iOS Human Interface Guidelines

iOS Design Principles

Aesthetic Integrity
Represents how well an app's appearance and behavior integrates with its function.

Consistency
Incorporates features and behaviors in ways people expect, including well-known icons, standard text styles, and uniform terminology.

Direct Manipulation
Engages people and facilitates understanding.

Feedback
Acknowledges actions and shows results to keep people informed through design, animation, and sound.

Metaphors
Learn more quickly when virtual objects and actions are metaphors for familiar experiences—whether rooted in the real or digital world.

User Control
People—not apps—are in control. Keep interactive elements familiar and predictable, confirm destructive actions, and make it easy to cancel operations.

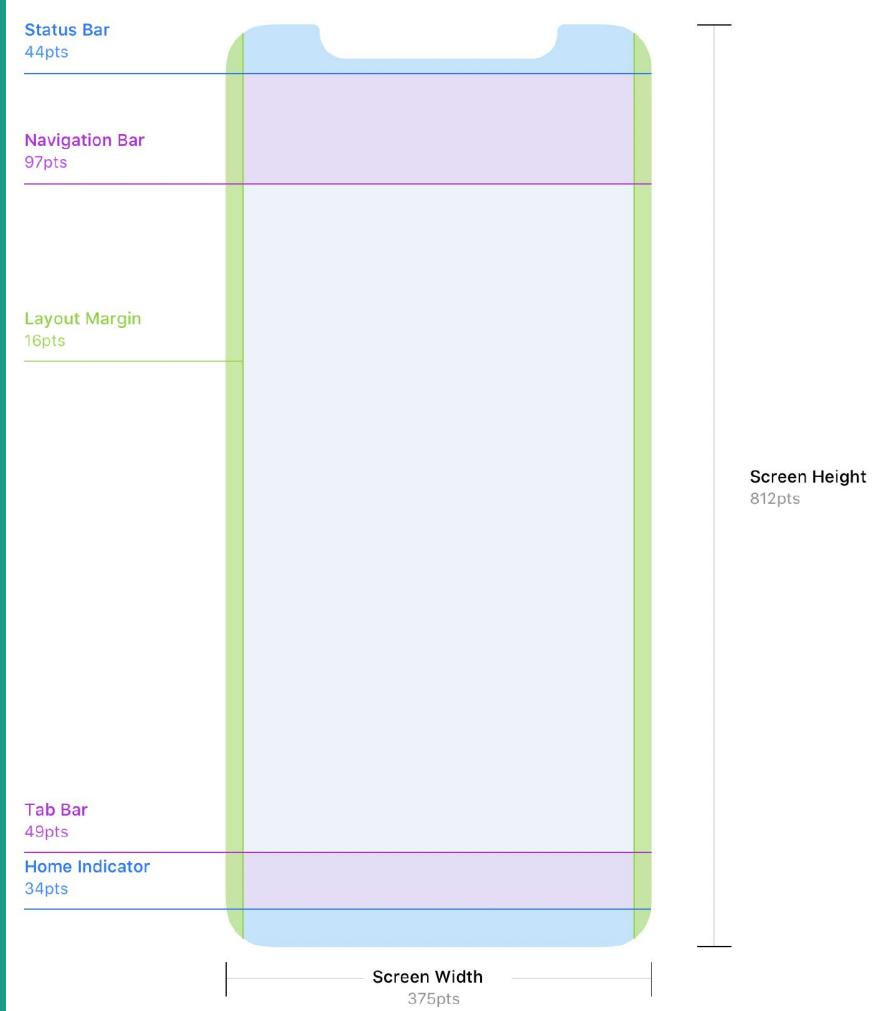
Interface Essentials

- Bars
- Views
- Controls

Bars

Tell people where they are in your app, provide navigation, and may contain buttons or other elements for initiating actions and communicating information.

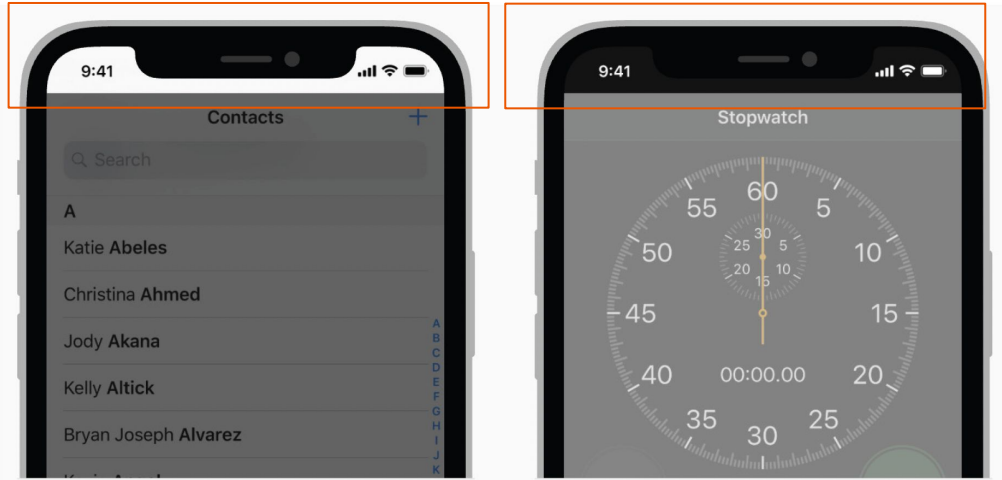
- Status Bars
- Navigation Bars
- Search Bars
- Tab Bars
- Toolbars



Layout margins and safe zone on the iPhone X.

Status Bars

Appear at the top of the screen. Use the system-provided status bar. People expect the status bar to be consistent systemwide. Don’t replace it with a custom status bar.



