Creating Accessible Layouts

In this module, you'll learn:

- What the characteristics of accessible layouts are.
- Why accessible layouts are important.
- How to ensure layouts are accessible.
- Best practices for accessible layouts.

What are the characteristics of accessible layouts?

The layout of a webpage or application influences how your audience perceives the information presented and can guide them to take specific actions. Accessible layouts are strategically organized, consistent and predictable, logical and intuitive, and clutter-free. They minimize distraction and cognitive load and enable end users to consume the content in multiple meaningful ways.

Why are accessible layouts important?

The layout of your design can greatly influence how much people understand what's on the screen. People with disabilities will use both the visual and nonvisual cues your layout provides to orient themselves.

When you create an accessible layout, you're removing barriers and points of friction so that everyone can participate as much as possible in the design you've created. For instance, **a consistent and predictable layout is one of the primary ways people who are visually impaired orient themselves to a user interface, and it also helps reduce cognitive load across a spectrum of disabilities.** Consistency and predictability eliminate barriers to navigating a layout.

Test your knowledge

Watch the video Clear Layout and Design and choose one or more answers to the following questions.

1. A good layout includes:
    A. Clear headings.
    B. Navigation bars.
    C. Various types of styling.

2. Complex layouts make it easier for people with visual disabilities to find information.
    A. True.
    B. False.

3. Clear and consistent designs make it easier for people with cognitive and learning disabilities to understand page content.
    A. True.
    B. False.

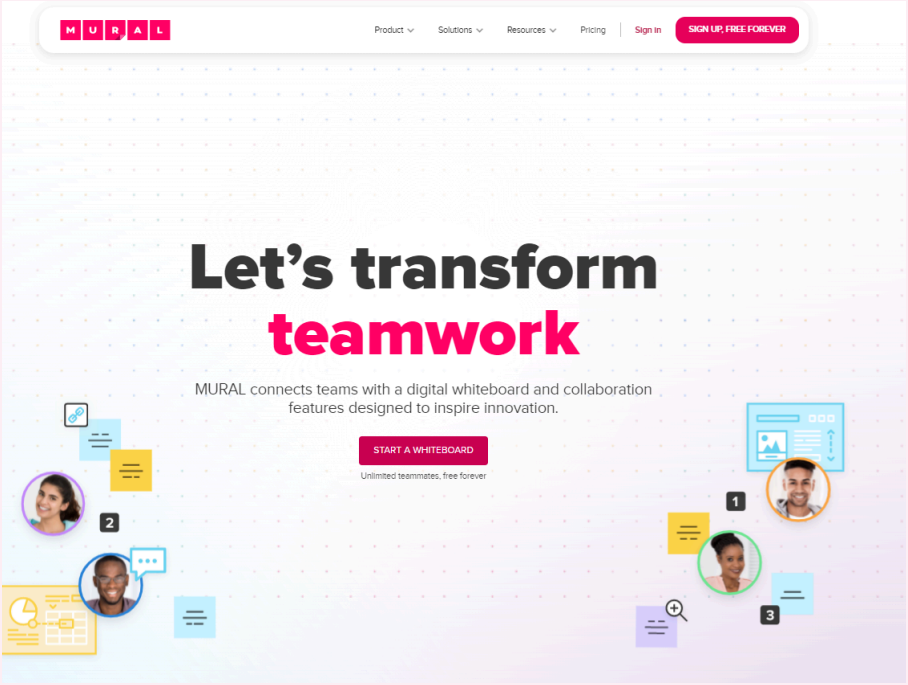
How do I ensure my layouts are accessible?

An accessible design guides an end user through elements on the page using a hierarchy of information, typography, and both visual and non-visual cues. Elements such as font size, whitespace, subject matter, color, and more will inform the strategy you use to create an accessible layout.

