Guidance on Applying WCAG 2.2 to Mobile Applications (WCAG2Mobile)

W3C Group Draft Note 06 May 2025

▸ **More details about this document**

Abstract

This document describes how Web Content Accessibility Guidelines (WCAG) 2.2 [*WCAG22*] principles, guidelines, and success criteria can be applied to mobile applications, including native mobile apps, mobile web apps and hybrid apps using web components inside native mobile apps. It provides informative guidance (guidance that is not normative and does not set requirements).

Status of This Document

This section describes the status of this document at the time of its publication. A list of current W3C publications and the latest revision of this technical report can be found in the W3C standards and drafts index at https://www.w3.org/TR/.

This is a W3C Group Note on "Guidance on Applying WCAG 2.2 to Mobile Applications (WCAG2Mobile)". The purpose of this work is to build upon "Mobile Accessibility: How WCAG 2.0 and Other W3C/WAI Guidelines Apply to Mobile" [mobile-accessibility-mapping], but also to have a stronger focus on mobile applications and include changes made in WCAG 2.1 and 2.2.

To comment, file an issue in the W3C MATF GitHub repository. The Mobile Accessibility Task Force (MATF) requests that public comments be filed as new issues, one issue per discrete comment. It is free to create a GitHub account to file issues. If filing issues in GitHub is not feasible, email public-agwg-comments@w3.org (comment archive).

To view in-progress updates to the guidelines, see public editors' draft.

This document was published by the Accessibility Guidelines Working Group as a Group Draft Note using the Note track.

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This is a draft document and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to cite this document as other than work in progress.

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This document is governed by the 03 November 2023 W3C Process Document.

Table of Contents

Success Criterion 1.3.2 Meaningful Sequence
Success Criterion 1.3.3 Sensory Characteristics
Success Criterion 1.3.4 Orientation
Success Criterion 1.3.5 Identify Input Purpose
Success Criterion 1.4.1 Use of Color
Success Criterion 1.4.2 Audio Control
Success Criterion 1.4.3 Contrast (Minimum)
Success Criterion 1.4.4 Resize Text
Success Criterion 1.4.5 Images of Text
Success Criterion 1.4.10 Reflow
Success Criterion 1.4.11 Non-text Contrast
Success Criterion 1.4.12 Text Spacing
Success Criterion 1.4.13 Content on Hover or Focus
Success Criterion 2.1.1 Keyboard
Success Criterion 2.1.2 No Keyboard Trap
Success Criterion 2.1.4 Character Key Shortcuts
Success Criterion 2.2.1 Timing Adjustable
Success Criterion 2.2.2 Pause, Stop, Hide
Success Criterion 2.3.1 Three Flashes or Below Threshold
Success Criterion 2.4.1 Bypass Blocks
Success Criterion 2.4.2 Page Titled
Success Criterion 2.4.3 Focus Order
Success Criterion 2.4.4 Link Purpose (In Context)
Success Criterion 2.4.5 Multiple Ways
Success Criterion 2.4.6 Headings and Labels
Success Criterion 2.4.7 Focus Visible
Success Criterion 2.4.11 Focus Not Obscured (Minimum)
Success Criterion 2.5.1 Pointer Gestures
Success Criterion 2.5.2 Pointer Cancellation
Success Criterion 2.5.3 Label in Name
Success Criterion 2.5.4 Motion Actuation
Success Criterion 2.5.7 Dragging Movements
Success Criterion 2.5.8 Target Size (Minimum)
Success Criterion 3.1.1 Language of Page
Success Criterion 3.1.2 Language of Parts
Success Criterion 3.2.1 On Focus
Success Criterion 3.2.2 On Input
Success Criterion 3.2.3 Consistent Navigation

§ 1. Background

This document is an iteration on Mobile Accessibility: How WCAG 2.0 and Other W3C/ WAI Guidelines Apply to Mobile [*mobile-accessibility-mapping*], published in February 2015. The document was intended to become a Group Note but it did not move to the next maturity stage. The most recent publication was an Editor's Draft in December 2018.

After 2018, the Mobile Accessibility Task Force (MATF) ensured that mobile considerations were included in WCAG 2.1 and WCAG 2.2, such as:

- 1.3.4 Orientation (AA), to support multiple display orientations;
- 1.4.10 Reflow (AA), to improve presentation on small screens;
- 2.5.1 Pointer Gestures (A), to provide single-pointer alternatives for touch gestures;
- 2.5.4 Motion Actuation (A), to provide alternatives for device motion;
- 2.5.7 Dragging Movements (AA), to provide single-pointer alternatives for dragging;
- 2.5.8 Target Size (Minimum) (AA), to providing minimum touch target sizes;

- 3.3.7 Redundant Entry (A), to reduce the amount of repetitive typing.