Light status bar

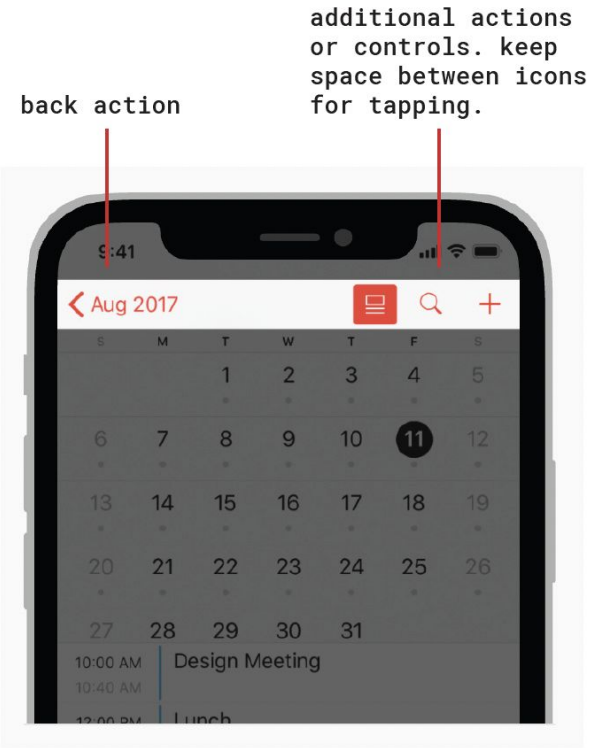
Dark status bar

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 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.

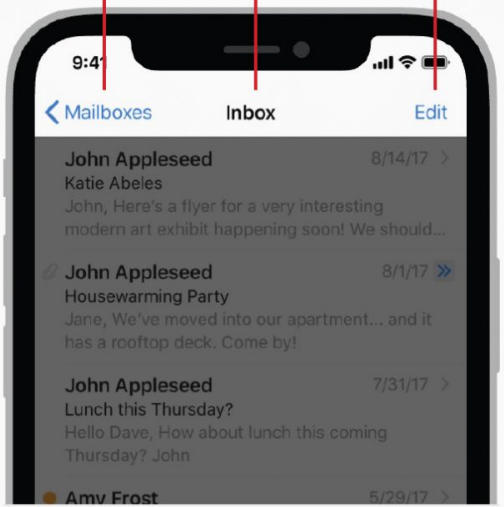
Sometimes, the right side of a navigation bar contains a control, like an Edit or a Done button, for managing the content within the active view.



back action

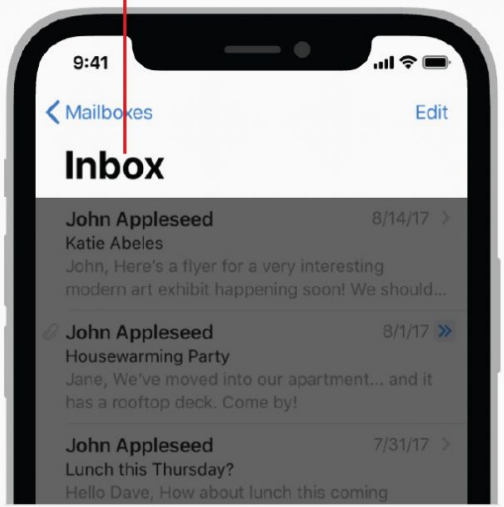
title

control



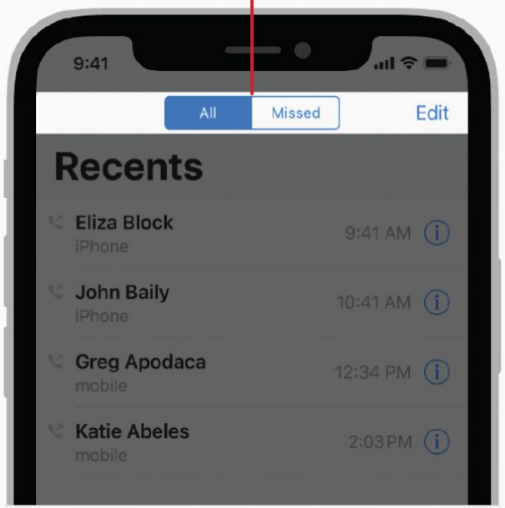
Standard title

some apps start with a large title and then when you scroll it reduces to the standard title size.



Large title

segmented control



Tab Bars

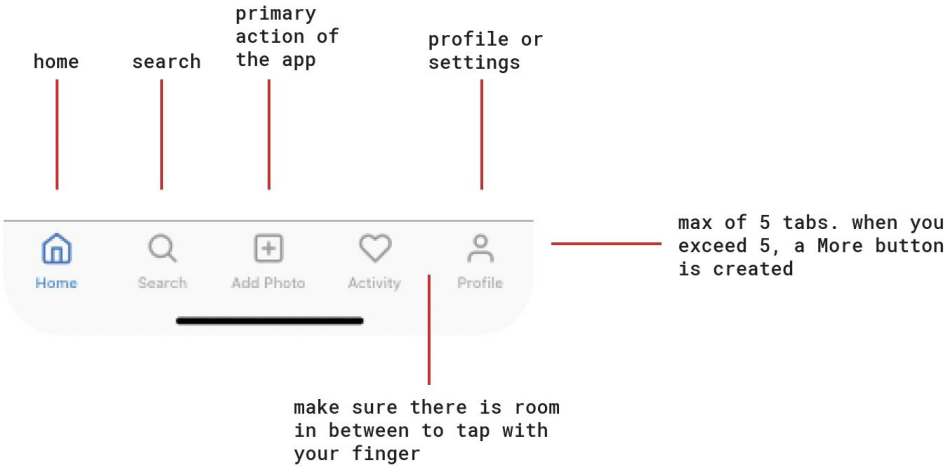
A tab bar appears at the bottom of an app screen and lets people quickly switch among the main sections of an app, typically 3–5 locations.

