Design

App icons

A unique, memorable icon communicates the purpose and personality of your app or game and can help people recognize your product at a glance in the App Store and on their devices.

Supported platforms

Beautiful app icons are an important part of the user experience on all Apple platforms and every app and game must have one. Each platform defines a slightly different style for app icons, so create a design that adapts well to different shapes and levels of detail while maintaining strong visual consistency and messaging. To download templates that help you create icons for each platform, see Apple Design Resources. For guidance on creating other types of icons, see Icons.

Best practices

Embrace simplicity. Simple icons tend to be easier for people to understand and recognize. Find a concept or element that captures the essence of your app or game, make it the core idea of the icon, and express it in a simple, unique way. Avoid adding too many details, because they can be hard to discern and can make an icon appear muddy, especially at smaller sizes. Prefer a simple background that puts the emphasis on the primary image — you don't need to fill the entire icon with content.

Create a design that works well on multiple platforms so it feels at home on each. If your app or game runs on more than one platform, use similar images and color palettes in all icons while rendering them in the style that's appropriate for each platform. For example, in iOS, tvOS, and watchOS, the Music app icon depicts the white musical notes on a red background using a

streamlined, graphical style; macOS displays the same elements, while adding shadow that makes the notes look recessed. Similarly, the Music app icon in visionOS uses the same color scheme and content, but offers a true 3D appearance when viewed while wearing the device.

| iOS | macOS | tvOS | visionOS | watchOS |

Prefer including text only when it's an essential part of your experience or brand. Text in icons is often too small to read easily, can make an icon appear cluttered, and doesn't support accessibility or localization. In some contexts, the app name appears near the icon, making it redundant to display the name within it. Although using a mnemonic like the first letter of your app's name can help people recognize your app or game, avoid including nonessential words that tell people what to do with it — like "Watch" or "Play" — or context-specific terms like "New" or "For visionOS."

Prefer graphical images to photos and avoid replicating UI components in your icon. Photos are full of details that don't work well when viewed at small sizes. Instead of using a photo, create a graphic representation of the content that emphasizes the features you want people to notice. Similarly, if your app has an interface that people recognize, don't just replicate standard UI components or use app screenshots in your icon.

If needed, optimize your icon for the specific sizes the system displays in places like Spotlight search results, Settings, and notifications. For iOS, iPadOS, and watchOS, you can tell Xcode to generate all sizes from your 1024×1024 px App Store icon, or you can provide assets for some or all individual icon sizes. For macOS and tvOS, you need to supply all sizes; for visionOS, you supply a single 1024x1024 px asset. If you create your own versions of your app icon, make sure the image remains distinct at all sizes. For example, you might remove fine details and unnecessary features, simplifying the image and exaggerating primary features. If you need to make such changes, keep them subtle so that your app icon remains visually consistent in every context.
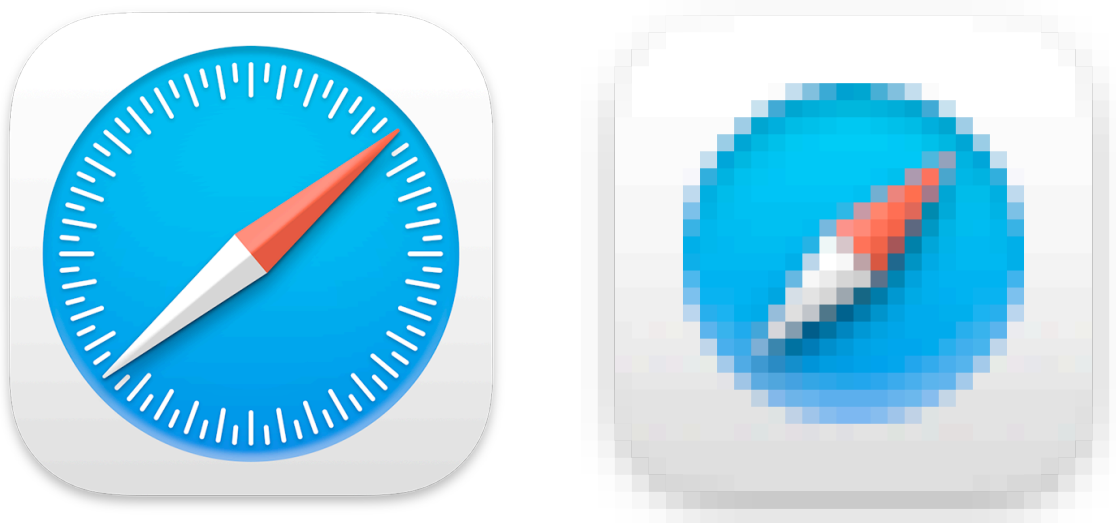
The 512x512 px Safari app icon (on the left) uses a circle of tick marks to indicate degrees; the 16x16 px version of the icon (on the right) doesn't include this detail.