Use the following guidelines to make your layout more accessible:

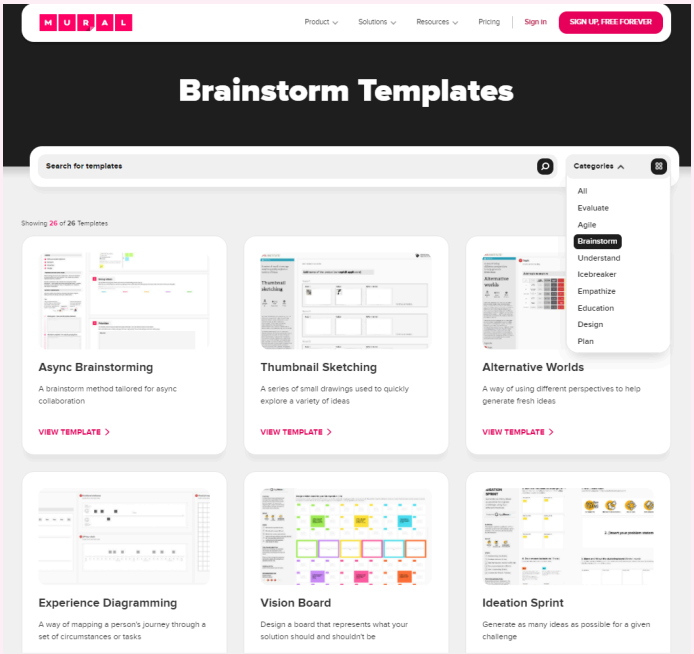
- **Ensure the layout is predictable and consistent.** As mentioned, this type of layout helps an end user orient themselves quickly and easily and prevents them from having to constantly search for information. Those who use the zoom function, for example, know immediately where to its find navigation options.

Example: In this screenshot of the MURAL website homepage, the layout is consistent and predictable in that the same menu options appear on each page no matter where you visit. If you decide to navigate to the Resource Hub, you'll still see the same options at the top in the same place.



- **Ensure end users can access information on the page in multiple ways.** Providing options and flexibility is always in the best interest of accessibility.
    - Using two or more of the following techniques will help you meet this guideline. Visit the Web Content Accessibility Guidelines pages linked below for more information:
        - Linking to all of the pages on the site from the homepage
        - Providing links to navigate to related webpages
        - Providing a Table of Contents
        - Creating bookmarks in PDF documents
        - Providing a site map
        - Providing a search function to help users find content
        - Providing a list of links to all other webpages

Example: In this screenshot of the Brainstorm Templates page on the MURAL website, the layout uses the search function technique as well as a list of links to each type of brainstorm template. The page also includes a list of categories to easily navigate to other types of templates.



- **Establish a content hierarchy or hierarchy of information.** You can determine the content hierarchy by identifying your audience's needs and arranging page components in ways that meet those needs. A content hierarchy includes:

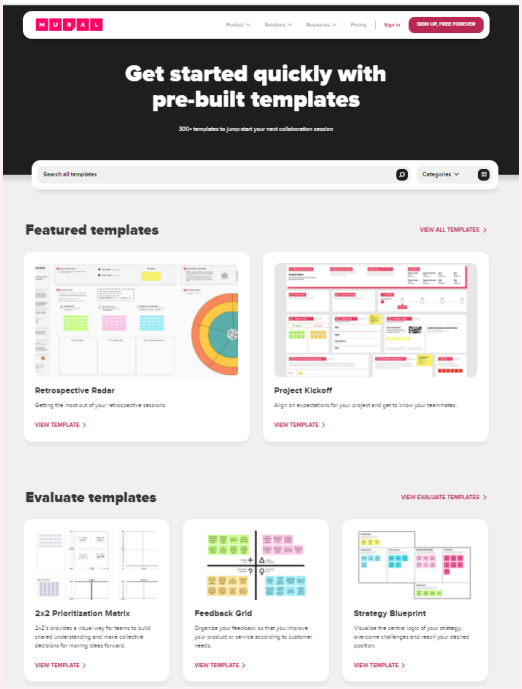
Definition: A **content hierarchy** is a strategic ordering of elements and information that places emphasis on the most important information first. For example, the most important information in a layout may go at the top of the page and the least important at the bottom. Content hierarchy is one of the most effective ways to ensure an end user accomplishes a task.