Tab bars maintain the same height in all screen orientations, and are hidden when a keyboard is displayed.

Primary action of the app – for instance, adding a new photo in a photo-based app – is typically centered.

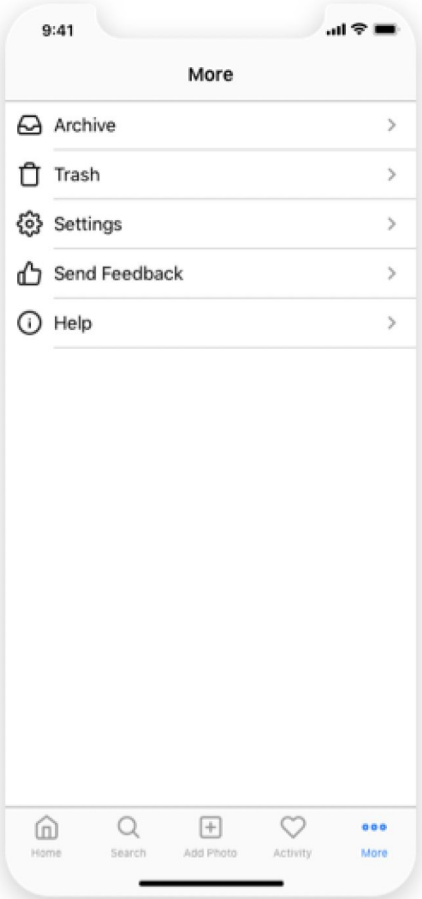
Any profile- or settings-related tab typically appears last.

Search typically appears second.



Secondary Navigation Destinations

Navigation destinations that can't fit in the bottom tab bar can (a) be shunted into a catch-all "More" tab or (b) appear as actions in the top-left or top-right of other destinations.

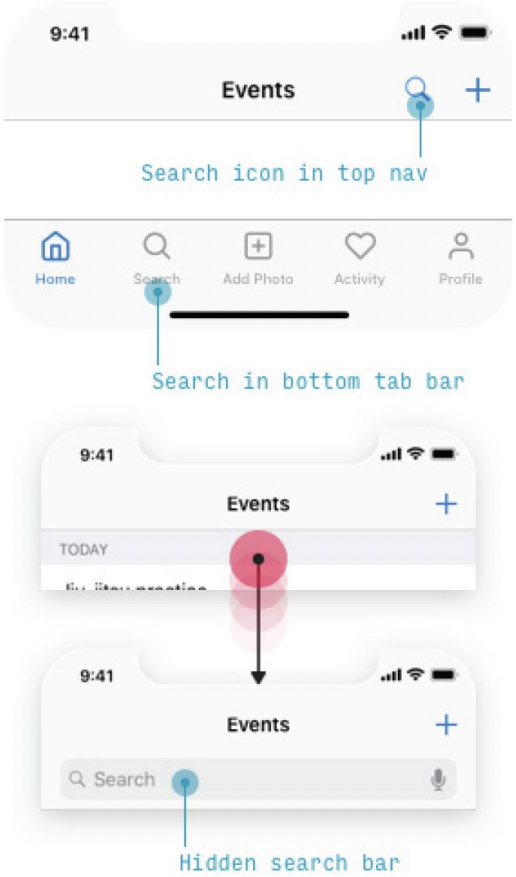


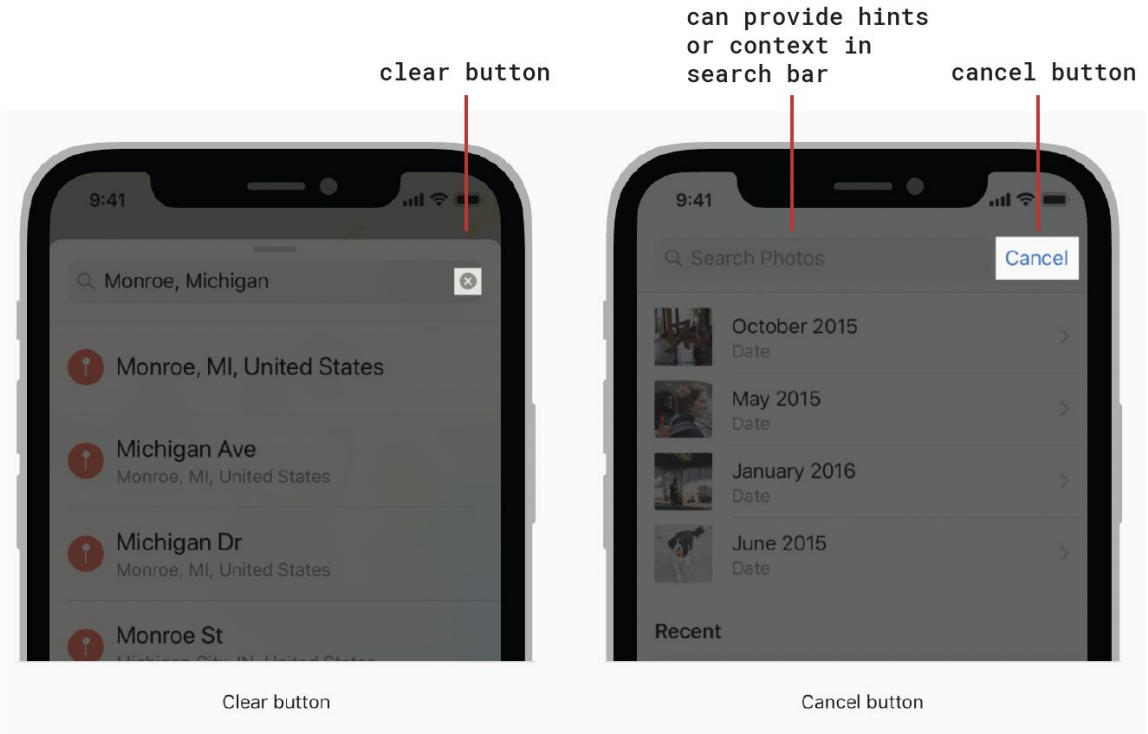
Search Bars

A search bar allows people to search through a large collection of values by typing text into a field.