Design your icon as a square image. On most platforms, the system applies a mask that automatically adjusts icon corners to match the platform's aesthetic. For example, visionOS and watchOS automatically apply a circular mask. Although the system applies the rounded rectangle appearance to the icon of an app created with Mac Catalyst, you need to create your macOS app icon in the correct rounded shape; for guidance, see macOS.

In most cases, design your icon with full edge-to-edge opacity. For layered app icons in visionOS and tvOS, prefer fully opaque content on the bottom layer. Note that the dark variants of iOS and iPadOS icons omit a solid background because the system provides one automatically.

For downloadable production templates that help you create app icons for each platform, see Apple Design Resources.

Consider offering an alternate app icon. In iOS, iPadOS, and tvOS, and iPadOS and iOS apps running in visionOS, people can choose an alternate version of an icon, which can strengthen their connection with the app or game and enhance their experience. For example, a sports app might offer different icons for different teams. Make sure that each alternate app icon you design remains closely related to your content and experience; avoid creating a version that people might mistake for the icon of a different app. When people want to switch to an alternate icon, they can visit your app's settings.

> **Note**
>
> Alternate app icons in iOS and iPadOS require their own dark and tinted variants. As with the default app icon, all alternate and variant icons are also subject to app review and must adhere to the App Review Guidelines.

Don't use replicas of Apple hardware products. Apple products are copyrighted and can't be reproduced in your app icons.

Platform considerations

iOS, iPadOS

People can customize the appearance of their app icons to be *light*, *dark*, or *tinted*. You can create your own variations to ensure that each one looks exactly the way you want. See Apple Design Resources for icon templates.


| Light | Dark | Tinted |

Design your dark and tinted icons to feel at home next to system app icons and widgets. You can preserve the color palette of your default icon, but be mindful that dark icons are more subdued, and tinted icons are even more so. A great app icon is visible, legible, and recognizable, even with a different tint and background.

Consider a simplified version of your icon that captures its essential features. Because dark and tinted icons appear against a dark background, fine details tend to stand out more and can look messy or cluttered.

Use your light app icon as a basis for your dark icon. Choose complementary colors that reflect the default design, and avoid excessively bright images. For guidance, see Dark Mode colors. To look at home on the platform, omit the background so the system-provided background can show through.
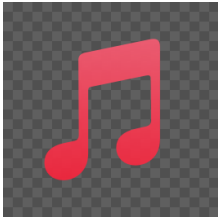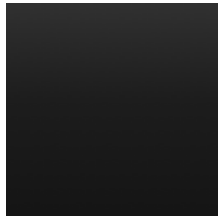

You provide a transparent dark icon.

The system provides the gradient background.

The system composites your dark icon on the gradient background.

Provide your tinted icon as a grayscale image. Most app icons look great with a vertical gradient applied uniformly over the icon image.

You provide a fully opaque, grayscale icon.

The system generates a tinted icon, compositing your grayscale icon on the gradient background.

The system provides the gradient background.

In some cases, you might want to vary the opacity in other ways; for example, the Home app icon uses varying shades of gray on concentric house shapes to create contrast between the elements of the icon.

Don't add an overlay or border to your Settings icon. iOS automatically adds a 1-pixel stroke to all icons so that they look good on the white background of Settings.

macOS

In macOS, app icons share a common set of visual attributes, including a rounded-rectangle shape, front-facing perspective, level position, and uniform drop shadow. Rooted in the macOS design language, these attributes showcase the lifelike rendering style people expect in macOS while presenting a harmonious user experience.

Consider depicting a familiar tool to communicate what people use your app to do. To give context to your app's purpose, you can use the icon background to portray the tool's environment or the items it affects. For example, the TextEdit icon pairs a mechanical pencil with a sheet of lined paper to suggest a utilitarian writing experience. After you create a detailed, realistic image of a tool, it often works well to let it float just above the background and extend slightly past the icon boundaries. If you do this, make sure the tool remains visually unified with the background and doesn't overwhelm the rounded-rectangle shape.