In January 2024, MATF regrouped and welcomed new participants to work on updated guidance for applying WCAG 2.2 to mobile applications.

This current document, "Guidance on Applying WCAG 2.2 to Mobile Applications (WCAG2Mobile)" maps directly to the W3C supporting document, Guidance on Applying WCAG 2 to Non-Web Information and Communications Technologies (WCAG2ICT) [*wcag2ict-22*], which was published as a Group Note in October 2024, describing how WCAG 2.2 could be applied to non-web documents and software.

The intention of MATF is to publish WCAG2Mobile as a Group Note, just like WCAG2ICT.

WCAG2ICT is organized to mirror the principle, guideline and success criterion structure of WCAG; this model is also used in WCAG2Mobile. WCAG2ICT clarifies when and how WCAG Level A and Level AA success criteria could be applied to non-web documents and software; WCAG2Mobile narrows the scope of this work to mobile applications.

For information on related work, see Mobile Accessibility at W3C.

§ 1.1 Guidance in this document

This document provides informative guidance (guidance that is not normative and that does not set requirements) with regard to the interpretation and application of Web Content Accessibility Guidelines (WCAG) to mobile applications. Specifically, this document provides informative guidance on applying WCAG 2.2 Level A and AA success criteria to mobile applications, including native mobile apps, mobile web apps and hybrid apps using web components inside native mobile apps.

§ 1.1.1 Interpretation of Web Terminology in a Mobile Context

When certain Web-specific terms or phrases like "web page(s)" were used in success criteria, those were replaced with mobile terms or phrases like "screen(s)" or "view(s)". Additional notes were also provided to explain the terminology replacements.

A small number of success criteria are written to apply to “a set of web pages” or “multiple web pages” and depend upon all pages in the set to share some characteristic or behavior. Since the unit of conformance in WCAG 2 is a single web page, the task force agreed that the equivalent unit of conformance for mobile applications is a single screen within the application. It follows that an equivalent unit of evaluation for a “set of web pages” would be a “set of screens”, not — as previously interpreted in WCAG2ICT — as a “set of software”. These terms are defined in the Key Terms section of this document. See “set of screens” to determine when a group of screens in a mobile application are considered a set.

The glossary terms were also reviewed and most of them applied to mobile applications, as written. Some applied with additional notes or edits (largely related to phrases like “Web page(s)”), and a small number of terms were only used in Level AAA success criteria, which are not addressed by the WCAG2Mobile Note at this time.

§ 1.2 Excluded from scope

The following are out of scope for this document:

- This document provides guidance specifically for mobile applications on phones and tablets; it does not include guidance for other types of mobile devices such as wearables and laptops.
- This document does not propose changes to WCAG 2 or its supporting documents; it does not include interpretations for implementing WCAG 2 in web technologies.
- This document is not sufficient by itself to ensure accessibility in mobile applications — as a web standard, WCAG does not fully cover all accessibility requirements for non-user interface aspects of platforms, user-interface components as individual items, or closed product software (where there is no assistive technology to communicate programmatic information).
- This document does not comment on hardware aspects of products, because the basic constructs on which WCAG 2 is built do not apply to these.
- This document does not comment on WCAG Level AAA success criteria.
- This document does not provide supporting techniques for implementing WCAG 2 in mobile applications.
- This document is purely an informative note about mobile applications, not a standard, so it does not describe how mobile applications should conform to it.

§ 1.3 Document overview

This document includes text quoted from the WCAG 2.2 principles, guidelines, success criteria, and glossary definitions without any changes. This document also includes text quoted from the WCAG2ICT document. The guidance provided by this document for each principle, guideline, success criterion, and definition is preceded by a heading beginning with “Applying…”.

§ 1.4 Document conventions

The following stylistic conventions are used in this document:

- Quotes from WCAG 2.2 are in `<details>` elements and visually styled with a border, and immediately follow the heading for the principle, guideline, or success criterion.
- Quotes from WCAG2ICT 2.2 are in `<details>` elements and visually styled with a border, and immediately follow the WCAG quote.
- Additional guidance provided by this document begins with the phrase “Applying” and has no special visual styling.
- In headings the term “Success Criterion” has been shortened to “SC” for brevity.
- Replacement text that is presented to show how an SC would read as modified by the advice in this document are in `<ins>` elements that are visually styled as bold green text with a dotted underline.
- Notes are slightly inset and begin with the phrase “NOTE”; each note is in its own inset box styled in pale green with a darker green line on the left side of the box.
- References to glossary items from WCAG 2 are presented in `<cite>` elements that are visually styled as ordinary text with a dotted underline, and contain title attributes noting these are WCAG definitions — when mouse or keyboard focus is placed over them, they turn blue with a yellow background.
- References to glossary items in this document are presented in `<cite>` elements that are visually styled as ordinary text with a dark gray underline.
- Hereafter, the short title “WCAG2Mobile” is used to reference this document.

