



Fact sheet Accessibility iOS

E-Accessibility Solutions for Everyone

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Orange guidelines :

<https://a11y-guidelines.orange.com/fr/>

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General navigation

Define large click zones: ✍

Apply the recommendations of the Platform: 44pt width/height + margin around each clickable element.

Adapt the application to the 2 screen orientations: ✍

Do not depend on screen orientation (portrait or landscape), unless the particular orientation is essential for understanding or using the content.

Propose an alternative to gestural actions:

Actions triggered by a gesture or movement of the device must have an alternative.

Use standard components:

Use native components first. If no component responds the need, create a dedicated component based on a standard component, taking care to maintain navigation consistent and accessible.

Define a title for each screen ✍

Each screen should have its own title to spot in the navigation.

Allow configuring time limits:

When the context changes after a certain time limit (ex: overlay which disappears on a video player after several seconds), the user must be allowed to adapt this time limit or offer an alternative.

Indicate horizontal scrolls ✍

Give a visual indication to users when there are horizontal "scrolls" (presence of arrows or several dots indicating pagination). Additionally for visually impaired users: complete the text alternative.

`UIPageControl`, `AccessibilityIncrement`, `AccessibilityDecrement`

Identify input errors ✍

In the event of an input error, it is important to clearly indicate the error, so that the field in question can be identified without difficulty (visual indication, suggested correction, explicit error message).

Vocal navigation

Reading order

By default, screen readers read items in a logical order. If necessary, it is possible to modify this order.

`UIAccessibilityContainer`, `ShouldGroupAccessibilityElement`

Notify the user of all content changes

Trigger the vocalization of a message by the screen reader in the event of a dynamic change in the content of the screen (list refresh, time counter, etc.).

`UIAccessibilityPostNotification`, `UIAccessibilityLayoutChangedNotification`, `UIAccessibilityScreenChangedNotification`

Manage navigation by headers

Give an explicit title to each screen. This must be set in the navigation bar to find your way.

Defining an element as a header: `AccessibilityTraitHeader`

Trigger vocalization

It is possible to make the screen reader speak (when it has been activated by the user).

`UIAccessibilityAnnouncementNotification`, `UIAccessibilityPostNotification`

Know the state of the screen reader

In some cases it may be interesting to know if the user is browsing using the screen reader.

`UIAccessibilityVoiceOverRunning`

Leave the control to the user

Any moving, updated, flashing content must be able to be stopped, hidden or paused by the user. The latter must remain in control of the application (no video that starts automatically, etc.)

Hide items from accessibility

It is possible to hide elements from assistance tools (Voiceover for example).

`AccessibilityElement`, `AccessibilityIsHidden`, `AccessibilityViewIsModal`

Colors and contrasts

Check color contrast

4.5/1 min. for standard size text.

3/1 min. for large text (150% normal text or 120% if bold).

You can use « Color Contrast Calculator » app:

<https://a11y-guidelines.orange.com/fr/mobile/ios/wwdc/2019/-contraste-des-couleurs-0626>

Don't rely on color

Color is not used as the only visual means of conveying information.



Switch control

Allow keyboard navigation

The element selection using the item mode works fine when the user interface isn't too complicated and uses native elements.

`AccessibilityNavigationStyle`

Non-text content

Provide text alternatives

For images that convey information and any element that requires additional description.

Please note : no alternative for decorative images.

`accessibilityLabel`, `accessibilityValue`, `accessibilityTrait`, `accessibilityHint`

Provide transcription for audio/video tracks

Provide a text transcript within the page or through a link to a text file.

Element magnification

Allow character enlargement

Since iOS7, it is possible to make the text size dynamic according to the device settings.

Using Dynamic Type

In order to allow the "large print" option to interact correctly with the application.

`Dynamic Type API`

Note: Manage content overflows (constraints).

Checklist accessibility


Quick checklist for a pull request

To verify :

- Images and icons have a text alternative
- Screen orientation is supported
- The input fields are labeled
- Texts can be enlarged
- Information is not only based on color
- Contrasts are respected
- Interactive areas have a minimum size
- There is no light flash (epilepsy)

Complete checklist before going into production

Before putting your application into production, you are advised to check all the criteria indicated on this sheet for each screen. You will also find a more exhaustive list of criteria on the Orange accessibility recommendations site, as well as on the va11ydette

 Criteria to check from the design phase

Basic gesture voice over

Enable screen reader

iOS: Settings > General > Accessibility > VoiceOver

Moving with a finger on the screen



To explore the screen and hear the vocalization of the element that is touched.

Double-click anywhere on the screen



To open or activate the item that was touched (voiced) last.

Swipe right using one finger



To move focus to the next element.

Swipe left using one finger



To move focus to the previous element

Picture credit: openexhibits (CC Share Alike 2.0.).

Toolbox

Accessibility Inspector

Application available on MAC OS by default allowing to perform accessibility tests on your application.

La Va11ydette

To help you check that your site meets accessibility criteria : <https://la-va11ydette.orange.com/?lang=en>

Orange Digital Accessibility

Guidelines, tools and good practices on accessibility, offered by EASE.

<https://a11y-guidelines.orange.com/en/>