A search bar can be displayed alone, or in a navigation bar or content view. It can also be placed in the tab bar.

When displayed in a navigation bar, a search bar can be pinned to the navigation bar so it's always accessible, or it can be collapsed until the user swipes down to reveal it.





Clear button

Cancel button

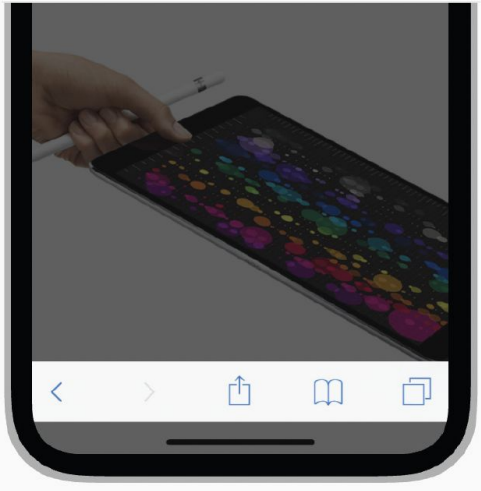
Tool Bars

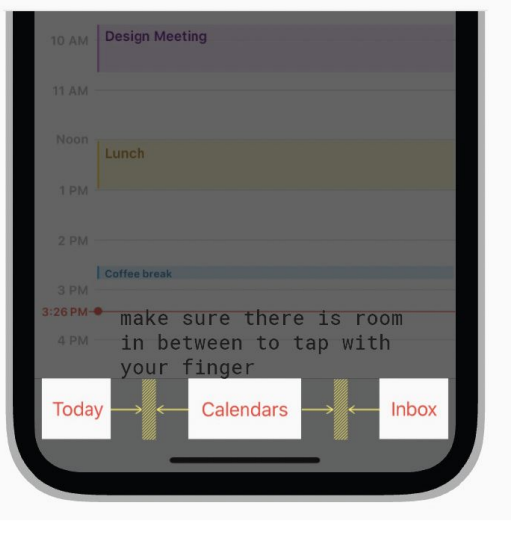
A toolbar appears at the bottom of an app screen and contains buttons for performing actions relevant to the current view or content within it.

Toolbars often hide when people are unlikely to need them. For example, Safari hides the toolbar while people scroll towards the bottom of a page, bringing it back when they scroll towards the top or tap the bottom of the screen. A toolbar also hides when a keyboard is onscreen.

It's important to understand the difference between a toolbar and a tab bar, because both types of bars appear at the bottom of an app screen.

A toolbar 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. A tab bar lets people switch quickly among different sections of an app. They never appear at the same time.

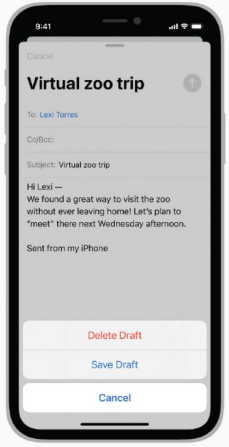




if using text,
keep it below 3.

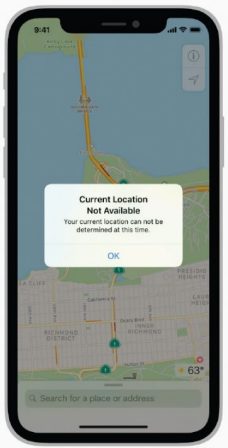
Views

Contain the primary content people see in your app, such as text, graphics, animations, and interactive elements. Views can enable behaviors such as scrolling, insertion, deletion, and arrangement.

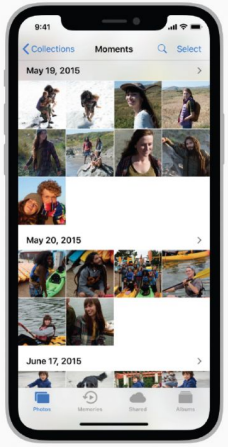


Action Sheets

Activity Views



Alerts



Collections

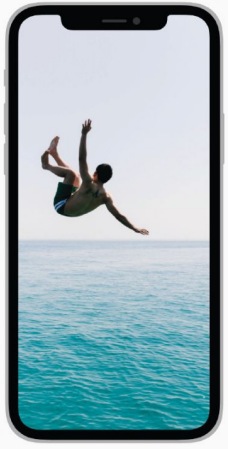
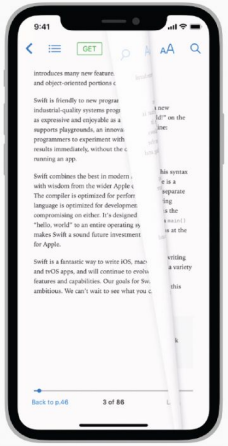
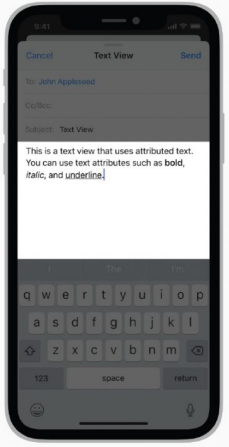


Image Views



Pages

Scroll Views



Text Views

Web Views

Tables

A table presents data as a scrolling, single-column list of rows that can be divided into sections or groups. Use a table to display large or small amounts of information cleanly and efficiently in the form of a list.

Plain Table

Grouped Table

Controls

Initiate actions and convey information. Buttons, switches, text fields, and progress indicators are examples of controls.