§ 1.5 Comparison with the 2015 Mobile Accessibility Working Draft Note

In this Draft Note, most of the existing sections have undergone significant review and updates. The current Draft has been restructured to align with WCAG2ICT rather than continue with the structure and format of the 2015 Mobile Accessibility Mapping document.

With this perspective in mind, the following list highlights where this current document differs from the 2015 Mobile Accessibility Mapping document to apply all success criteria of WCAG 2.0, WCAG 2.1, WCAG 2.2, and acknowledge the change to 4.1.1 Parsing to mobile applications:

- New Background section to explain the changes in scope for the current document
- Modifications to key terms introduced by WCAG2ICT:
  - closed functionality
  - menu-driven interface
  - platform software
  - virtual keyboard
- New key terms introduced by WCAG2Mobile:
  - > NOTE
    >
    > Work In Progress. See Key Terms section.
- Inclusion of all WCAG 2.2 Level A and AA success criteria and not just those specifically affected by mobile phone usage.

The prior 2015 Mobile Working Draft Note included specific guidance on the following WCAG 2.0 success criteria for mobile, primarily for a mobile web context:

- Success Criterion 1.4.3 Contrast (Minimum) (Level AA)
- Success Criterion 1.4.4 Resize Text (Level AA)
- Success Criterion 1.4.6 Contrast (Enhanced) (Level AAA)
- Success Criterion 2.1.1 Keyboard (Level A)

- Success Criterion 2.1.2 No Keyboard Trap (Level A)
- Success Criterion 2.4.3 Focus Order (Level A)
- Success Criterion 2.4.4 Link Purpose (In Context) (Level A)
- Success Criterion 2.4.7 Focus Visible (Level AA)
- Success Criterion 2.4.9 Link Purpose (Link Only) (Level AA)
- Success Criterion 3.2.3 Consistent Navigation (Level AA)
- Success Criterion 3.2.4 Consistent Identification (Level AA)
- Success Criterion 3.3.2 Labels or Instructions (Level A)
- Success Criterion 3.3.5 Help (Level AAA)

Supporting documentation in the Mobile Mapping Appendix included WCAG 2.0 Techniques that Apply to Mobile to address mobile web use cases for the rest of the WCAG 2.0 success criteria at Level A, Level AA, and Level AAA, as they were available in 2015 when the webpage was published. However, most listed techniques have limited application to native mobile applications and cross-platform frameworks like Flutter and React Native.

This document includes all the relevant WCAG 2.1 Level A and AA success criteria and guidelines:

- Success Criterion 1.3.4 Orientation
- Success Criterion 1.3.5 Identify Input Purpose
- Success Criterion 1.4.10 Reflow
- Success Criterion 1.4.11 Non-text Contrast
- Success Criterion 1.4.12 Text Spacing
- Success Criterion 1.4.13 Content on Hover or Focus
- Success Criterion 2.1.4 Character Key Shortcuts
- Success Criterion 2.5.1 Pointer Gestures
- Success Criterion 2.5.2 Pointer Cancellation
- Success Criterion 2.5.3 Label in Name
- Success Criterion 2.5.4 Motion Actuation
- Success Criterion 4.1.3 Status Messages

This document includes all the relevant WCAG 2.2 Level A and AA success criteria:

- Success Criterion 2.4.11 Focus Not Obscured (Minimum)
- Success Criterion 2.5.7 Dragging Movements
- Success Criterion 2.5.8 Target Size (Minimum)
- Success Criterion 3.2.6 Consistent Help
- Success Criterion 3.3.7 Redundant Entry
- Success Criterion 3.3.8 Accessible Authentication (Minimum)
- Obsolete and Removed WCAG 2.2 success criteria that have errata for WCAG 2.0 and 2.1 — e.g., Success Criterion 4.1.1 Parsing

New terms:

- Added to Glossary from WCAG 2.1 and 2.2 (**Note:** Glossary items used only in AAA Success Criteria have not been included in this current edition):
  - dragging movements
  - encloses
  - focus indicator
  - minimum bounding box
  - pointer input
  - process
  - single pointer
  - state
  - status message
- Added to Glossary from WCAG2ICT for any context:
  - cognitive function test
  - css pixel
  - down event
  - keyboard shortcut
  - style property
  - target

    - up event
- Added to Glossary from WCAG2ICT for mobile context:
    - change of context
    - dragging movements
    - keyboard interface
    - large scale
    - set of web pages
    - set of non-web documents
    - set of software programs
    - set of web pages
    - user agent
    - user interface component
- Added to Glossary specifically for WCAG2Mobile:
    - navigational mechanisms

§ 2. Key Terms

WCAG2Mobile defines key glossary terms to refine the broader scope of WCAG2ICT for mobile applications. It introduces terms that do not exist in WCAG2ICT or WCAG but are important to define for a mobile application context.

