Digital Accessibility Checklist

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Preface

Nepal's **Constitution, (2015)** guarantees the **right to information** and **equality for all citizens**, including persons with disabilities. This aligns with international commitment concerning the *United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006),* which is ratified by Nepal in 2010. Article 9 of the UNCRPD specifically highlights the importance of **accessibility to information and communication technologies** (ICT) for persons with disabilities. Globally, countries like the United States (through the *Americans with Disabilities Act* and *Section 508*), the United Kingdom (under the *Equality Act*), and Canada (through the *Accessible Canada Act*) have enacted robust laws that mandate **digital accessibility** across public and private sectors. The **Web Content Accessibility Guidelines (WCAG)**, an international standard, outline best practices to ensure that websites and digital services are accessible to everyone, especially persons with disabilities.

In Nepal, this commitment to accessibility is reinforced through several key policies and laws. The **Act Relating to the Rights of Persons with Disabilities 2017** ensures the inclusion of people with disabilities in all national development frameworks and specifically mentions making **information accessible**. Likewise, the **National Policy and Plan of Action on Disability 2006** and the **National Disability Policy 2023** address the need for accessible communication and ICT for persons with disabilities. These provisions aim to ensure equal access to social support, healthcare, education, employment, and rehabilitation services by making information systems inclusive and accessible.

The 2021 Census shows that 2.2% of Nepal's population lives with some form of disability. Among these group, physical disabilities account for 37.1%, while other common disabilities include **low vision** (17.1%), **multiple disabilities** (8.9%), and **hard of hearing** (8.0%). The lower reported prevalence in Nepal compared to global rates (16%) may be attributed to the focus on impairment in the Census data collection rather than functionality. More comprehensive data, such as the *UNFPA Model Survey* in Sudurpaschim province, estimates the disability prevalence at 10.1%, which aligns more closely with international estimates.

While there is increasing recognition of the importance of accessibility on **digital platforms in Nepal—such as websites, documents, and public online services remain largely inaccessible** to persons with disabilities. Only a few organizations have actively adopted digital accessibility

practices. One of the key challenges identified during our training sessions with stakeholders is that they do not have adequate knowledge and understanding about how to implement digital accessibility.

Prayatna Nepal, a nonprofit organization has made commitment to promote the rights and opportunities of visually impaired people in Nepal, we have been working tirelessly to improve **digital accessibility**. Through training and awareness programs, we aim to build capacity among stakeholders and help them to create digital spaces that are inclusive and accessible to all.

This checklist is our effort to bridge the knowledge gap and create widespread awareness about digital accessibility. By leveraging our experience and the **internationally recognized WCAG standards**, we hope this document will serve as a **guide for stakeholders, government agencies, civil society organizations, and developers**. This document plays great role to establish clear standards for digital accessibility in Nepal by creating a more inclusive digital environment where information and opportunities are equally available to all, regardless of ability.

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As an organization actively engaged in promoting digital accessibility, we recognize the significance of developing a comprehensive digital accessibility checklist. This initiative aims to foster a shared understanding of accessibility standards, ensuring that digital platforms are inclusive and equitable for all.

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Sarita Lamichhane

Chairperson

Prayatna Nepal

Glossaries for Key Terms in Digital Accessibility

Accessibility

The quality of being easily reached, entered, or used by everyone, including people with disabilities. In digital context, it means creating content and technologies that all users can access and use effectively.

Accessibility Statement

A document that outlines how accessible a website or application is, what barriers might exist, and how users can get accessible alternatives if needed.

Alternative Formats

Different ways of presenting the same information to meet various accessibility needs (e.g., large print, audio, braille, electronic text).

Alternative Text (Alt Text)

A textual description of images, graphics, and visual elements that screen readers can read to users who cannot see the content. Good alt text conveys both the content and function of the image.

Assistive Technology

Hardware or software used by peop

le with disabilities to access and use digital content (e.g., screen readers, speech recognition, switches, eye tracking devices).

Audio Description

Narration added to video content to describe important visual details that cannot be understood from the main soundtrack alone.

Captions

Text version of speech and other significant sounds in video content, synchronized with the audio. Includes speaker identification and sound effects. Can be:

- Closed Captions: Can be turned on/off.
- Open Captions: Permanently visible

Color Contrast

The difference in light between foreground (text) and background colors. WCAG 2.2 requires a minimum ratio of:

- 4.5:1 for normal text
- 3:1 for large text

Color Vision Deficiency

A condition that affects the ability to distinguish between certain colors, commonly known as color blindness. It affects approximately 8% of males and 0.5% of females.

Digital Accessibility

The practice of ensuring digital content and technologies (websites, documents, applications) can be used by people with various disabilities.