If you depict real objects in your app icon, make them look like they're made of physical materials and have actual mass. Consider replicating the characteristics of substances like fabric, glass, paper, and metal to convey an object's weight and feel. For example, the Xcode app icon features a hammer that looks like it has a steel head and polymer grip.

Use the drop shadow in the icon design template. The macOS app icon template includes the system-defined drop shadow that helps your app icon coordinate with other macOS icons.

Consider using interior shadows and highlights to add definition and realism. For example, the Mail app icon uses both shadows and highlights to give the envelope authenticity and to suggest that the flap is slightly open. In icons that include a tool that floats above a background — such as TextEdit or Xcode — interior shadows can strengthen the perception of depth and make the tool look real. Use shadows and highlights that suggest a light source facing the icon, positioned just above center and tilted slightly downward.

Avoid defining contours that suggest a shape other than a rounded rectangle. In rare cases, you might want to fine-tune the basic app icon shape, but doing so risks creating an icon that looks like it doesn't belong in macOS. If you must alter the shape, prefer subtle adjustments that continue to express a rounded rectangle silhouette.

Keep primary content within the icon grid bounding box; keep all content within the outer bounding box. If an icon's primary content extends beyond the icon grid bounding box, it tends to look out of place. If you overlay a tool on your icon, it works well to align the tool's top edge with the outer bounding box and its bottom edge with the inner bounding box, as shown below. You can use the grid to help you position items within an icon and to ensure that centered inner elements like circles use a size that's consistent with other icons in the system.

tvOS

tvOS app icons use between two and five layers to create a sense of dynamism as people bring them into focus. For guidance, see Layered images.