“Content” and “user agent” are glossary terms from WCAG2ICT that need to be interpreted significantly differently when applied to mobile applications.

The glossary terms “document” and “software” in WCAG2ICT are replaced with the defined terms “screen” and “view”. The glossary terms “set of web pages”, “set of documents” and “set of software programs” are replaced with the defined term “set of screens”.

The term “accessibility services of platform software”, introduced by WCAG2ICT, has been modified to reflect its different use in mobile applications. Additionally, “closed functionality” has a different meaning in the context of mobile applications.

The remaining glossary terms from WCAG2ICT and WCAG 2 are addressed in WCAG2ICT: Comments on Definitions in WCAG 2 Glossary.

Terms defined and used in WCAG2Mobile are applicable only to the interpretation of the guidance in this document. The particular definitions should not be interpreted as having applicability to situations beyond the scope of WCAG2Mobile. Further information on usage of these terms follows.

> NOTE
>
> **Work in Progress**. See Issues labeled as 'definition' on GitHub.

§ 3. Comments by Principle, Guideline and Success Criterion

The sections that follow are organized according to the principles, guidelines and success criteria from WCAG 2.2. The text of each principle, guideline and success criterion from WCAG 2.2 is provided as quoted text. Following that, the WCAG2ICT guidance is provided as quoted text. Next, the WCAG2Mobile guidance itself is provided.

> NOTE
>
> **Work in Progress**. The document currently only includes guidance for success criteria. The guidance for principles and guidelines will be added at a later stage.

§ Success Criterion 1.1.1 Non-text Content

(Level A)

▸ **WCAG: Success Criterion 1.1.1 Non-text Content**

▸ **WCAG2ICT: Applying SC 1.1.1 Non-text Content to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.1.1.

> NOTE
>
> Not all mobile platforms provide a way to programmatically associate a label with non-text content.

§ Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded)

(Level A)

▸ **WCAG: Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded)**

▸ **WCAG2ICT: Applying SC 1.2.1 Audio-only and Video-only (Prerecorded) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.2.1.

> NOTE
>
> The alternative can be provided directly in the **view** – or provided in an alternate version that meets the success criteria.

§ Success Criterion 1.2.2 Captions (Prerecorded)

(Level A)

▸ **WCAG: Success Criterion 1.2.2 Captions (Prerecorded)**

▸ **WCAG2ICT: Applying SC 1.2.2 Captions (Prerecorded) to Non-Web Documents**

and Software

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.2.2.

> NOTE
>
> The WCAG 2 definition of "captions" notes that "in some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired." Per the definition in WCAG 2, to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and / or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".

§ Success Criterion 1.2.3 Audio Description or Media Alternative (Prerecorded)

(Level A)

▸ **WCAG: Success Criterion 1.2.3 Audio Description or Media Alternative (Prerecorded)**

▸ **WCAG2ICT: Applying SC 1.2.3 Audio Description or Media Alternative (Prerecorded) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.2.3.

> NOTE
>
> The WCAG 2 definition of "audio description" says that "audio description" is "also called 'video description' and 'descriptive narration'".

NOTE

Secondary or alternate audio tracks are commonly used for this purpose.

§ Success Criterion 1.2.4 Captions (Live)

(Level AA)

▸ **WCAG: Success Criterion 1.2.4 Captions (Live)**

▸ **WCAG2ICT: Applying SC 1.2.4 Captions (Live) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.2.4.

NOTE

The WCAG 2 definition of "captions" notes that "In some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired." Per the definition in WCAG 2, to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and / or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".

§ Success Criterion 1.2.5 Audio Description (Prerecorded)

(Level AA)

▸ **WCAG: Success Criterion 1.2.5 Audio Description (Prerecorded)**

▸ **WCAG2ICT: Applying SC 1.2.5 Audio Description (Prerecorded) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.2.5.

> NOTE
>
> The WCAG 2 definition of "audio description" says that audio description is "also called 'video description' and 'descriptive narration'".

> NOTE
>
> Secondary or alternate audio tracks are commonly used for this purpose.

§ Success Criterion 1.3.1 Info and Relationships

(Level A)

▸ **WCAG: Success Criterion 1.3.1 Info and Relationships**

▸ **WCAG2ICT: Applying SC 1.3.1 Info and Relationships to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #1 on GitHub

§ Success Criterion 1.3.2 Meaningful Sequence

(Level A)

▸ **WCAG: Success Criterion 1.3.2 Meaningful Sequence**

▸ **WCAG2ICT: Applying SC 1.3.2 Meaningful Sequence to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.3.4.

> NOTE
>
> Grouping related elements using semantic containers helps ensure a meaningful reading sequence.