Focus Indicator

A visual indication showing which element on a screen currently has keyboard focus is essential for keyboard navigation.

Heading Structure

Hierarchical organization of content using heading levels (H1-H6) to create a logical document outline and enable efficient navigation.

Keyboard Accessibility

The ability to access all functionality of digital content using only a keyboard is crucial for users who cannot use a mouse.

Reading Order

The logical sequence in which content should be read by screen readers is particularly important in documents, slides, and complex layouts.

Responsive Design

Design approach ensuring content adapts to different screen sizes and devices while maintaining accessibility.

Screen Reader

Software that converts digital text into synthesized speech or braille output is essential for users who are blind or have visual impairments.

Section 508

Federal law requiring U.S. federal agencies to make their electronic and information technology accessible to people with disabilities, serving as a widely adopted standard for digital accessibility compliance.

Speech to Text

Technology that converts spoken words into written text is helpful for users with motor disabilities or learning differences.

Subtitles

Text version of dialogue in video content, primarily for viewers who can hear but don't understand the spoken language.

Tagged PDF

A PDF document with proper structural markup that enables screen readers to present content in a logical order.

Text to Speech

Technology that converts written text into spoken words is beneficial for users with visual or learning disabilities.

Transcripts

Text versions of audio or video content, including both spoken words and important sound effects.

Unicode

A universal character encoding standard that ensures proper display of text across different platforms and languages, critical for accessibility as it enables correct reading of content by screen readers and assistive technologies.

Web Accessibility

The inclusive practice of ensuring websites and web applications is designed and developed so that people with disabilities can use them.

WCAG

Web Content Accessibility Guidelines: international standards for making web content accessible to people with disabilities.

Common Acronyms

- **ADA**: Americans with Disabilities Act
- **ARIA**: Accessible Rich Internet Applications
- **ATAG**: Authoring Tool Accessibility Guidelines
- **CART**: Communication Access Realtime Translation
- **ICT**: Information and Communications Technology
- **JAWS**: Job Access With Speech (screen reader)
- **NVDA**: Non-Visual Desktop Access (screen reader)
- **OCR**: Optical Character Recognition
- **PDF/UA**: PDF Universal Accessibility
- **POUR**: Perceivable, Operable, Understandable, Robust
- **TTS** : Text to Speech
- **VPAT**: Voluntary Product Accessibility Template
- **VRS** : Video Relay Service
- **W3C**: World Wide Web Consortium
- **WAI**: Web Accessibility Initiative
- **WCAG**: Web Content Accessibility Guideline

Introduction to Digital Accessibility

What is digital accessibility?

Digital accessibility refers to the practice of creating and maintaining digital content and technologies that people with disabilities can use independently. This includes websites, documents, multimedia content, social media posts, mobile applications, and other digital platforms. Accessible content must be compatible with assistive technologies and provide equivalent alternatives for all users.

Evolution of Digital Accessibility Standards

The World Wide Web Consortium (W3C) introduced the Web Content Accessibility Guidelines (WCAG) 1.0 in 1999 as the first major step toward standardizing digital accessibility. These guidelines established basic principles for making web content accessible to people with disabilities.

WCAG 2.0, released in 2008, marked a significant advancement by introducing technology-neutral principles that could adapt to evolving technologies. WCAG 2.1 (2018) expanded these guidelines to address mobile accessibility, low vision requirements, and cognitive disabilities. The current version, WCAG 2.2 (2023), further builds these standards to address additional user needs and emerging technologies.

Core Principles of Digital Accessibility

The WCAG framework establishes four fundamental principles that form the foundation of digital accessibility:

1. Perceivable

Information and user interface components must be presentable in ways that users can recognize. Content must be available to users' senses of sight, hearing, and touch. Creating flexible layouts, offering options for both visual and audio content, and making sure the content is identifiable are all parts of it.

2. Operable

All users must be able to use the user interface components and navigation. This includes more than just mouse operation; it also involves keyboard accessibility, sufficient interaction time, and navigation features that assist users in locating content and determining their location within websites.

3. Understandable

Information and interface operation must be understandable to all users. Users must be able to understand both the content and how to interact with it. This includes readable text, predictable functionality, and help with avoiding and correcting mistakes. Avoiding jargon and excessively technical terms is another aspect of it.

4. Robust

Content must be compatible with current and future assistive technologies and be reliable across platforms. This requires following web standards and guarantees that the content can be interpreted accurately by a variety of assistive technologies.

Technical Standards

The WCAG guidelines provide three conformance levels that build upon each other:

- Level A represents the minimum level of accessibility, addressing the most basic and critical accessibility features.
- Level AA builds upon Level A and represents the standard most organizations should aim to achieve. It addresses major accessibility barriers while remaining technically feasible.
- Level AAA offers the highest level of accessibility; however, it may not be feasible to achieve full Level AAA conformance for all content, particularly interactive 3D elements.