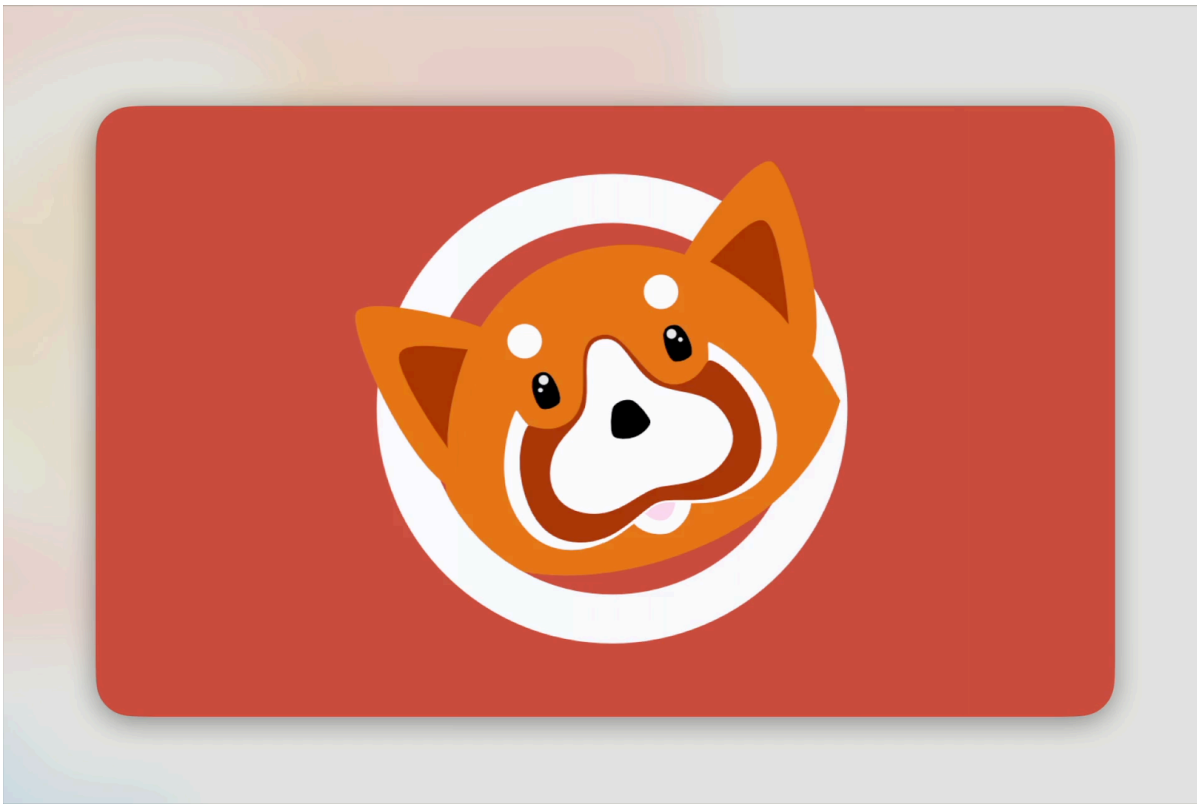Background   Layer 1   Layer 2

Layer 3   Layer 4

When focused, the app icon elevates to the foreground and gently sways while the surface illuminates. The separation between layers and the use of transparency produce a feeling of depth during the parallax effect.

Play ⊙

Use appropriate layer separation. If your icon includes a logo, separate the logo from the background. If your icon includes text, bring the text to the front so it's not hidden by other layers when the parallax effect occurs.

Play ⊙

Use gradients and shadows cautiously. Background gradients and vignettes can clash with the parallax effect. For gradients, prefer top-to-bottom, light-to-dark styles. Shadows usually look best as sharp, hard-edged tints that are baked into the background layer and aren't visible when the app icon is stationary.

Leverage varying opacity levels to increase the sense of depth and liveliness. Creative use of opacity can make your icon stand out. For example, the Photos icon separates its centerpiece into multiple layers that contain translucent pieces, bringing greater liveliness to the design.

Include a safe zone to ensure content isn't cropped. When focused, content around the edges of your app icon may be cropped as the icon scales and moves. To ensure that your icon's content is always visible, keep a safe zone around it. Be aware that the safe zone can vary, depending on the image size, layer depth, and motion, and that foreground layers are cropped more than background layers.
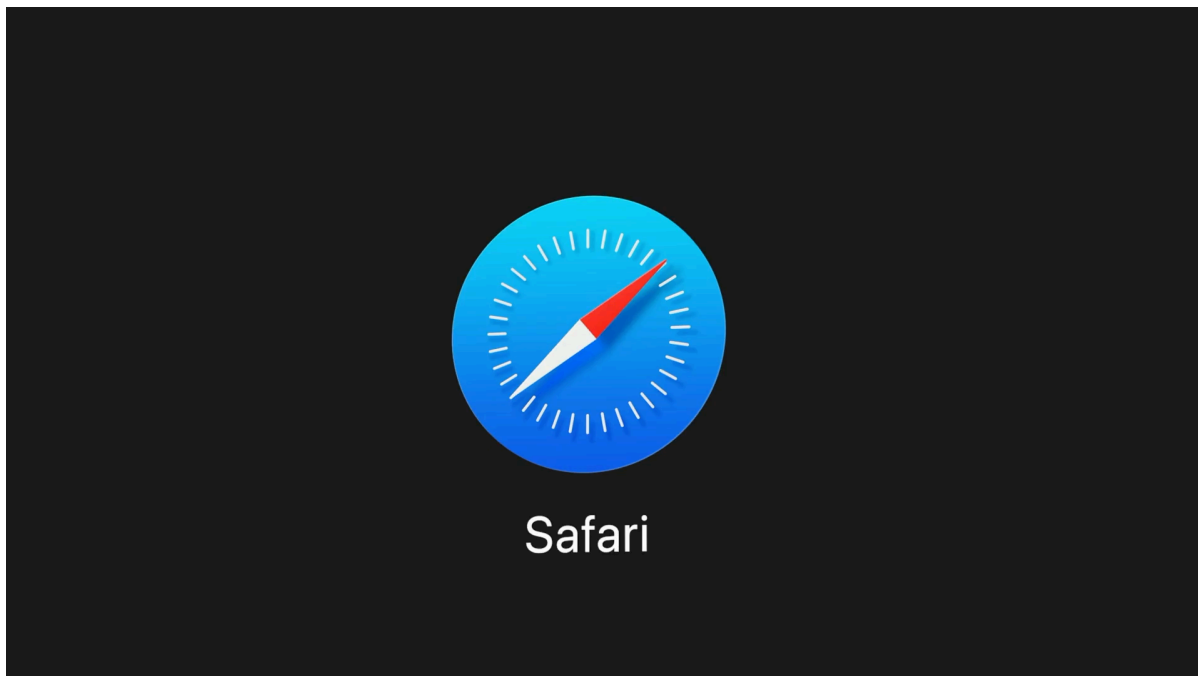
visionOS

A visionOS app icon is circular and includes a background layer and one or two layers on top, producing a three-dimensional object that subtly expands when people view it.