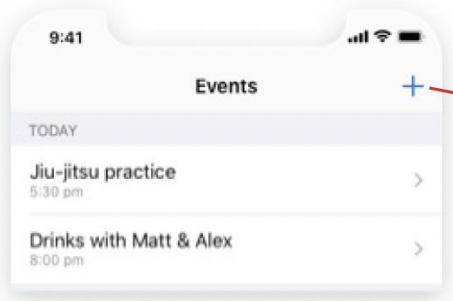
- Buttons
- Context Menus, Edit Menus, Pull-Down Menus
- Page Controls, Progress Indicators, Refresh Content Controls
- Pickers
- Segmented Controls
- Sliders, Steppers, Switches
- Text Fields & Keyboards

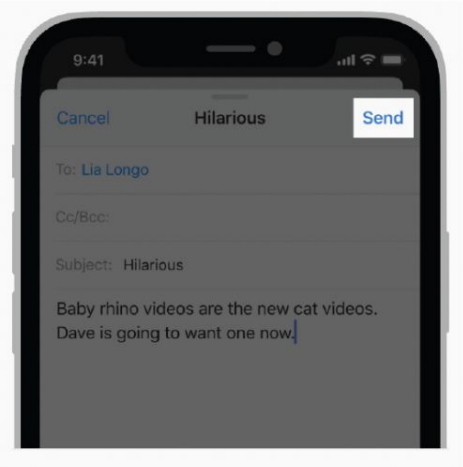
Buttons

Buttons initiate app-specific actions, have customizable backgrounds, and can include a title or an icon.

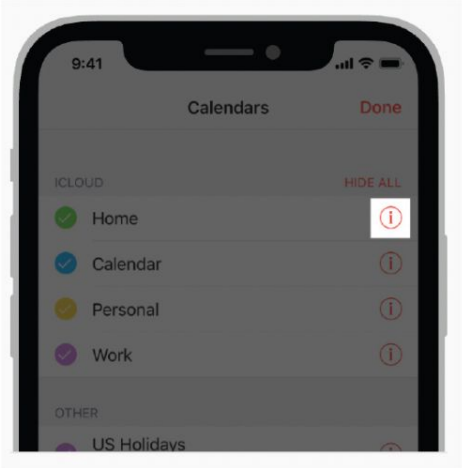
The system provides a number of predefined button styles for most use cases.

You can also design fully custom buttons.

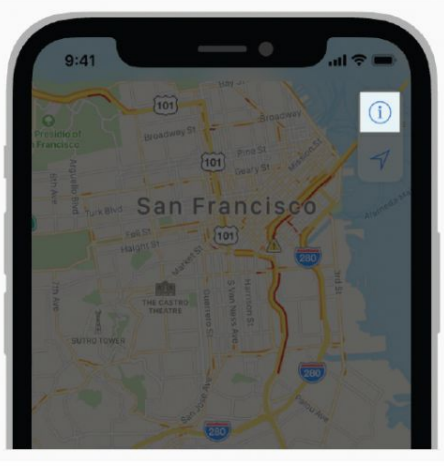




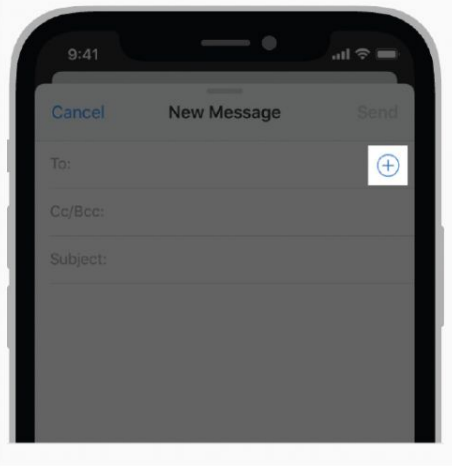
System Button
appear in navbars or toolbars usually



Detail Disclosure Button
typically opens a modal view containing additional info. usually in a table row.

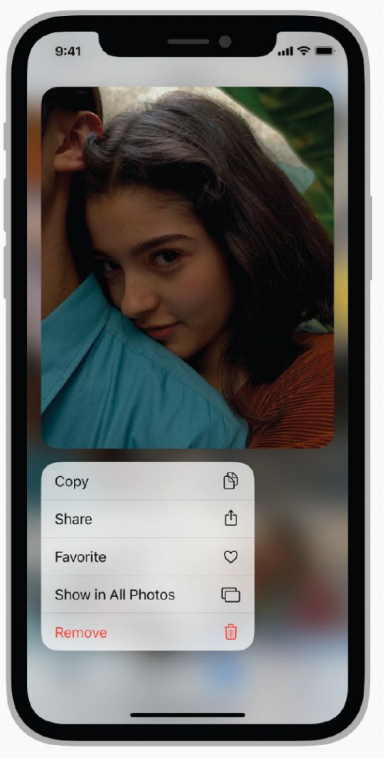


Info Button
reveals configuration details about an app, sometimes on the back of the current view, after flipping the view around.

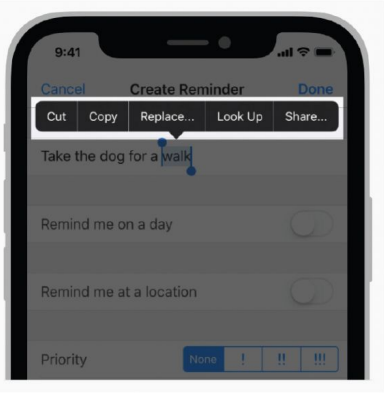


Add Contact Button
browse a list of existing contacts and select one for insertion into a text field or other view.