Methodology for Implementation

From multimedia resources and mobile applications to documents and websites, digital accessibility covers a wide range of content types. While following the fundamental accessibility principles, each category needs specific considerations.

Organizations should approach the implementation of accessibility methodologically, starting with fundamental features and gradually improving accessibility.

Digital accessibility barriers by disability type

Visual Disabilities

Type of Disability	Barriers	Why These Are Barriers
Blindness	Images without alternative text (description)	Users can't understand the content or purpose of images when screen readers have no text to read
	PDFs that aren't properly tagged for elements like images, headings, etc.	Screen readers can't interpret the document structure or read content in the correct order
	Complex data tables	The relationships between data cells and headers are not conveyed by screen readers.
	Lack of headings/structure	Difficult to scan and understand content organization
	CAPTCHAs that are purely visual	Users can't complete basic authentication steps to access services or submit the form.

	Mouse dependent interactions	Users can't use mouse or traditional pointing devices.
	Information presented only using colors	Information conveyed only through color is completely missed
	Videos without audio description	Actions in videos are missed
	Scanned Text	Text becomes unreadable without OCR process.
Low Vision	Small text size	Text becomes unreadable or causes eye strain
	Poor color contrast	Text and interface elements blend, making them hard to differentiate.
	Text in images	Can't be enlarged by browser tools or screen magnifiers
	Website is not designed for mobile.	Content becomes unusable when magnified or using zoom.
Color Blindness	Color-only error indicators	Error messages or required fields aren't noticeable
	Charts/graphs using only color to differentiate	Data visualization becomes meaningless

Hearing Disabilities

Type of Disability	**Barriers**	**Why These Are Barriers**
Deafness	Videos without captions and sign language	Cannot access audio content in videos

	Audio content without transcripts	Cannot access podcasts, audio messages, or recordings
	Sign language videos without text alternatives	Cannot access content if they use a different sign language
	Audio CAPTCHA only	Cannot complete audio-based security verification
Hard of Hearing	Poor quality captions	Difficult to understand or follow content
	Background music drowning speech	Makes it harder to understand spoken content
	Audio-only feedback (like error beeps)	Miss important system notifications or alerts

Motor Disabilities

Type of Disability	**Barriers**	**Why These Are Barriers**
Limited Hand Control	Small clickable areas or button size	Difficult to accurately click or tap on small elements
	Short timeouts on forms	Can't complete forms or tasks within time limits
	Complex keyboard shortcuts	Difficult to press multiple keys simultaneously
	Hover-only interactions (For example Dropdown Menus)	Cannot access dropdown menus or tooltips
Tremors	Double-click requirements	Challenging to perform precise clicking actions
	Drag-and-drop interfaces	Hard to maintain steady cursor movement

	Small form elements	Difficult to select or click accurately
Paralysis	Mouse-dependent navigation	Cannot use traditional pointing devices
	Lack of keyboard shortcuts	Unable to access all features without mouse
	Automatic carousels/slideshows	Cannot control content timing or navigation

Cognitive Disabilities

Type of Disability	**Barriers**	**Why These Are Barriers**
Reading Difficulties, Learning Difficulties, Autism	Complex language	Content becomes hard to understand
	Large blocks of text	Overwhelming amount of information
	Lack of headings/structure	Difficult to scan and understand content organization
	Moving or flashing content	Distracting and can make reading impossible
	Auto-playing media	Creates unwanted distractions
	Multiple pop-ups	Interrupts focus and task completion
	Lack of consistent layouts	Have to relearn navigation on different pages

	No visual supports	Text-only content is harder to understand
	Difficult instructions	Difficult to follow multi-step processes

Language and literacy barriers

Type of Barrier	**Barriers**	**Why These Are Barriers**
Limited Literacy	Technical jargon and difficult terminologies	Cannot understand sophisticated terminology
	Text-heavy content	Difficult to process large amounts of text
	Lack of visual aids	No alternative ways to understand content
Language Barriers	Content in single language	Cannot access information in preferred language
	Culturally specific references	May misunderstand content or context
Digital Literacy	Complex interfaces	Difficulty understanding how to use digital tools
	Technical terminology	Cannot understand system messages or instructions
	Lack of help documentation	No way to learn how to use features

General Notes

- Many users may experience multiple types of barriers simultaneously.
- Barriers can vary in severity depending on individual circumstances.
- Environmental factors (like poor lighting or noisy surroundings) can increase these barriers.
- Technology access and internet connectivity in Nepal may create additional challenges.

- Cultural and linguistic considerations specific to Nepal should be taken into account when addressing these barriers.