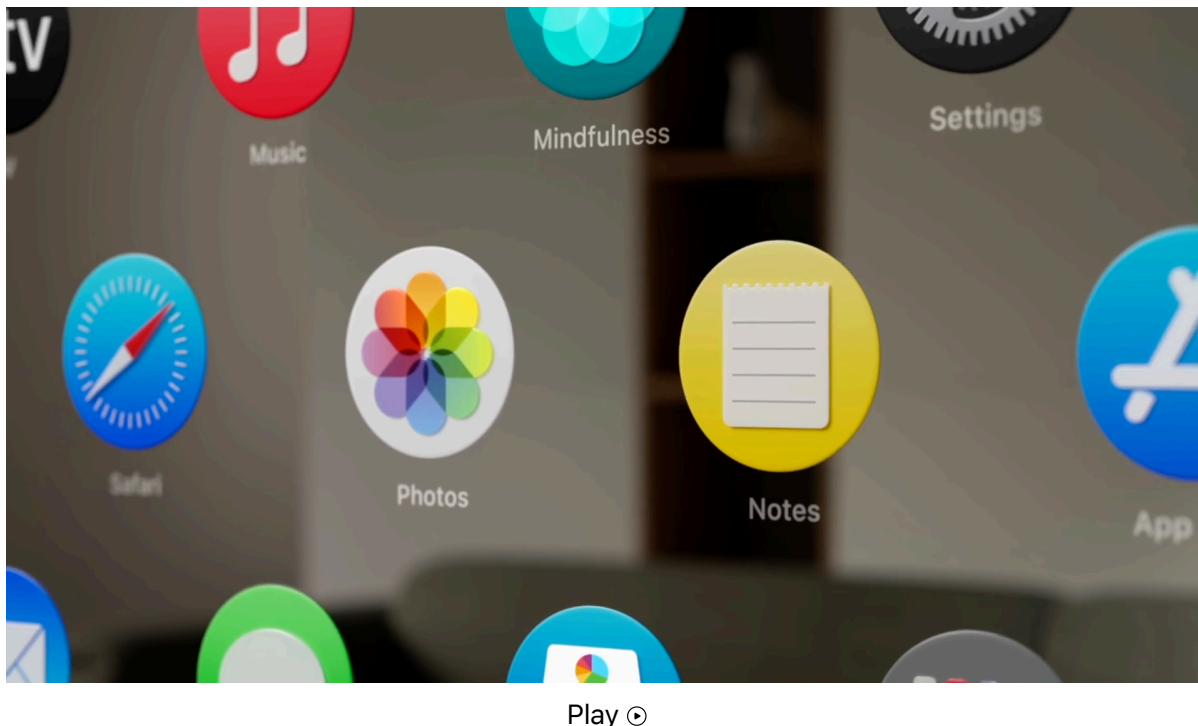| Background	Layer 1	Layer 2

Play ⊙

The system enhances an app icon's visual dimensionality by adding shadows to convey a sense of depth between layers and using the alpha channel of the upper layers to create an embossed appearance.

Play ⊙

Use a full-bleed, non-transparent image for the background layer of your icon. In contrast, avoid using full-bleed images in non-background layers. Using transparent areas in non-background layers lets visual information from underlying layers show through.

Provide each layer as a square image. The system uses a circular mask to crop all layers of an app icon. Providing layers that are already cropped can negatively impact the result.

Avoid using large areas of semi transparency. Although using semi-transparent pixels to anti-alias a shape works fine, a large semi-transparent area doesn't blend well with alpha and can combine with the system-provided shadow to produce a dark result. Unless you're anti-aliasing a shape, keep pixels fully opaque or transparent.

In non-background layers, prefer well-defined edges between distinct regions that are either fully opaque or transparent pixels. The system-drawn highlights and shadows look best when non-background layers contain shapes that have clearly defined edges. Avoid using soft or feathered edges.

Avoid adding a shape that's intended to look like a hole or concave area to the background layer. The system-added shadow and specular highlights can make such a shape stand out instead of recede.

Keep distinct shapes or images in non-background layers close to the center. The circular mask can clip a shape or image when it's too close to the edge, causing the shape to look off-center and spoiling the icon's three-dimensional appearance.

