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.



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.





Standard title

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



segmented control 9:41 all 🗢 💼 Edit Missed Recents Eliza Block John Baily Greg Apodaca Katie Abeles

Large title

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.





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.





Scroll 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.

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Open, modern kitchen design in a small space. Cooktop in the island and seating on one side. Contemporary lighting.						
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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 i

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



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



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



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.





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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

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



Display a Clear

button in the right end of a text field

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.



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

Туре

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.

San Francisco (SF). San Francisco is a sans serif type family that includes SF Pro, SF Pro Rounded, SF Mono, SF Compact, and SF Compact Rounded. SF Pro is the system font in iOS, macOS, and tvOS; SF Compact is the system font in watchOS. Designed to match the visual clarity of the platform UIs, the system fonts are legible and neutral.

The quick brown fox jumps over the lazy dog.

New York (NY). New York is a serif typeface that provides a unique tone designed to complement the SF fonts. NY works as well in a graphic display context (at large sizes) as it does in a reading context (at text sizes).

The quick brown fox jumps over the lazy dog.

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

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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.

Laige (Deraalt)			
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.

Large (Default)

Line Length & Leading

0 0 -Most mornings as I leave the Y after my swim and shower, I cross paths with a coterie of toddlers entering with their caregivers for a kid-oriented activity. I can't resist saving hello, requesting a high-five, and wishing them a fun time. I leave the Y grinning from ear to ear, uplified not just by my representatives of the next generation. What a great way to start the day! When I told a fellow swimmer about this experience and mentioned that I was writing a column on the health benefits of positive emotions, she asked, "What do you do about people who are always negative?" She was referring to her parents, whose chronic negativity seems to drag everyone down and make family visits extremely unpleasant I lived for half a century with a man who suffered from periodic bouts of generation. depression, so I understand how challenging negativism can be. I wish I had known years ago about the work Barbara Fredrickson, a psychologist at the University of North Carolina, has done on fostering positive emotions, in particular her theory that accumulating "micro-moments of positivity," like my daily interaction with children, can, over time, result in greater overall well-being. The research that Dr. Fredrickson and others have done demonstrates that the extent to which we can generate positive emotions from even everyday activities can determine who flourishes and who doesn't. More than a sudden bonanza of good fortune, repeated brief moments of positive

Most mornings as I leave the Y after my swim and shower, I cross paths with a coterie of toddlers entering with their caregivers for ald-oriented activity. I can't resist saying hello, requesting a high-five, and wishing them a fun time. I leave the Y grinning from ear to ear, uplified not just by my own workout but even more so by my interaction with these darling representatives of the next generation.

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When I told a fellow swimmer about this experience and mentioned that I was writing a column on the health benefits of positive emotions, she asked, "What do you do about people who are always



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.

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

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



iOS

Design your icon at 180x180 px first, and check/tweak/export larger sizes after that.



iOS will clip off the

iOS-style gri

corners, but your icon should be square

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