Digital Accessibility Checklist

Writing Nepali Texts

Accessibility feature	Why this is a barrier?	How to implement it?
Nepali Font	Nepali text written using Nepali fonts like "Preeti" "Kantipur" etc. are not accessible because they are just graphic representation of Nepali text.	Always use Unicode Nepali system to write Nepali text. It can be either downloaded or used online in sites like "Easy Nepali Typing" or Google transliteration
Nepali PDF	The PDF document in Nepali language is not accessible to screen readers even if they are written in Unicode.	Accessible version of Nepali document should only be circulated in text format like word or rtf.

Microsoft Word Accessibility Checklist

Accessibility feature	Why this is a barrier?	How to Implement it?
Document Title	Without a proper title, screen reader users cannot quickly identify or find the document.	Open File > Info > Properties. Enter a descriptive title that clearly identifies the document's purpose.
Document Language	When language is not specified, screen readers may use incorrect pronunciation and syntax rules.	Select Review tab > Language > Set Proofing Language. Select the primary language of your document.

Heading Structure	Users cannot navigate the document structure or understand content hierarchy when headings are only visually formatted (using bold and bigger text size)	Use Styles panel to apply proper heading levels (Heading 1, 2, 3). Maintain a logical hierarchy - don't skip levels. Use Heading 1 for document title, Heading 2 for major sections etc.
Paragraph Spacing	If spaces are created between paragraphs by pressing 'enter' multiple times or if new page is created that way, it might become inaccessible to screen reader because- it will read it as 'blank'.	Spaces should always be created using paragraph spacing options. New pages should be added by insert menu or pressing CTRL + ALT
Alternative Text for Images	Users who cannot see images have no way to understand the image content or purpose.	Right-click image > Edit Alt Text. Write clear, concise description (e.g., "Graph showing sales increase of 25% in 2023"). Don't start with "image of" or "picture of."
Decorative Images Marking	Unmarked decorative elements can cause screen readers to read unnecessary information, creating a confusing experience.	Mark images as decorative in Word's accessibility checker. Use the 'Alt Text' field to indicate when elements are decorative by entering empty alt text. Remove unnecessary decorative elements that don't add value.
Image Wrapping	Images wrapped around text are not accessible for screen readers. Image should always be in line with text.	Choose Right-click image > Wrap Text > In line with Text.
Table Headers	Without properly marked headers, screen reader users cannot understand data relationships or navigate tables effectively.	Select the top row > Table Design tab > Select "Header Row." Use clear header text. Avoid merged cells. Keep tables simple and linear.

Table Captions	Without captions, screen reader users cannot quickly understand the table's purpose or content context.	Add clear, descriptive captions using Word's 'Insert Caption' feature. Place captions above tables. Include table numbers for easy reference. Write concise but informative descriptions.
Table Structure	Complex tables with split or merged cells create navigation difficulties for screen reader users and can break the logical reading order.	Keep tables simple with clear row and column headers. Avoid merging cells where possible. Split complex tables into simpler ones. Use proper header markup for row/column headers.
Table Purpose	Using tables for layout rather than data presentation confuses screen readers and creates inconsistent reading patterns.	Use tables only for presenting data relationships. For layout, use Word's built-in formatting tools like columns, sections, and paragraph spacing. Create proper data tables with clear headers and structure.
Link Text	The URL used as links are difficult to understand for people using screen readers.	Always use hyperlink on text instead of URL.
Meaningful Links	Links like "click here" or "read more" provide no context about the destination when read by screen readers.	Write descriptive link text that makes sense out of context (e.g., "Download 2024 Annual Report" instead of "Download here"). Include the full context in the link text.
Color Contrast	Text that doesn't have sufficient contrast with its background is difficult or impossible to read for many users.	Maintain minimum contrast ratio of 4.5:1 for normal text and 3:1 for large text. Use the built-in Accessibility Checker to verify contrast. Never use color alone to convey meaning.

Bullets and Numbers	Screen readers cannot identify lists that are manually formatted with hyphens or numbers.	Use Word's built-in bullet or numbering tools. Select Home tab > Bullets or Numbering. Use numbered lists for sequential items and bullets for non-sequential items.
Columns	Using tabs or spaces to create columnar layout causes reading order problems for screen readers.	Use Insert tab > Columns feature for multi-column text. Avoid using spaces, tabs, or text boxes to position text in columns.
Font Selection	Decorative or overly stylized fonts can be difficult to read for users with visual or cognitive disabilities.	Use clear, sans-serif fonts like Arial or Calibri. Maintain minimum 11-point font size. Avoid using font formatting (like italics) for emphasis - use styles instead.
Watermark Accessibility	Inaccessible watermarks can be missed by screen readers, causing users to miss important document status information.	Use Word's built-in watermark feature. Ensure watermark text has sufficient contrast. Include watermark information in document properties or header text. Consider alternative ways to convey document status.