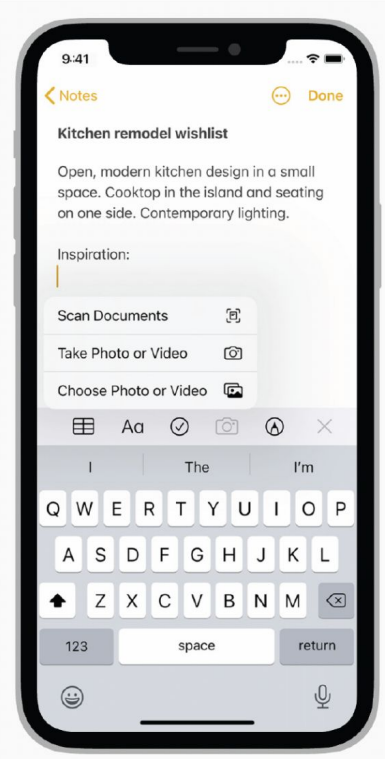
Menus



Context Menu
give people access to additional functionality related to onscreen items without cluttering the interface.

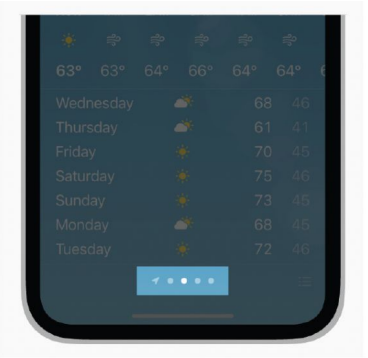


Edit Menu
touch and hold or double-tap an element to select content and reveal edit options, such as Copy and Paste.

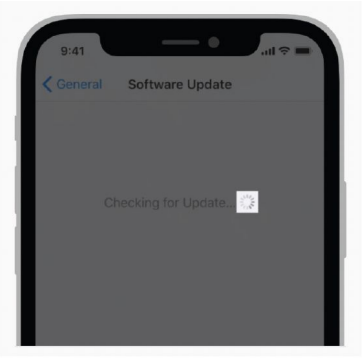


Pull-Down Menu
display a pull-down menu that lists items or actions from which people can choose.

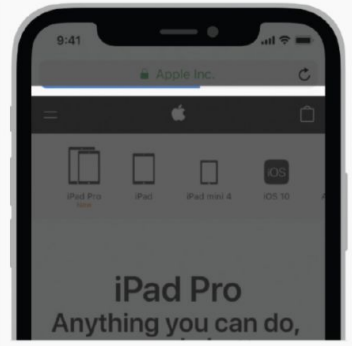
Page Controls, Progress Indicators, Refresh



Page Control
displays a row of indicator images, each of which represents a page in a flat list.



Activity Indicator
spins while an unquantifiable task, such as loading or synchronizing complex data, is performed.



Progress Bar
includes a track that fills from left to right to show the progression of a task with a known duration.

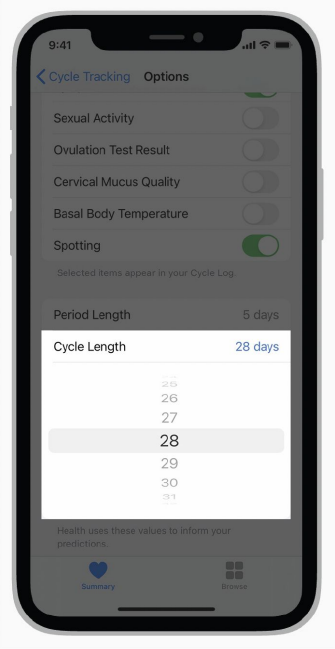
Refresh Content Control
A refresh control is manually initiated to immediately reload content

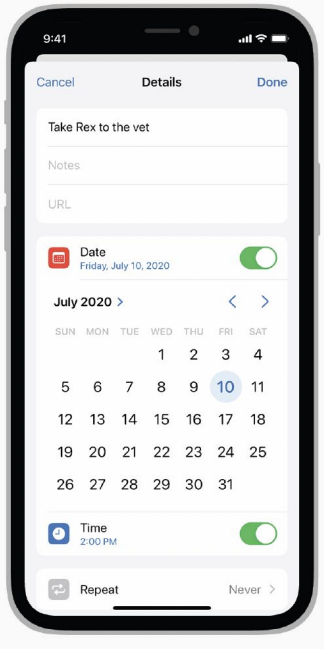
Pickers

Consider using a picker to offer medium-to-long lists of items.

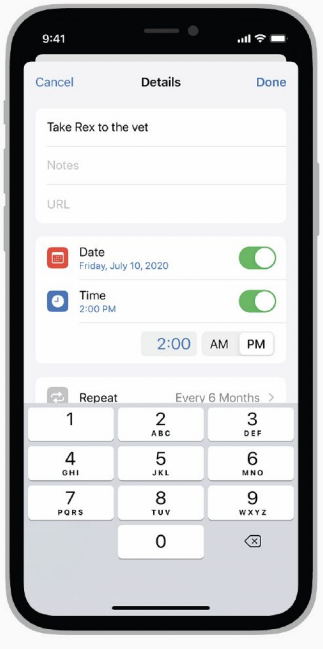
If you have fewer items, consider using a drop-down.

If you have a super long list, consider a list or table.





An inline date picker in date mode



An inline date picker in time mode

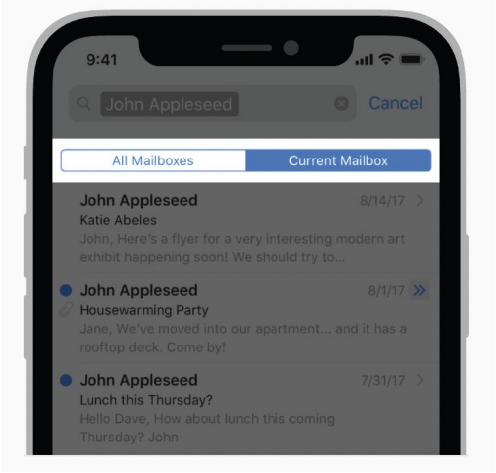
Segmented Controls

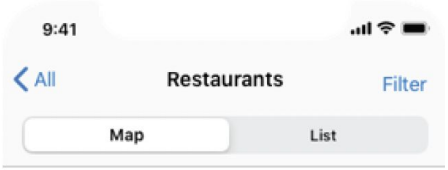
A segmented control is a linear set of two or more segments, each of which functions as a mutually exclusive button.