§ Success Criterion 1.3.3 Sensory Characteristics

(Level A)

▸ **WCAG: Success Criterion 1.3.3 Sensory Characteristics**

▸ **WCAG2ICT: Applying SC Sensory Characteristics 1.3.3 to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #24 on GitHub

§ Success Criterion 1.3.4 Orientation

(Level AA)

▸ **WCAG: Success Criterion 1.3.4 Orientation**

▸ **WCAG2ICT: Applying SC 1.3.4 Orientation to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.3.4.

> NOTE
>
> It is considered a best practice to support all available orientations, such as as portrait, portrait (reversed), landscape, and landscape (reversed).

§ Success Criterion 1.3.5 Identify Input Purpose

(Level AA)

▸ **WCAG: Success Criterion 1.3.5 Identify Input Purpose**

▸ **WCAG2ICT: Applying SC 1.3.5 Identify Input Purpose to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #2 on GitHub

§ Success Criterion 1.4.1 Use of Color

(Level A)

▸ **WCAG: Success Criterion 1.4.1 Use of Color**

▸ **WCAG2ICT: Applying SC 1.4.1 Use of Color to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.4.1.

> NOTE
>
> If a mobile platform's built-in distinction relies only on color, additional visual means must convey the information.

§ Success Criterion 1.4.2 Audio Control

(Level A)

▸ **WCAG: Success Criterion 1.4.2 Audio Control**

▸ **WCAG2ICT: Applying SC 1.4.2 Audio Control to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.4.2, replacing "on a Web page" with "in a view", "any content" with "any view", "whole page" with "whole view", and "on the Web page" with "in the view"; and removing "See Conformance Requirement 5: Non-Interference".

With these substitutions, it would read:

1.4.2 Audio Control: If any audio **in a view** plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level.

NOTE

Since **any** **view** that does not meet this success criterion can interfere with a user's ability to use the **whole** **view**, all content **in the** **view** (whether it is used to meet other success criteria or not) must meet this success criterion.

§ Success Criterion 1.4.3 Contrast (Minimum)

(Level AA)

▸ **WCAG: Success Criterion 1.4.3 Contrast (Minimum)**

▸ **WCAG2ICT: Applying SC 1.4.3 Contrast Minimum to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #28 on GitHub

§ Success Criterion 1.4.4 Resize Text

(Level AA)

▸ **WCAG: Success Criterion 1.4.4 Resize Text**

▸ **WCAG2ICT: Applying SC 1.4.4 Resize Text to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #3 on GitHub

§ Success Criterion 1.4.5 Images of Text

(Level AA)

▸ **WCAG: Success Criterion 1.4.5 Images of Text**

▸ **WCAG2ICT: Applying SC 1.4.5 Images of Text to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.4.5.

§ Success Criterion 1.4.10 Reflow

(Level AA)

▸ **WCAG: Success Criterion 1.4.10 Reflow**

▸ **WCAG2ICT: Applying SC 1.4.10 Reflow to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #4 on GitHub

§ Success Criterion 1.4.11 Non-text Contrast

(Level AA)

▸ **WCAG: Success Criterion 1.4.11 Non-text Contrast**

▸ **WCAG2ICT: Applying SC 1.4.11 Non-text Contrast to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #49 on GitHub

§ Success Criterion 1.4.12 Text Spacing

(Level AA)

▸ **WCAG: Success Criterion 1.4.12 Text Spacing**

▸ **WCAG2ICT: Applying SC 1.4.12 Text Spacing to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 1.4.12, replacing "content implemented using markup languages" with "content".

With these substitutions, it would read:

1.4.12 Text Spacing: In **content** that support the following text style properties, no loss of content or functionality occurs by setting all of the following and by changing no other style property:

- Line height (line spacing) to at least 1.5 times the font size;
- Spacing following paragraphs to at least 2 times the font size;

- Letter spacing (tracking) to at least 0.12 times the font size;
- Word spacing to at least 0.16 times the font size.

Exception: Human languages and scripts that do not make use of one or more of these text style properties in written text can conform using only the properties that exist for that combination of language and script.

> NOTE
>
> Content is not required to use these text spacing values. The requirement is to ensure that when a user overrides the authored text spacing, content or functionality is not lost.

> NOTE
>
> Writing systems for some languages use different text spacing settings, such as paragraph start indent. Authors are encouraged to follow locally available guidance for improving readability and legibility of text in their writing system.

> NOTE
>
> If a mobile platform does not include a way for users to override text style properties, this success criterion is not applicable.