Microsoft Excel Accessibility Checklist

Accessibility feature	**Why this is a barrier?**	**How to implement it?**
Sheet Names	Generic sheet names (Sheet1, Sheet2) provide no context for screen reader users about sheet contents.	Rename sheets with descriptive names (e.g., "2024 Sales Data", "Employee List"). Right-click sheet tab > Rename. Use consistent naming conventions.
Table Headers	Without proper headers, screen reader users cannot understand	Use Insert tab > Table. Select "My table has headers" option. Use clear,

	data relationships or navigate between columns and rows.	descriptive header text. Avoid blank header cells.
Named Ranges	Unnamed ranges make it difficult for screen reader users to understand data groupings and navigate large datasets.	Select data range > Formulas tab > Define Name. Give meaningful names to important data ranges (e.g., "Q1Sales", "Regional Totals").
Hidden Content	Hidden rows, columns, or sheets can confuse screen reader users and may be accidentally overlooked.	Review all hidden content. Use filters instead of hiding rows/columns when possible. Document any necessarily hidden content in a notes sheet.
Chart Accessibility	Charts without alternative text and proper labeling exclude users who cannot see the visual representation.	Add alt text to charts (right-click > Edit Alt Text). Include clear titles, axis labels, and legends. Add data labels where appropriate. Provide data table together with complex charts.
Hyperlinks	Unclear hyperlink text ("Click here", "Link") doesn't tell screen reader users where links lead.	Use descriptive link text that makes sense out of context. Include the full URL in a notes column if needed. Test that links are keyboard accessible.
Slicer Accessibility	Inaccessible slicers in Excel or PowerPoint prevent users from filtering data independently using screen readers.	Use built-in slicer features that support keyboard navigation. Provide clear labels for slicers. Ensure filter status is announced by screen readers. Maintain keyboard focus indicators.

Microsoft PowerPoint Accessibility Checklist

Accessibility Feature	**Why This is a Barrier?**	**How to Implement it?**

Slide Layouts	Custom layouts using text boxes and manual positioning create illogical reading order and navigation problems for people using assistive technologies.	Use built-in slide layouts (Home tab > Layout). Avoid floating text boxes. Maintain consistent layout throughout presentation. Modify slide master for custom layouts.
Reading Order	Incorrect reading order forces screen reader users to hear content in an illogical sequence.	View tab > Selection Pane. Arrange elements from bottom (first read) to top (last read). Test with screen reader. Keep layouts simple and logical.
Alternative Text	Visual content without alternative text excludes users who cannot see images, charts, or graphics.	Right-click visual > Edit Alt Text. Describe the purpose and content of the visual. Include data represented in charts. Don't repeat information already in slide text.
Slide Titles	Slides without unique titles make navigation difficult and provide no context for screen reader users.	Give each slide a unique, descriptive title. Use title case consistently. Check View > Outline View to verify all slides have titles.
Animations Transitions	Complex animations and automatic transitions can create barriers for users with cognitive disabilities or motion sensitivity.	Keep animations simple and purposeful. Set to start "On Click." Avoid automatic transitions.
Speaker Notes	Without speaker notes, users relying on screen readers may miss context and details presented verbally.	Add notes explaining visual elements, if there are many contextual elements. Include spoken context not in slide text. Describe key points of complex

		graphics. Use Notes View to verify completeness.
Color and Contrast	Poor contrast and color-dependent information create barriers for users with visual impairments or color blindness.	Maintain high contrast between text and background (minimum 4.5:1). Don't rely on color alone to convey meaning. Use labels with colors. Test with grayscale view.
Multimedia Content	Videos and audio without captions or transcripts exclude users with hearing disabilities.	Add closed captions to videos. Provide transcripts for audio. Ensure media controls are keyboard accessible. Include descriptive narration of important visual content.
Table Structure	Complex tables with merged cells create navigation barriers.	Keep tables simple. Avoid merged cells. Include clear headers. Consider breaking complex tables into simpler ones. Test table navigation with keyboard.
Handout Format	Inaccessible handouts create barriers when presentation materials are shared.	Create accessible PDF or Word versions of handouts. Include all alternative text and descriptions. Test handout format with screen readers. Provide multiple format options.
Text Box Accessibility	Text boxes that aren't properly structured can be missed by screen readers or read out of order.	Set proper reading order for text boxes. Use Word's built-in text box styles. Ensure text boxes are in the proper z-order. Link related text boxes if content flows between them.