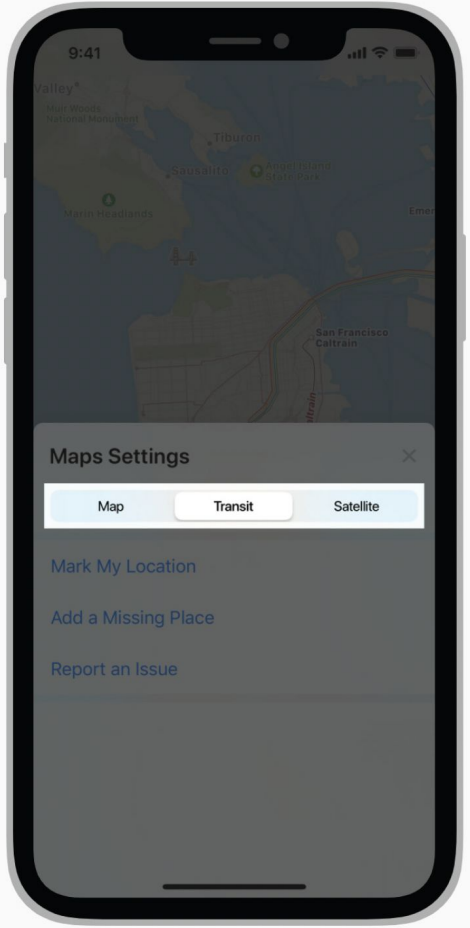
Within the control, all segments are equal in width.

Like buttons, segments can contain text or images, avoid mixing the two.

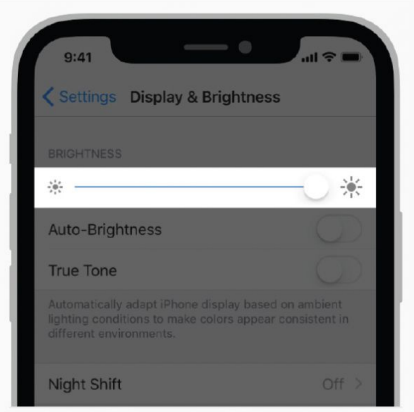
Segmented controls are often used to display different views.



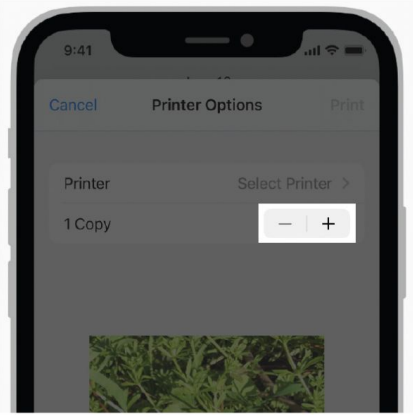




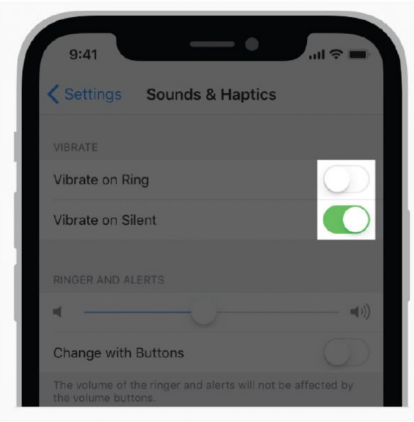
Sliders, Steppers, Switches



Slider
horizontal track with a control called a thumb, which you can slide with your finger to move between a minimum and maximum value.



Stepper
two-segment control used to increase or decrease an incremental value.

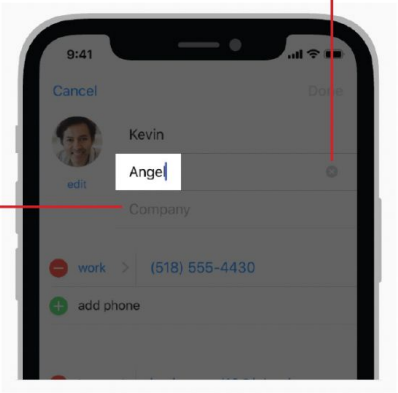


Switch
visual toggle between two mutually exclusive states – on and off.

Text Fields & Keyboards

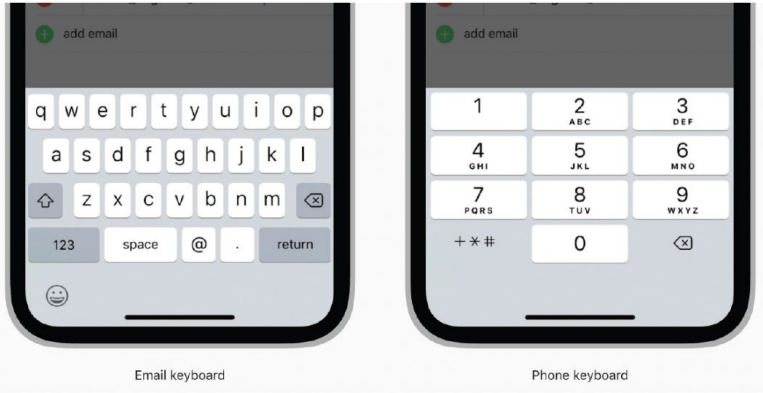
Display a Clear button in the right end of a text field when appropriate.

Show a hint in a text field to help communicate purpose.



Text Field
single-line, fixed-height field, often with rounded corners, that automatically brings up a keyboard when the user taps it.

Use a text field to request a small amount of information, such as an email address.



Email keyboard

Phone keyboard

Keyboards
to streamline data entry, the keyboard displayed when editing a text field should be appropriate for the type of content in the field.