1. Logical order of information:
    - Structure your design so that end users intuitively understand the order of information and its context. Screen readers and keyboard users should be able to follow a logical flow of elements and reading order. If you read the page aloud, does it make sense?
        - The structure of a layout impacts the focus order and how a user navigates with a keyboard. A logical layout structured by content and language determines the flow of the page and how a keyboard user will navigate the page using focus. The order of language in particular affects the flow of a page. For example, Arabic flows from right to left.
    - Promote one main focus and ensure key information is consumed first. Structuring the layout by order of importance helps readers consume information quickly and effectively.

Example: In this screenshot of the templates page on the MURAL website, the main focus is, well, templates! The layout simply requires the end user to scroll down to search for templates or view featured templates and other types.

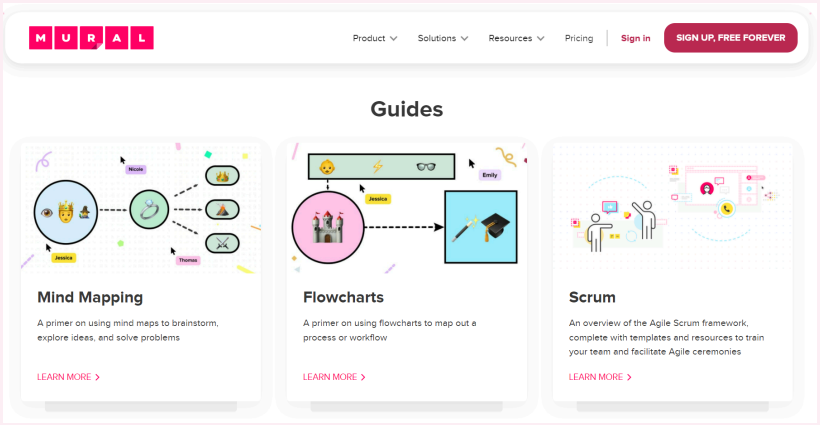
It looks logical, but does it sound logical?

You can test this by visiting the page linked in this box and reading the information on the screen out loud or with a screen reader.



2. Groups of related items:
    - Use whitespace, categories, headings, columns, and images to separate blocks of related content so that readers can understand the meaning and relationship to other content.
    - Headings are particularly useful not just for visual style and organization. They also help screen reader users understand what topic the content is associated with and navigate the page in a way that makes sense.

Example: In this screenshot of the Resource Hub on the MURAL website, the layout makes use of whitespace and groups like information using categories, headings, columns, and images to create a clean, clear design.



3. Designated page regions, including the header, main content, footer, navigation, and search:
    - Defined regions can be identified by assistive technologies and can be easier to scan. Developers will use defined regions to implement markup regions, which are easier for screen reader and keyboard users to navigate.
    - Link clutter can create distracting and confusing layouts.

Example: Designated page regions keep your layout organized and easy to scan.

PAGE HEADER		
NAV	**MAIN CONTENT**	**ASIDE**
PAGE FOOTER		

4. Skip links:
    - Create skip links at the top or near the top of the page. Skip links should be one of the first items a screen reader or keyboard recognizes. They help keyboard navigation become more efficient and prevent end users from unnecessarily navigating through extra links. Note: Skip links aren't always needed in applications.