PDF Accessibility Checklist

Accessibility Feature	Why This is a Barrier?	How to Implement it?
Tagged PDF	Without proper tags, screen readers cannot understand document structure and read content in logical order.	Enable "Create Tagged PDF" when converting documents from word. Use Acrobat's "Auto tag Document" feature. Review and fix tag structure in Tags panel.
Document Title and Metadata	Screen reader users cannot identify the document quickly if it lacks proper title and metadata.	Set Document Title and other metadata in File > Properties. Include author, subject, and keywords. Don't rely only on filenames. Make title descriptive and meaningful.
Reading Order	Incorrect reading order forces users to hear content in illogical sequence, making document hard to understand.	Use Reading Order tool in Acrobat. Ensure content flows logically. Check with Tags panel. Test with screen reader.
Heading Structure	Without proper heading hierarchy, users cannot navigate through document sections effectively.	Use proper heading levels (H1, H2, H3). Don't skip levels. Match headings to visual formatting. Create logical document structure.
Alternative Text	Users who cannot see images have no way to understand visual content and diagrams.	Add alt text through Properties > Tag panel. Describe image purpose and content. Mark decorative images as background. Include detailed descriptions for complex diagrams or charts.
Table Structure	Unstructured tables prevent screen readers from connecting headers with data cells.	Use proper table tags. Mark header cells. Avoid complex merged cells. Ensure proper reading order within tables. Add table summary if needed.

Lists	Unstructured lists make it difficult to understand content organization and relationships.	Use proper list tags (L, LI, Lbl). Ensure nested lists are properly structured. Maintain consistent formatting.
Form Fields	Unlabeled form fields prevent users from understanding what information to enter.	Add labels to all form fields. Set proper tab order. Mark required fields. Provide clear instructions. Include error messages and validation.
Text Search/Select	Scanned PDFs without OCR are just images of text, making them impossible to read with assistive technology.	Run OCR on scanned documents. Verify text accuracy. Ensure text is selectable and searchable. Fix any recognition errors.
Color Contrast	Poor contrast between text and background creates reading barriers.	Maintain sufficient color contrast (4.5:1 ratio). Don't rely on color alone to convey meaning. Test with contrast checker. Provide alternative indicators.
Document Language	Unspecified language causes screen readers to use wrong pronunciation rules.	Set primary document language in Properties. Mark language changes within content.
Links	Unclear or unlabeled links make navigation difficult for screen reader users.	Use descriptive link text. Ensure links are properly tagged. Check that URLs are accessible. Verify link destinations are valid.
Page Numbers	Missing or inconsistent page numbers create navigation problems.	Add logical page numbers. Ensure page labels match physical page numbers. Use page thumbnails effectively.
Artifacts	Improperly tagged decorative elements distract from main content.	Mark decorative elements as artifacts. Remove unnecessary reading elements. Ensure background images are properly tagged.

Multimedia Elements	Inaccessible multimedia content excludes users with disabilities.	Provide captions for videos. Include audio descriptions. Ensure media controls are keyboard accessible. Provide transcripts.

Social media accessibility checklist

Accessibility Feature	Why This is a Barrier?	How to Implement it?
Image Alternative Text	Blind or low vision users cannot understand images without descriptive text.	Write clear, concise alt text (Instagram: Use Alt Text feature, Twitter: Add Image Description, Facebook: Edit Alt Text while uploading image). Describe important visual elements and context.
Text Readability	Dense text blocks and unconventional typography make content hard to read for many users.	Use clear fonts. Break text into short paragraphs. Avoid fancy fonts or excessive emojis. Leave spaces between paragraphs. Limit to 2-3 sentences per paragraph.
CamelCase Hashtags	Screen readers read hashtags as one word when words aren't separated.	Use capital letters for each word in hashtags (#DigitalAccessibility instead of #digitalaccessibility). Keep hashtags at end of post.
Video Captions	Deaf or hard of hearing users cannot access video content without captions.	Add closed captions to all videos. Use platform caption tools or create SRT files. Include speaker identification. Caption sound effects and music.
Audio Transcripts	Users who are deaf or in noisy environments cannot access audio content.	Provide full transcripts for audio content like podcasts or voice messages. Include speaker names and relevant sound descriptions.