§ Success Criterion 1.4.13 Content on Hover or Focus

(Level AA)

▸ **WCAG: Success Criterion 1.4.13 Content on Hover or Focus**

▸ **WCAG2ICT: Applying SC 1.4.13 Content on Hover or Focus to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #6 on GitHub

§ Success Criterion 2.1.1 Keyboard

(Level A)

▸ **WCAG: Success Criterion 2.1.1 Keyboard**

▸ **WCAG2ICT: Applying SC 2.1.1 Keyboard to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #12 on GitHub

§ Success Criterion 2.1.2 No Keyboard Trap

(Level A)

▸ **WCAG: Success Criterion 2.1.2 No Keyboard Trap**

▸ **WCAG2ICT: Applying SC 2.1.2 No Keyboard Trap to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #30 on GitHub

§ Success Criterion 2.1.4 Character Key Shortcuts

(Level A)

▸ **WCAG: Success Criterion 2.1.4 Character Key Shortcuts**

▸ **WCAG2ICT: Applying SC 2.1.4 Character Key Shortcuts to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.1.4.

NOTE

The WCAG2ICT interpretation is that a long press of a key (2 seconds or more) and other accessibility features provided by the platform do not meet the WCAG definition of a keyboard shortcut. See the keyboard shortcut definition for more details.

NOTE

The WCAG2Mobile interpretation aligns with WCAG2ICT, emphasizing that long presses and other accessibility features are not addressed by this success criterion.

§ Success Criterion 2.2.1 Timing Adjustable

(Level A)

▸ **WCAG: Success Criterion 2.2.1 Timing Adjustable**

▸ **WCAG2ICT: Applying SC 2.2.1 Timing Adjustable to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.2.1, replacing “the content” with “views”.

With this substitution, it would read:

2.2.1 Timing Adjustable: For each time limit that is set by **views**, at least one of the following is true:

- Turn off: The user is allowed to turn off the time limit before encountering it; or
- Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or
- Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, “press the space bar”), and the user is allowed to extend the time limit at least ten times; or
- Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or
- Essential Exception: The time limit is essential and extending it would invalidate the activity; or
- 20 Hour Exception: The time limit is longer than 20 hours.

> NOTE
>
> This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.

§ Success Criterion 2.2.2 Pause, Stop, Hide

(Level A)

▸ **WCAG: Success Criterion 2.2.2 Pause, Stop, Hide**

▸ **WCAG2ICT: Applying SC 2.2.2 Pause, Stop, Hide to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.2.2, replacing “page” and “Web page” with “view” and removing “See Conformance Requirement 5: Non-Interference” in Note 2 of the success criterion.

With these substitutions, it would read:

2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true:

Moving, blinking, scrolling

For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and

Auto-updating

For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential.

> NOTE
>
> For requirements related to flickering or flashing content, refer to Guideline 2.3.

> NOTE
>
> Since any content that does not meet this success criterion can interfere with a user's ability to use the whole **view**, all content on the **views** (whether it is used to meet other success criteria or not) must meet this success criterion.

NOTE

Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.

NOTE

An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.

NOTE

While the success criterion uses the term “information”, the WCAG 2 Intent section makes it clear that this is to be applied to all content. Any content, whether informative or decorative, that is updated automatically, blinks, or moves may create an accessibility barrier.

§ Success Criterion 2.3.1 Three Flashes or Below Threshold

(Level A)

▸ **WCAG: Success Criterion 2.3.1 Three Flashes or Below Threshold**

▸ **WCAG2ICT: Applying SC 2.3.1 Three Flashes or Below Threshold to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.3.1, replacing “Web pages” with “views”, “the whole page” with “the whole view”, and “the Web page” with “the view”; and removing “See Conformance

Requirement 5: Non-Interference”.

With these substitutions, it would read:

2.3.1 Three Flashes or Below Threshold: **Views** do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds.

> NOTE
>
> Since any content that does not meet this success criterion can interfere with a user's ability to use the **whole** **view**, all content on **the** **view** (whether it is used to meet other success criteria or not) must meet this success criterion.

§ Success Criterion 2.4.1 Bypass Blocks

(Level A)

▸ **WCAG: Success Criterion 2.4.1 Bypass Blocks**

▸ **WCAG2ICT: Applying SC 2.4.1 Bypass Blocks to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #8 on GitHub

§ Success Criterion 2.4.2 Page Titled

(Level A)

▸ **WCAG: Success Criterion 2.4.2 Page Titled**

▸ **WCAG2ICT: Applying SC 2.4.2 Page Titled to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #9 on GitHub

§ Success Criterion 2.4.3 Focus Order

(Level A)

▸ **WCAG: Success Criterion 2.4.3 Focus Order**

▸ **WCAG2ICT: Applying SC 2.4.3 Focus Order to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #35 on GitHub

§ Success Criterion 2.4.4 Link Purpose (In Context)

(Level A)

▸ **WCAG: Success Criterion 2.4.4 Link Purpose (In Context)**

▸ **WCAG2ICT: Applying SC 2.4.4 Link Purpose (In Context) to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #36 on GitHub

§ Success Criterion 2.4.5 Multiple Ways

(Level AA)

