NIC Web Page Accessibility Checklist

Web Content Accessibility Guidelines (WCAG) version 2.1 applies.

1. **Ensure Text is Readable with Sufficient Contrast**

* **Why**: Improves readability for users with visual impairments.
* **How**:
  + Avoid using multiple fonts and do not use a size less than 12 pt.
  + Use a contrast ratio of at least **4.5:1** for normal text and **3:1** for large text.
* **WCAG Criterion**: [1.4.3 Contrast (Minimum)](https://www.w3.org/TR/WCAG21/#contrast-minimum)
* **Helpful Tool**: [**Color Contrast Analyser**](https://www.tpgi.com/color-contrast-checker/)  
  Download URL: https://www.tpgi.com/color-contrast-checker/

1. **Ensure Proper Heading Structure**

* **Why**: Helps users navigate the page effectively using assistive technologies.
* **How**: Use semantic HTML (<h1>, <h2>, etc.) and maintain a logical hierarchy, stepping up heading levels sequentially (i.e., H1, H2, H3, H2, H3, not H1, H3, H5, H2, H4)
* **WCAG Criterion**: [1.3.1 Info and Relationships](https://www.w3.org/TR/WCAG21/#info-and-relationships)

1. **Provide Text Alternatives for Non-Text Content**

* **Why**: Ensures users who rely on screen readers can understand images, charts, or other non-text elements.
* **How**: Use alt attributes for images and text descriptions for charts or infographics.
  + **When to Add Alt Text**: If the image conveys information critical to the content, describe its purpose and meaning.
  + **When to Mark Images as Decorative**: If the image is purely decorative (e.g., background patterns, visual embellishments) and adds no meaningful context, mark it as decorative (i.e., <img … **alt=“”**>). This ensures it is skipped by assistive technologies like screen readers.
* **WCAG Criterion**: [1.1.1 Non-text Content](https://www.w3.org/TR/WCAG21/#non-text-content)
* **Helpful Tool:** [**Alt Text Generator from ASUEdPlus**](https://asuo-ai-labs.streamlit.app/Image_Accessibility)URL: https://asuo-ai-labs.streamlit.app/Image\_Accessibility

1. **Use Descriptive Link Text**

* **Why**: Ensures users understand the purpose of a link without additional context.
* **How**: Replace vague phrases like "Click here" with specific text like "Read our accessibility guide."
* **WCAG Criterion**: [2.4.4 Link Purpose (In Context)](https://www.w3.org/TR/WCAG21/#link-purpose-in-context)

1. **Avoid Using Color Alone to Convey Meaning**

* **Examples**:
  + **Bad**: Milestone 1 Status: 🔴 | Milestone 2 Status: Green Light Emoji
  + **Good**: Milestone 1 Status: ❌ | Milestone 2 Status: ✅
* **Why**: Ensures users with colorblindness or visual impairments can interpret content.
* **How**: Use text labels, patterns, or other visual indicators alongside color coding.
* **WCAG Criterion**: [1.4.1 Use of Color](https://www.w3.org/TR/WCAG21/#use-of-color)

1. **Create Accessible Tables**

* **Why**: Helps users with screen readers understand table data and its relationships.
* **How**: Use proper HTML table markup. Add <th> for headers, associate headers with data using scope or headers attributes, and avoid using tables for layout.
* **WCAG Criterion**: [1.3.1 Info and Relationships](https://www.w3.org/TR/WCAG21/#info-and-relationships)

1. **Provide Accessible Multimedia**

* **Why**: Ensures users who are deaf, hard of hearing, or blind can access audio and video content.
* **How**: Add captions to videos, provide transcripts for audio, and include audio descriptions for video content when necessary.
* **WCAG Criterion**: [1.2.2 Captions (Prerecorded)](https://www.w3.org/TR/WCAG21/#captions-prerecorded), [1.2.5 Audio Description (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-description-prerecorded)

1. **Make All Functionality Accessible by Keyboard**

* **Why**: Allows users who cannot use a mouse to interact with the site.
* **How**: Test keyboard navigation to ensure all interactive elements (e.g., buttons, links) are operable.
* **WCAG Criterion**: [2.1.1 Keyboard](https://www.w3.org/TR/WCAG21/#keyboard)

1. **Provide Clear and Consistent Navigation**

* **Why**: Helps users find and understand content more easily.
* **How**: Use consistent menus and clear headings, and include a site map if possible.
* **WCAG Criterion**: [2.4.1 Bypass Blocks](https://www.w3.org/TR/WCAG21/#bypass-blocks), [3.2.3 Consistent Navigation](https://www.w3.org/TR/WCAG21/#consistent-navigation)

1. **Test with Accessibility Tools and Users**

* **Why**: Identifies issues that automated tools might miss.
* **How**: Use tools like [WebAIM WAVE](https://wave.webaim.org/) (URL: https://wave.webaim.org/) and conduct usability testing with people with disabilities.
* **WCAG Criterion**: [4.1.2 Name, Role, Value](https://www.w3.org/TR/WCAG21/#name-role-value)

## Developer-related Checks

1. **Ensure Responsive Design**

* **Why**: Makes content usable on devices of various screen sizes.
* **How**: Use flexible layouts, scalable text, and test for usability on mobile devices.
* **WCAG Criterion**: [1.4.10 Reflow](https://www.w3.org/TR/WCAG21/#reflow)

1. **Include Skip Navigation Links**

* **Why**: Allows users to bypass repetitive content and go directly to the main section.
* **How**: Add a "Skip to Main Content" link as the first focusable element on the page.
* **WCAG Criterion**: [2.4.1 Bypass Blocks](https://www.w3.org/TR/WCAG21/#bypass-blocks)

1. **Use ARIA Roles and Landmarks Carefully**

* **Why**: Helps assistive technologies identify and navigate content sections.
* **How**: Use ARIA roles like role="banner" or role="navigation" sparingly and only when native HTML is insufficient.
* **WCAG Criterion**: [4.1.2 Name, Role, Value](https://www.w3.org/TR/WCAG21/#name-role-value)

1. **Provide Accessible Forms**

* **Why**: Helps users with assistive technologies complete forms correctly.
* **How**: Use properly labeled form fields, group related elements with <fieldset>, and include clear error messages.
* **WCAG Criterion**: [3.3.2 Labels or Instructions](https://www.w3.org/TR/WCAG21/#labels-or-instructions)

1. **Provide Error Identification and Suggestions**

* **Why**: Ensures users understand and correct mistakes when filling out forms.
* **How**: Display clear error messages and suggest corrections where possible.
* **WCAG Criterion**: [3.3.1 Error Identification](https://www.w3.org/TR/WCAG21/#error-identification), [3.3.3 Error Suggestion](https://www.w3.org/TR/WCAG21/#error-suggestion)