Emojis	Screen readers read emoji descriptions, making content confusing when overused.	Use emojis carefully. Place them at the end of text. Don't repeat emojis. Don't use emojis to convey critical information.
Color Contrast	Poor contrast makes text difficult to read, especially for low vision users.	Ensure text is easily readable against background. Test contrast ratios. Don't use light gray text. Use solid backgrounds when possible.
Content Warnings	Unexpected sensitive content can be problematic for some users.	Use content warnings for sensitive topics. Place warnings at the beginning. Allow users to opt-in to sensitive content.
Animated GIFs	Flashing content can trigger seizures or cause distraction.	Avoid rapidly flashing GIFs. Use static images when possible. Warn about animated content. Limit animation duration.
Image Text	Text embedded in images is not accessible to screen readers.	Put important text in post body, not images. If must use image text, repeat information in caption or alt text.
Stories/Reels Format	Temporary content can be difficult to access or understand.	Keep text on screen longer. Use high contrast colors. Provide captions. Don't rely solely on sound. Include text descriptions.
Live Streams	Real-time content can exclude users who need captions or descriptions.	Use live captioning. Provide summary or transcript after. Describe visual elements verbally.
Image or Emoji as Fonts	Using images or emojis as text/fonts prevents screen readers from accessing the content and makes it impossible for users to adjust text size or contrast.	Use standard web fonts and Unicode characters instead of custom font images. If using emojis, ensure they have proper text alternatives. Provide actual text content that can be read by assistive technologies.

Animated GIF Accessibility	GIFs can cause distraction, trigger seizures, and are often meaningless to screen reader users as they lack proper descriptions.	Provide text alternatives describing the GIF content. Allow users to pause or stop animations. Consider using video with controls instead. Avoid auto-playing GIFs if possible. Include descriptive alt text that explains the content and purpose.
Sign Language Placement	Inconsistent placement of sign language interpreters in videos can make it difficult for deaf users to follow both the visual content and interpretation.	Place sign language interpreter in a consistent, visible location. Ensure interpreter window is at least 1/4th in large screen and 1/3rd in small screen of the video height. Maintain good contrast between interpreter and background. Allow users to resize/reposition interpreter window.
Complex Images	Multiple elements or messages within a single image can overwhelm users and make it difficult for screen readers to provide meaningful descriptions.	Break complex images into simpler components. Provide detailed alt text describing the relationship between elements. Consider using multiple images or a more structured layout. Include text descriptions for key information.

Website accessibility checklist

Accessibility Feature	Why This is a Barrier?	How to Implement it?
Page Title	Without clear page titles, screen reader users cannot quickly identify page content or browser tabs.	Use unique, descriptive titles for each page. Format as: Page Name - Website Name. Keep titles concise but informative.

Semantic HTML	Using generic divs instead of semantic elements makes it harder for assistive technologies to understand page structure.	Use <nav> for navigation, <header> for page headers, <main> for main content, <footer> for page footer, <aside> for sidebar content, <article> for independent content and <section> for thematic grouping
Keyboard Navigation	Mouse-dependent interfaces exclude users who rely on keyboards or other input devices.	Ensure all functions work with the keyboard. Make focus indicator visible. Maintain logical tab order. Provide skip links for navigation. All the menu items and drops downs should be accessible by keyboard only.
Skip Links	Users who navigate by keyboard must tab through all navigation items on every page before reaching main content	Add "Skip to main content" as first focusable element on the website. Make skip link visible when focused. Provide skip links for long navigation menus. Consider multiple skip links for complex layouts (e.g., "Skip to navigation", "Skip to footer"). Ensure skip links work when activated
Focus Indicator	Without visible focus indicators, keyboard users can't track their position on the page	Never remove focus outline. Make focus indicator high contrast (3:1 minimum) Ensure indicator is clearly visible against all backgrounds. Make focus indicator sufficiently large.
Alternative Text	Users who cannot see images miss important visual information.	Add descriptive alt text to images. Use empty alt="" for decorative images.
Color Contrast	Poor contrast makes content hard to read for	Maintain 4.5:1 contrast ratio for normal text. 3:1 for large text. Don't rely solely on

	users with visual impairments.	color to convey information. Test with contrast checker.
Form Labels and Controls	Unlabeled forms prevent users from understanding what information to input.	Use proper label elements. Associate labels with controls. Provide clear instructions. Mark required fields. Show error messages clearly.
Error Placement	Poorly placed error messages can be missed or misunderstood.	Show errors near the relevant field. Display a summary at the top of the form. Use clear, actionable error messages. Make errors visible without relying on color
Link Text	Generic links like "click here" don't tell users where they lead.	Use descriptive link text. Make links work out of context. Indicate if links open new windows. Distinguish between navigation and content links.
Tables	Improperly structured tables make data relationships unclear for screen reader users.	Use proper table markup. Include headers. Avoid merged cells. Add captions or summaries for complex tables. Use proper scope attributes.
Multimedia	Videos and audio without alternatives exclude users with hearing or visual disabilities.	Provide captions for videos. Include audio descriptions. Offer transcripts. Ensure media players are keyboard accessible.
Media Autoplay	Unexpected audio or video playback can interfere with screen readers and disturb users.	Disable autoplay by default. Provide clear play/pause controls. Allow users to control media playback.
Dynamic Content	Content that updates without user awareness creates confusion.	Announce dynamic changes to screen readers. Use ARIA live regions appropriately. Allow users to control auto-updating content.