▸ **WCAG: Success Criterion 2.4.5 Multiple Ways**

▸ **WCAG2ICT: Applying SC 2.4.5 Multiple Ways to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #13 on GitHub

§ Success Criterion 2.4.6 Headings and Labels

(Level AA)

▸ **WCAG: Success Criterion 2.4.6 Headings and Labels**

▸ **WCAG2ICT: Applying SC 2.4.6 Headings and Labels to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #50 on GitHub

§ Success Criterion 2.4.7 Focus Visible

(Level AA)

▸ **WCAG: Success Criterion 2.4.7 Focus Visible**

▸ **WCAG2ICT: Applying SC 2.4.7 Focus Visible to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #51 on GitHub

§ Success Criterion 2.4.11 Focus Not Obscured (Minimum)

(Level AA)

▸ **WCAG: Success Criterion 2.4.11 Focus Not Obscured (Minimum)**

▸ **WCAG2ICT: Applying SC 2.4.11 Focus not Obscured to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #52 on GitHub

§ Success Criterion 2.5.1 Pointer Gestures

(Level A)

▸ **WCAG: Success Criterion 2.5.1 Pointer Gestures**

▸ **WCAG2ICT: Applying SC 2.5.1 Pointer Gestures to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #37 on GitHub

§ Success Criterion 2.5.2 Pointer Cancellation

(Level A)

▸ **WCAG: Success Criterion 2.5.2 Pointer Cancellation**

▸ **WCAG2ICT: Applying SC 2.5.2 Pointer Cancellation to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #38 on GitHub

§ Success Criterion 2.5.3 Label in Name

(Level A)

▸ **WCAG: Success Criterion 2.5.3 Label in Name**

▸ **WCAG2ICT: Applying SC 2.5.3 Label in Name to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.5.3.

§ Success Criterion 2.5.4 Motion Actuation

(Level A)

▸ **WCAG: Success Criterion 2.5.4 Motion Actuation**

▸ **WCAG2ICT: Applying SC 2.5.4 Motion Actuation to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 2.5.4.

§ Success Criterion 2.5.7 Dragging Movements

(Level AA)

▸ **WCAG: Success Criterion 2.5.7 Dragging Movements**

▸ **WCAG2ICT: Applying SC 2.5.7 Dragging Movements to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #53 on GitHub

§ Success Criterion 2.5.8 Target Size (Minimum)

(Level AA)

▸ **WCAG: Success Criterion 2.5.8 Target Size (Minimum)**

▸ **WCAG2ICT: Applying SC 2.5.8 Target Size (Minimum) to Non-Web Documents and Software:**

Placeholder

> NOTE: Work In Progress
>
> Read issue #10 on GitHub

§ Success Criterion 3.1.1 Language of Page

(Level A)

▸ **WCAG: Success Criterion 3.1.1 Language of Page**

▸ **WCAG2ICT: Applying SC 3.1.1 Language of Page to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #14 on GitHub

§ Success Criterion 3.1.2 Language of Parts

(Level AA)

▸ **WCAG: Success Criterion 3.1.2 Language of Parts**

▸ **WCAG2ICT: Applying SC 3.1.2 Language of Parts to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #15 on GitHub

§ Success Criterion 3.2.1 On Focus

(Level A)

▸ **WCAG: Success Criterion 3.2.1 On Focus**

▸ **WCAG2ICT: Applying SC 3.2.1 On Focus to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #41 on GitHub

§ Success Criterion 3.2.2 On Input

(Level A)

▸ **WCAG: Success Criterion 3.2.2 On Input**

▸ **WCAG2ICT: Applying SC 3.2.2 On Input to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #42 on GitHub

§ Success Criterion 3.2.3 Consistent Navigation

(Level AA)

▸ **WCAG: Success Criterion 3.2.3 Consistent Navigation**

▸ **WCAG2ICT: Applying SC 3.2.3 Consistent Navigation to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #54 on GitHub

§ Success Criterion 3.2.4 Consistent Identification

(Level AA)

▸ **WCAG: Success Criterion 3.2.4 Consistent Identification**

▸ **WCAG2ICT: Applying SC 3.2.4 Consistent Identification to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #55 on GitHub

§ Success Criterion 3.2.6 Consistent Help

(Level A)

▸ **WCAG: Success Criterion 3.2.6 Consistent Help**

▸ **WCAG2ICT: Applying SC 3.2.6 Consistent Help to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.2.6, replacing "web page(s)" and "page(s)" with "view(s)" and "CSS break-point" with "break-point".

With these substitutions, it would read:

3.2.6 Consistent Help: If a **view** contains any of the following help mechanisms, and those mechanisms are repeated on multiple **views** within a set of **views**, they occur in the same order relative to other **view** content, unless a change is initiated by the user:

- Human contact details;
- Human contact mechanism;
- Self-help option;
- A fully automated contact mechanism.

