

**MDN Plus** now available in your country! Support MDN and make it your own. [Learn more](#) ✨




 mdn web docs



# Mobile accessibility checklist

This document provides a concise checklist of accessibility requirements for mobile app developers. It is intended to continuously evolve as more patterns arise.

## Color

- Color contrast must comply with [WCAG 2.1 AA level requirements](#) 
  - Contrast ratio of 4.5:1 for normal text (less than 18 point or 14 point bold.)
  - Contrast ratio of 3:1 for large text (at least 18 point or 14 point bold.)
- Information conveyed via color must be also available by other means too (underlined text for links, etc.)

## Visibility

- Content hiding techniques such as zero opacity, z-index order and off-screen placement must not be used exclusively to handle visibility.
- Everything other than the currently visible screen must be *truly* invisible (especially relevant for single page apps with multiple *cards*):
  - Use the `hidden` attribute or `visibility` or `display` style properties.
  - Unless absolutely unavoidable, `aria-hidden` attribute should not be used.

## Focus

- All activatable elements must be focusable:
  - Standard controls such as links, buttons, and form fields are focusable by default.

- Non-standard controls must have an appropriate [ARIA Role](#) assigned to them, such as `button`, `link`, or `checkbox`.
- Focus should be handled in a logical order and consistent manner.

## Text equivalents

- Text equivalent must be provided for every non-strictly presentational non-text element within the app.
  - Use *alt* and *title* where appropriate (read Steve Faulkner's post about [Using the HTML title attribute](#) <sup>↗</sup> for a good guide.)
  - If the above attributes are not applicable, use appropriate [ARIA States and Properties](#) <sup>↗</sup> such as `aria-label`, `aria-labelledby`, or `aria-describedby`.
- Images of text must be avoided.
- All user interface components with visible text (or image of text) as labels must have the same text available in the programmatic [name](#) <sup>↗</sup> of the component. [WCAG 2.1: Label in name.](#) <sup>↗</sup>
- All form controls must have labels ( `<label>` elements) for the benefit of screen reader users.

## Handling state

- Standard controls such as radio buttons and checkboxes are handled by the operating system. However, for other custom controls state changes must be provided via [ARIA States](#) <sup>↗</sup> such as `aria-checked`, `aria-disabled`, `aria-selected`, `aria-expanded`, and `aria-pressed`.

## Orientation

- Content should not be restricted to a single orientation, such as portrait or landscape, unless essential. [WCAG 2.1: Orientation](#) <sup>↗</sup>
  - Examples of when an orientation is essential is a piano application or a bank check.

## General guidelines

- An app title must be provided.

- Headings must not break hierarchical structure

```
<h1>Top level heading</h1>
<h2>Secondary heading</h2>
<h2>Another secondary heading</h2>
<h3>Low level heading</h3>
```



- [ARIA Landmark Roles](#) should be used to describe an app or document structure, such as `banner`, `complementary`, `contentinfo`, `main`, `navigation`, `search`.
- For touch events, at least one of the following must be true ([WCAG 2.1: Pointer Cancellation](#) ):
  - The down-event should not be used to trigger any action
  - The action is triggered on the up event and an option to abort the action before its completion is available or an option to undo the action after its completion
  - The up-event will undo any action that was triggered on a down event
  - It is essential to trigger the action on the down event. For example, playing a game or a piano application.
- Touch targets must be large enough for the user to interact with (see the [BBC Mobile Accessibility Guidelines](#) for useful touch target size guidelines).

**Note:** The [original version of this document](#) was written by [Yura Zenevich](#) .

**Last modified:** Sep 28, 2022, [by MDN contributors](#)