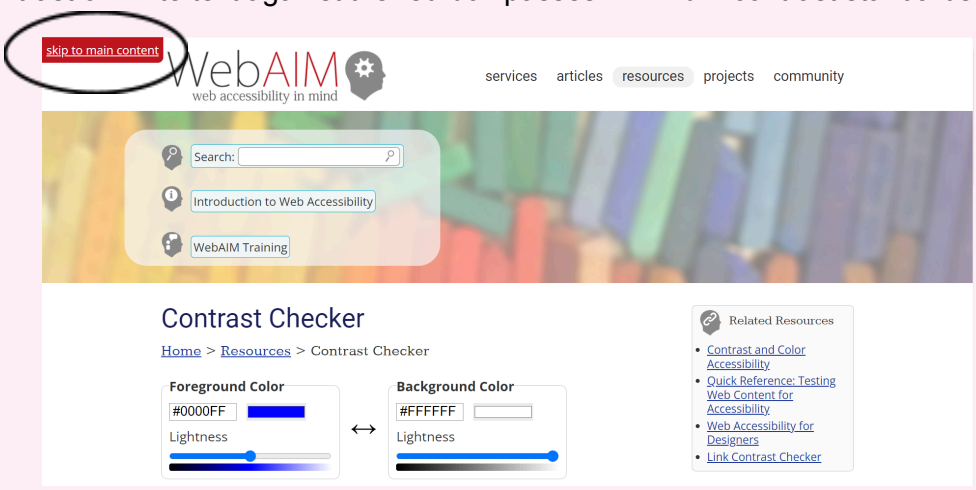
Definition: Skip links are links that, when clicked, jump the end user back to the main content area. Skip links are especially helpful to keyboard users, as they allow them to bypass

menu items and move straight to the main content of the page.
Skip links are also called:

- Skip navigation links.
- Skip navigation.
- Skip main navigation.
- Skip to main content.
- Skip to content.

    - Accessible skip links should:
        - Be hidden by default.
        - Be accessible to keyboard navigation.
        - Become visible when receiving focus.
        - Jump the end user to the main content area.
    - Additional skip links may be necessary on complex pages with a lot of content. It's important to balance this potential need with the need for a clean design. Link clutter can create distracting and confusing layouts.

Example: The skip link, "skip to main content," circled in the screenshot below from the WebAIM website is a good example of where to place a skip link. It skips over the navigation menu and goes straight to the contrast checker, which is the main focus of the page. Note the color contrast of white text against the red box passes minimum contrast standards.



- **Design focus indicators.** Focus indicators enable keyboard and screen reader users to know where they are on the screen as they navigate through web pages and applications.
    - Make sure that the navigation order of focusable elements is both logical and intuitive.

- **Minimize tab stops:**
    - Minimize the number of tab stops by hiding decorative elements and using skip links. Decorative elements should not be visible to

accessibility tools. Excessive tab stops make page navigation frustrating and often more difficult to reach the main content.

Definition: Tab stops are when the focus indicator moves to and focuses on/stops at the next element on the screen, often by using the Tab key.

Best practices, in a nutshell

To create an accessible layout:

- Ensure the layout is predictable and consistent.
- Ensure end users can access information on the page in multiple ways.
- Use a content strategy to inform your layout that includes:
    - Logical order of information.
    - Groups of related information.
    - Designated page regions.
    - Skip links.
- Design focus indicators.
- Minimize tab stops.

When creating your layout, remember to ask yourself this: Can my end users quickly understand the meaning of the page and complete a task? If so, there's a good chance you're on the right track to creating an accessible layout.

Test your knowledge

Choose one or more answers to the following questions.

1. Which choice will inform how you create your layout:
    A. Skip links.
    B. Tab stops.
    C. Content hierarchy.

2. An accessible layout includes.
    A. Lots of skip links.
    B. Groups of related items.
    C. Lots of tab stops.

3. Defined page regions can be identified by assistive technology.
    A. True.
    B. False.

4. What is a content hierarchy?
    A. Another name for a type of layout.
    B. A structured ordering of information and elements on a page.
    C. Content organized by whitespace.