NOTE

Help mechanisms may be provided directly on the **view**, or may be provided via a direct link to a different **view** containing the information.

NOTE

For this success criterion, "the same order relative to other **view** content" can be thought of as how the content is ordered when the **view** is serialized. The visual position of a help mechanism is likely to be consistent across **views** for the same **view** variation (e.g., **break-point**). The user can initiate a change, such as changing the **view**'s zoom or orientation, which may trigger a different **view** variation. This criterion is concerned with relative order across **views** displayed in the same **view** variation (e.g., same zoom level and orientation).

§ Success Criterion 3.3.1 Error Identification

(Level A)

▸ **WCAG: Success Criterion 3.3.1 Error Identification**

▸ **WCAG2ICT: Applying SC 3.3.1 Error Identification to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.3.1.

§ Success Criterion 3.3.2 Labels or Instructions

(Level A)

▸ **WCAG: Success Criterion 3.3.2 Labels or Instructions**

▸ **WCAG2ICT: Applying SC 3.3.2 Labels or Instructions to Non-Web Documents and Software**

Placeholder

> NOTE: Work In Progress
>
> Read issue #45 on GitHub

§ Success Criterion 3.3.3 Error Suggestion

(Level AA)

▸ **WCAG: Success Criterion 3.3.3 Error Suggestion**

▸ **WCAG2ICT: Applying SC 3.3.3 Error Suggestion to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.3.3.

§ Success Criterion 3.3.4 Error Prevention (Legal, Financial, Data)

(Level AA)

▸ **WCAG: Success Criterion 3.3.4 Error Prevention (Legal, Financial, Data)**

▸ **WCAG2ICT: Applying SC 3.3.4 Error Prevention (Legal, Financial, Data) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.3.4 replacing “web pages” with “views”.

With this substitution, it would read:

3.3.4 Error Prevention (Legal, Financial, Data): For views that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true:

1. Reversible: Submissions are reversible.
2. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.
3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.

§ Success Criterion 3.3.7 Redundant Entry

(Level A)

▸ **WCAG: Success Criterion 3.3.7 Redundant Entry**

▸ **WCAG2ICT: Applying SC 3.3.7 Redundant Entry to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.3.7.

§ Success Criterion 3.3.8 Accessible Authentication (Minimum)

(Level AA)

▸ **WCAG: Success Criterion 3.3.8 Accessible Authentication (Minimum)**

▸ **WCAG2ICT: Applying SC 3.3.8 Accessible Authentication (Minimum) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 3.3.8, replacing “the Web site” with “a view”.

A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

Alternative Another authentication method that does not rely on a cognitive function test.

Mechanism A mechanism is available to assist the user in completing the cognitive function test.

Object Recognition The cognitive function test is to recognize objects.

Personal Content The cognitive function test is to identify non-text content the user provided to **a view**.

NOTE

"Object recognition" and "Personal content" may be represented by images, video, or audio.

NOTE

Examples of mechanisms that satisfy this criterion include: support for password entry by password managers to reduce memory need, and copy and paste to reduce the cognitive burden of re-typing.

NOTE

If the non-web software is an application, passwords used to unlock the underlying platform software are out of scope for this requirement as these are not up to a software application's author.

§ Success Criterion 4.1.1 Parsing

(Level A)

▸ **WCAG: Success Criterion 4.1.1 Parsing (Obsolete and removed)**

▸ **WCAG2ICT: Applying SC 4.1.1 Parsing (Obsolete and removed) (WCAG 2.2) to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 4.1.1, meaning that it has been marked as **obsolete and removed**.

(Obsolete and removed)

NOTE

WCAG 2.2 has made this success criterion obsolete and removed it as a requirement in the standard. Therefore, the interpretation of this success criterion for mobile applications has been removed.

§ Success Criterion 4.1.2 Name, Role, Value

(Level A)

▸ **WCAG: Success Criterion 4.1.2 Name, Role, Value**

▸ **WCAG2ICT: Applying SC 4.1.2 Name, Role, Value to Non-Web Documents and Software**

Placeholder

NOTE: Work In Progress

Read issue #48 on GitHub

§ Success Criterion 4.1.3 Status Messages

(Level AA)

▸ **WCAG: Success Criterion 4.1.3 Status Messages**

▸ **WCAG2ICT: Applying SC 4.1.3 Status Messages to Non-Web Documents and Software**

This applies directly as written, and as described in Intent from Understanding Success Criterion 4.1.3, removing “implemented using markup languages”.

With these substitutions, it would read:

4.1.3 Status Messages: In content, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus.

> NOTE
>
> This is typically enabled through the use of accessibility services of the user agent or platform software.

§ A. Acknowledgements

Additional information about participation in the Mobile Accessibility Task Force (MATF) can be found on the MATF home page.

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§ B. References

§ B.1 Informative references

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