Focus Management	Poor focus management makes keyboard navigation difficult or impossible.	Maintain visible focus indicator. Manage focus during interactions. Return focus after modal dialogs. Don't trap keyboard focus.
Responsive Design	Non-responsive designs create barriers on different devices and zoom levels.	Design for different viewport sizes. Support zooms up to 200%. Maintain readability when zoomed. Test with different devices.
Error Identification	Unclear error messages prevent users from understanding and fixing problems.	Clearly identify errors. Provide specific instructions to fix errors. Use multiple cues (color, icon, text). Position error messages logically. This is very important with forms.
Time Outs	Fixed time limits create barriers for users who need more time.	Don’t use things that changes with times like slideshow etc.
Page Language	Incorrect language settings cause screen readers to use wrong pronunciation rules.	Set page language in HTML. Mark language changes within content. Use proper language codes.
ARIA Labels	Interactive elements without proper labels are unusable with assistive technology.	Use ARIA labels when needed. Don't duplicate information. Test with screen readers. Follow ARIA authoring practices.
Navigation	Inconsistent or complex navigation makes site exploration difficult.	Provide consistent navigation. Include site search. Offer multiple ways to find content. Show current location.
Resizable Text	Fixed-size text creates barriers for users who need larger text.	Allow text resizing without breaking layout. Support browser zoom. Use relative units (em, rem) for text.
Responsive Design	Non-responsive websites break layout on mobile	Implement fluid grids, flexible images, and media queries. Test across different

	devices, making content unreadable or requiring horizontal scrolling, which is particularly challenging for users with motor impairments.	devices. Use relative units (em, rem) instead of fixed pixels. Ensure touch targets are at least 44x44px. Maintain readable text size across viewports.
Content Structure	Lack of logical structure makes it difficult for screen reader users to navigate and understand the relationship between different content elements.	Use proper heading hierarchy (H1-H6). Group related content using semantic HTML. Implement ARIA landmarks where appropriate. Create clear visual hierarchy. Use consistent layout patterns.
CAPTCHA Alternatives	Traditional visual CAPTCHAs create insurmountable barriers for users with visual impairments.	Provide multiple CAPTCHA options (audio, logic puzzles). Use modern alternatives like reCAPTCHA v3 or Captcha. Consider email verification or other accessible security measures. Ensure all CAPTCHA solutions have keyboard-accessible controls.

Testing and Validation Guide

Automated Testing

Document Testing

Microsoft Office applications (Word, Excel, PowerPoint) include built-in accessibility checkers that identify common accessibility issues. These tools provide explanations of problems and suggest solutions for fixing them. Use these checkers throughout document creation and before finalizing any document.

Adobe Acrobat Pro's accessibility checker helps validate PDF documents for accessibility compliance. This tool performs a comprehensive check of various accessibility elements and generates detailed reports identifying areas needing improvement.

Web Testing

Several automated tools are available for testing website accessibility:

- WAVE (Web Accessibility Evaluation Tool) identifies common web accessibility errors.
- Axe Developer Tools helps developers identify and fix accessibility issues.
- Color contrast analyzers verify text readability.
- HTML validation tools ensure proper markup.

While automated tools are helpful, they should not be the only method of testing, as they can detect only common accessibility issues directly related to associated codes. They are unable to detect any issues that require logical thinking.

Manual Testing

Manual testing is essential for a thorough accessibility evaluation. This involves:

Document Review

- Review document structure and navigation.
- Verify proper heading hierarchy.
- Check alternative text for images.
- Test table structure and readability.
- Verify color contrast and font usage.
- Test with screen readers.
- Review links and bookmarks.

Website Review

- Test keyboard navigation.

- Verify focus indicators.
- Check form functionality.
- Test screen reader compatibility.
- Review multimedia content accessibility.
- Check responsive design functionality.
- Verify link descriptions and navigation.

Common Focus Areas

For all content types, manually verify:

- Logical reading order
- Clear headings and structure
- Proper alternative text
- Sufficient color contrast
- Keyboard accessibility
- Clear error messages
- Consistent navigation

User Testing

User testing provides invaluable insights into real-world accessibility challenges. Consider these aspects when conducting user testing:

Planning

- Include users with different disabilities.
- Test with various assistive technologies.
- Consider different experience levels.
- Include local language users.

Testing Areas

Have users test:

- Navigation and orientation
- Content comprehension
- Form completion
- Multimedia interaction
- Document usability
- Overall user experience.

“Remember that accessibility testing is an ongoing process, not a one-time activity. Regular testing helps maintain accessibility standards and ensures content remains accessible as it's updated or modified.