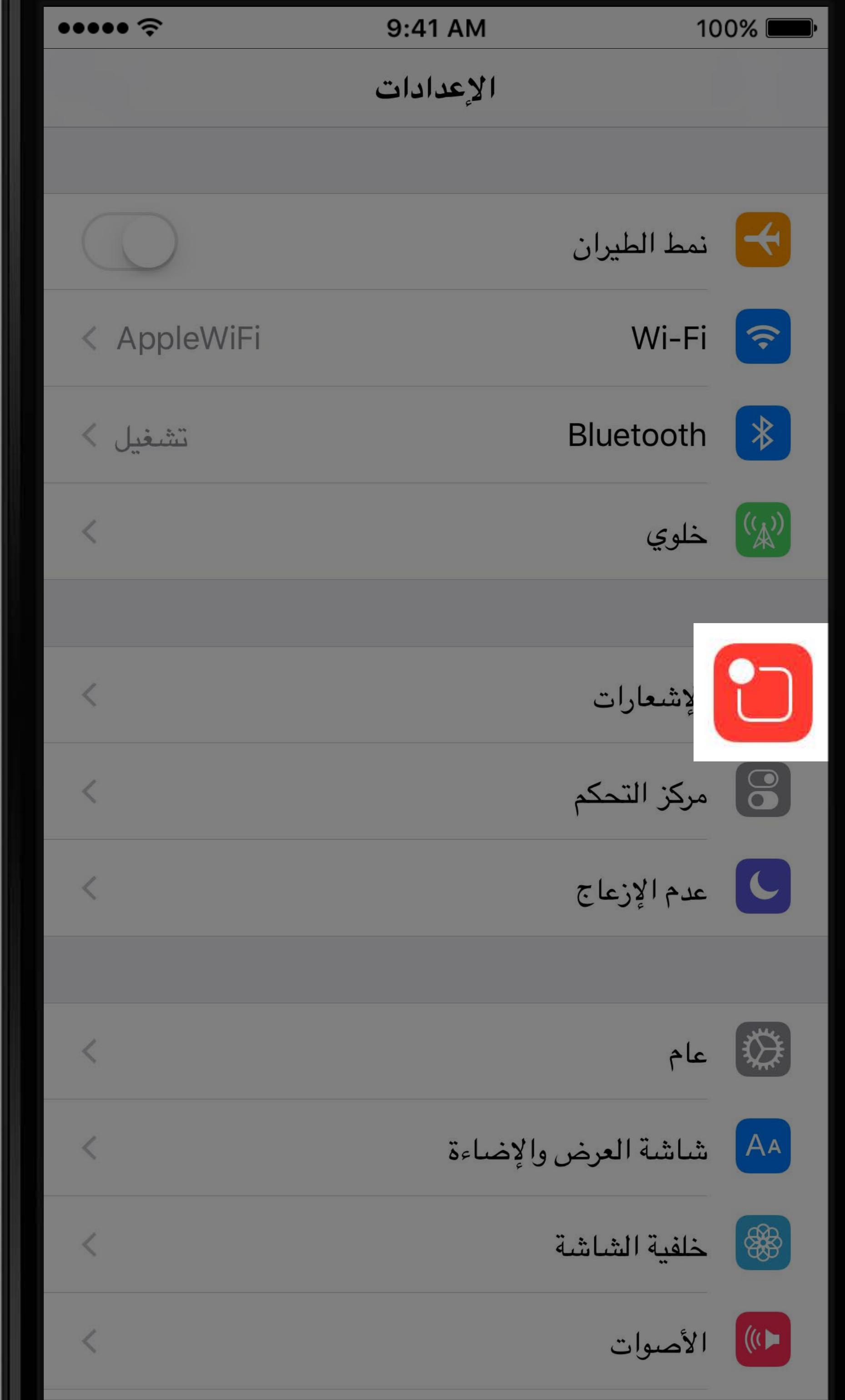








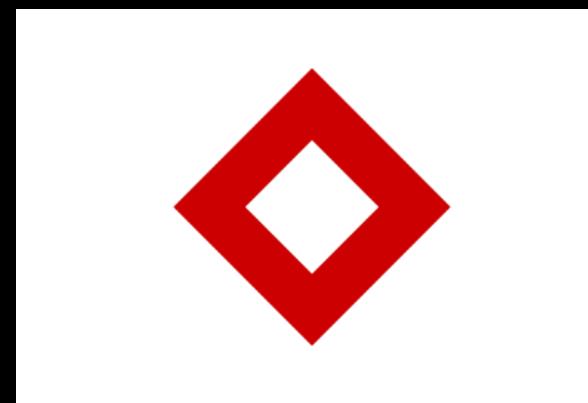
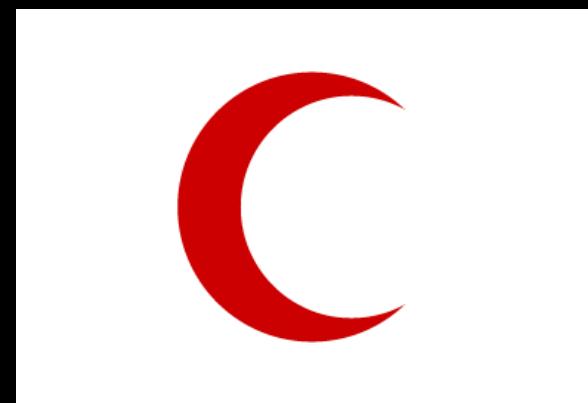
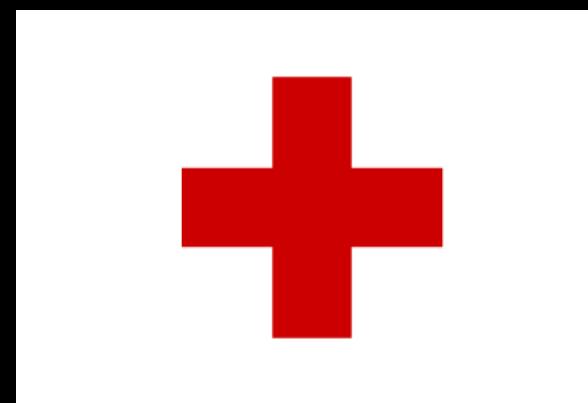




Things to Remember

Things to Remember

Symbols can have different meanings



Things to Remember

Symbols can have different meanings

Avoid direction and text



Things to Remember

Symbols can have different meanings

Avoid direction and text

Iconography should match UI



Next Steps

Next Steps

Who is your audience?

What are their cultural values?

What capabilities will they have?

Speak with them directly

Next Steps

Who is your audience?

What are their cultural values?

What capabilities will they have?

Speak with them directly

How can I be more inclusive?

More Information

<https://developer.apple.com/wwdc16/801>

iOS Human Interface Guidelines Beta

The world's most advanced mobile OS offers everything you need to design beautiful, engaging apps that radiate power and simplicity.

Overview ▾

- Design Principles**
- What's New in iOS 10
- Interface Essentials
- Interaction
- Features
- Visual Design
- Graphics
- UI Bars
- UI Views
- UI Controls
- Extensions
- Technologies
- Resources



As an app designer, you have the opportunity to deliver a killer product that rises to the top of the App Store charts. To do so, you'll need to meet high expectations for quality and functionality.

Three primary themes differentiate iOS from other platforms:

- **Clarity.** Throughout the system, text is legible at every size, icons are precise and lucid, adornments are subtle and appropriate, and a sharpened focus on functionality motivates the design. Negative space, color, fonts, graphics, and interface elements subtly highlight important content and convey interactivity.



Related Sessions

Typography and Fonts	Presidio	Wednesday 9:00AM
Auditing Your Apps for Accessibility	Nob Hill	Wednesday 10:00AM
Making Apps Adaptive, Part 2	Presidio	Friday 9:00AM
What's New in International User Interfaces	Nob Hill	Friday 9:00AM

Labs

User Interface Design by Appointment Lab

UI Design Lab

Daily 9:00AM

Accessibility User Interface by Appointment Lab

UI Design Lab

Tuesday 9:00AM

Accessibility User Interface by Appointment Lab

UI Design Lab

Wednesday 9:00AM



W W D C 16