Avoid visual elements that give the appearance of depth from a fixed vantage point. If people can perceive the depth of a layer's inner element from only one perspective, this depth disappears when they look at the icon. Avoid using a technique like extruding the bottom edge of a layer's element, because doing so conflicts with the perpendicular perspective of other app icons.

Avoid adding custom specular highlights or shadows to your visionOS app icon. In addition to interfering with the system-provided visual effects, custom highlights and shadows are static whereas visionOS supplies dynamic ones.

For developer guidance, see Configuring your app icon.

watchOS

A watchOS app icon is circular and displays no accompanying text.

Avoid using black for your icon's background. Lighten a black background or add a border so the icon doesn't blend into the display background.

Specifications

App icon attributes

App icons in all platforms use the PNG format and support the following color spaces:

- sRGB (color)

- Gray Gamma 2.2 (grayscale)

In addition, app icons in iOS, iPadOS, macOS, tvOS, and watchOS support Display P3 (wide-gamut color).

The layers, transparency, and corner radius of an app icon can vary per platform. Specifically:

Platform	Layers	Transparency	Asset shape
iOS, iPadOS	Single	No	Square
macOS	Single	Yes, as appropriate	Square with rounded corners
tvOS	Multiple	No	Rectangle
visionOS	Multiple	Yes, as appropriate	Square
watchOS	Single	No	Square

App icon sizes

iOS, iPadOS app icon sizes

For the App Store, create an app icon that measures 1024x1024 px.

You can let the system automatically scale down your 1024x1024 px app icon to produce all other sizes, or — if you want to customize the appearance of the icon at specific sizes — you can supply multiple versions such as the following.

@2x (pixels)	@3x (pixels) iPhone only	Usage
120x120	180x180	Home Screen on iPhone
167x167	–	Home Screen on iPad Pro
152x152	–	Home Screen on iPad, iPad mini
80x80	120x120	Spotlight on iPhone, iPad Pro, iPad, iPad mini
58x58	87x87	Settings on iPhone, iPad Pro, iPad, iPad mini
76x76	114x114	Notifications on iPhone, iPad Pro, iPad, iPad mini

macOS app icon sizes

For the App Store, create an app icon that measures 1024x1024 px.

In addition to the App Store version, you also need to supply your app icon in the following sizes.

@1x (pixels)	@2x (pixels)
512x512	1024x1024
256x256	512x512
128x128	256x256
32x32	64x64
16x16	32x32

tvOS app icon sizes

For the App Store, create an app icon that measures 1280x768 px.

In addition to the 1280x768 px version of your app icon, you also need to supply the following sizes.

@1x (pixels)	@2x (pixels)	Usage
400x240	800x480	Home Screen

visionOS app icon sizes

For the App Store and the Home View, create an app icon that measures 1024x1024 px.

watchOS app icon sizes

For the App Store, create an app icon that measures 1024x1024 px.

You can let the system automatically scale down your 1024x1024 px app icon to all other sizes, or — if you want to customize the appearance of your icon at specific sizes — you can supply the sizes listed in the following table. All icon dimensions are shown in pixels @2x.

38mm	40mm	41mm	42mm	44mm	45mm	4
80x80	88x88	92x92	80x80	100x100	102x102	1(
48x48	55x55	58x58	55x55	58x58	66x66	6
172x172	196x196	196x196	196x196	216x216	234x234	2

If you have a companion iPhone app, you also need to supply your watchOS app icon in the following sizes.

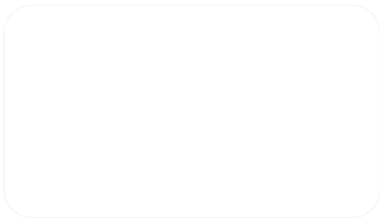| @2x (pixels)	@3x (pixels)
58x58	87x87

Resources

Related

[Apple Design Resources](#)

Developer documentation

[Configuring your app icon](#) — Xcode

Videos

App Icon Design

Change log

Date	Changes
June 10, 2024	Added guidance for creating dark and tinted app icon variants for iOS and iPadOS.
January 31, 2024	Clarified platform availability for alternate app icons.

Date	Changes
June 21, 2023	Updated to include guidance for visionOS.
September 14, 2022	Added specifications for Apple Watch Ultra.

Date	Changes
June 21, 2023	Updated to include guidance for visionOS.
September 14, 2022	Added specifications for Apple Watch Ultra.