Type / Icon Sizing & Touch Targets

Type

The key to mobile typography is readability and legibility. If users can't read your content, there's no point in offering content in the first place.

Font size

Generally, anything smaller than 16 pixels (or 11 points) is challenging to read on any screen.

Font family

Most users prefer a clear, easy-to-read font. A safe bet is the system's default typeface (Apple iOS uses the San Francisco font; Google Android uses Roboto).

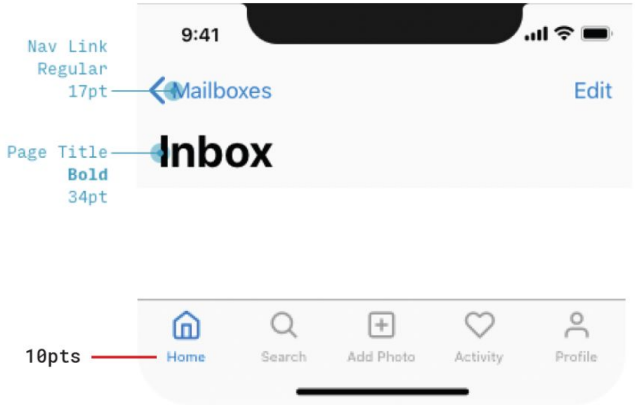
Contrast

Light-colored text (such as light gray) might look aesthetically appealing, but users will have a hard time reading it, especially against a light background. Make sure there is plenty of contrast between the font and the background for easy readability.

Type Size

iOS

The base font size is 17pt (for body text, controls, and small titles), with large titles at 34pt, secondardy text at 15pt, and the minimum font size of 10pt.

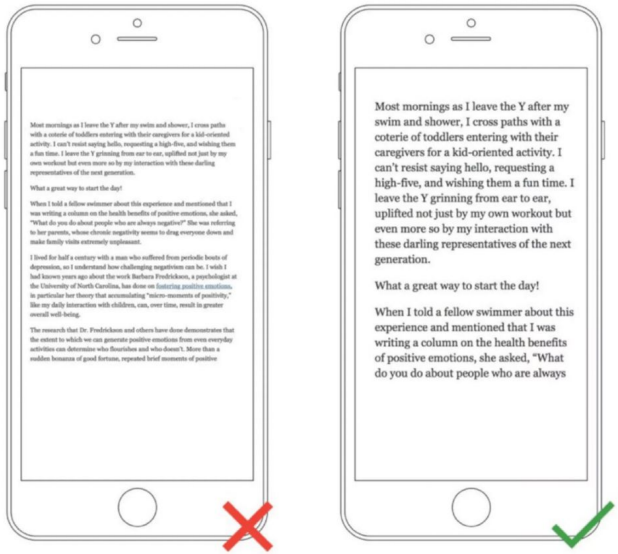


Large (Default)

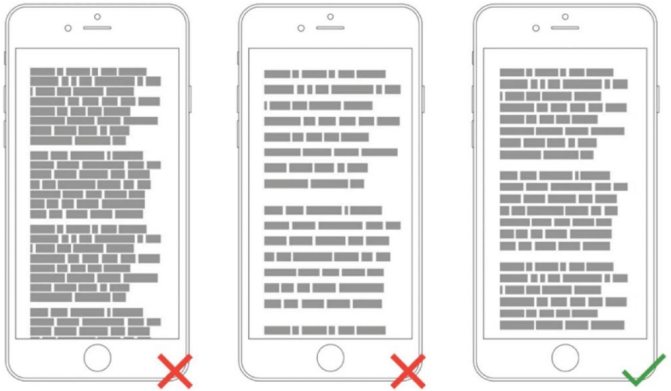
Style	Weight	Size (points)	Leading (points)
Large Title	Regular	34	41
Title 1	Regular	28	34
Title 2	Regular	22	28
Title 3	Regular	20	25
Headline	Semi-Bold	17	22
Body	Regular	17	22
Callout	Regular	16	21
Subhead	Regular	15	20
Footnote	Regular	13	18
Caption 1	Regular	12	16
Caption 2	Regular	11	13

Point size based on image resolution of 144ppi for @2x and 216ppi for @3x designs.

Line Length & Leading

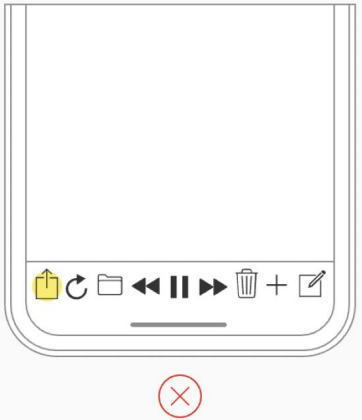


Limit the length of text lines.
A good rule of thumb is to use **30 to 40 characters** per line for mobile.



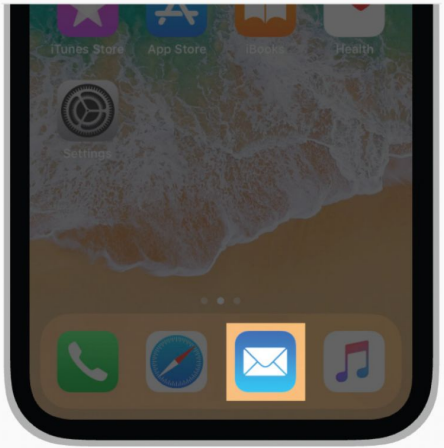
Don't squeeze lines.
Adding space between text aids the user in reading and creates a feeling that there isn't so much information to take in.

Icon Sizing & Tappable Area



Provide ample touch targets for interactive elements. Try to maintain a minimum tappable area of 44pt x 44pt for all controls.

App Icon Sizing



Device or context	Icon size
iPhone	180px × 180px (60pt × 60pt @3x)
	120px × 120px (60pt × 60pt @2x)

Touch Target Areas