



Intro to Accessible Web Design

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Agenda

- What is accessible design?
- Why does it matter?
- Overview of best practices
- Resources
- Questions

What is accessible web design?

Aims to eliminate barriers

Essential for some,
useful for all



Examples of Assistive Technology

Visual disabilities

- Screen magnifiers
- Screen readers
- Speech recognition software
- Refreshable Braille displays

Hearing disabilities

- Automatic transcription software

Physical disabilities

- Joysticks
- Trackballs
- Head pointers

Also consider ...

- Translation tools
- Digital literacy and general literacy



Legal Considerations

- Section 508 of the Rehabilitation Act – Federal Electronic and Information Technology
- Americans with Disabilities Act
 - Public entities must ensure accessibility in digital as well as physical environments



Digital Access *for all* Idahoans Plan

2.3.2 Goal 2: Improve online accessibility and inclusivity of public resources and services

2.3.2.1 Increase accessibility of state websites and online services

As more government services and daily life (e.g., school, work, healthcare) move online, Idahoans may not be able to use these services, even if they have an active internet connection, due to many barriers, such as having a disability, poor website design, and lack of in-person support. This is especially true in instances where digitally-based services replace or reduce access to more traditional service delivery methods.

Accessible design =
better design



Four Principles of Web Accessibility

Web Content Accessibility Guidelines (WCAG)

Perceivable

- Users must be able to comprehend your content
- Example: See and hear content

Operable

- Users must be able to interact with your content
- Example: Use the computer by typing or by voice

Understandable

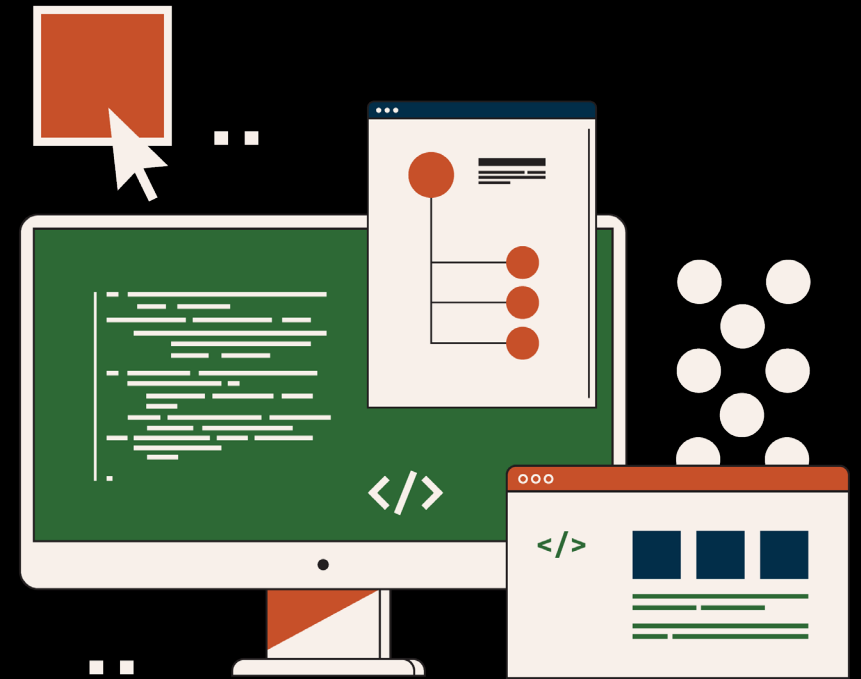
- Users must be able to understand your content.
- Example: Clear and simple language

Robust

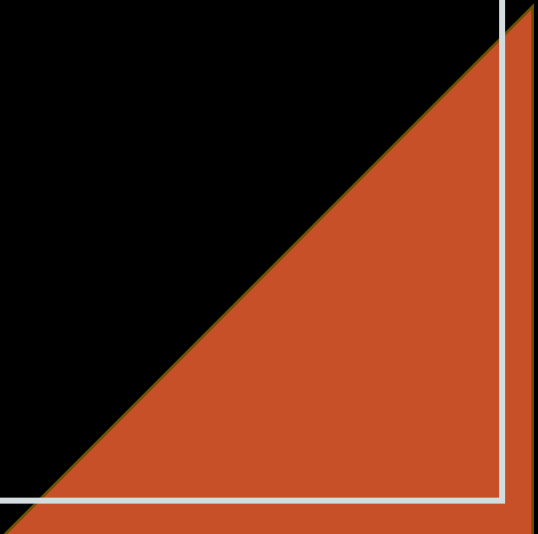
- Your content should be accessible through multiple, evolving technologies.

Best Practices

- Headings / section titles
- Alt text
- Descriptive hyperlinks
- Simple text styling
- Accessible colors



Headings / Section Titles

- Map out a logical structure for content
 - Don't skip heading levels
 - Well-structured headings:
 1. Allow screen readers and other assistive technology to skip from section to section
 2. Improve search-engine optimization
- 
- An orange triangle is located in the bottom right corner of the slide, pointing towards the top right.

H1: My Favorite Recipes

H2: Quick and Easy

H3: Spaghetti

H3: Hamburgers

H3: Tacos

H4: Beef Tacos

H4: Chicken Tacos

H4: Fish Tacos

H2: Some Assembly Required

H3: Tuna Casserole

H3: Lasagna

H4: Vegetable Lasagna

H4: Beef Lasagna

H2: All-In

H3: Crab-Stuffed Filet Mignon with Whiskey Peppercorn Sauce

H3: Sun Dried Tomato and Pine Nut Stuffed Beef Tenderloin

Adding Heading Tags

Text Block

General Design Extras

Add Media

Heading 1 B I [List Icons] [Link Icon] [Table Icon] [Green Arrow Icon]

ABC - A [Font Color Icon] [Link Icon] [Omega Icon] [Undo Icon] [Redo Icon] [Help Icon]

Heading 1

Heading 2

Heading 3

Paragraph

Text Block

General Design Extras

Add Media

b i link b-quote del ins img ul ol li code more close tags A:

```
<h1>Heading 1</h1>  
<h2>Heading 2</h2>  
<h3>Heading 3</h3>  
<h4>Heading 4</h4>  
<h5>Heading 5</h5>  
<h6>Heading 6</h6>
```

Alt text

- Several functions:
 - Screen readers announce text in place of images
 - Browsers present alt text if an image fails to load
 - Search engines use alt text to assess pages
- Best practices:
 - Accurate
 - Relevant (context matters)
 - Succinct
 - Not redundant
 - Don't say "image of" / "photo of"
 - Leave blank if purely decorative

Example of Alt Text with Various Context



- **Alt text with no context:**
 - A mostly empty stadium.
- **Alt text on a page about recent turnout for track tryouts:**
 - Harvard Stadium with two lone runners bounding up the steps
- **Alt Text on a page about renovation projects:**
 - Harvard Stadium with cracked concrete pillars.

Example image and text from Harvard University

On a related note...

- Avoid text in images
 - Bad user experience for those who need to enlarge, transform, or translate text
 - Bad user experience for those using a text-only browser
 - Harder to update/maintain
- Be thoughtful in designing charts, infographics, diagrams, maps, etc.

Hyperlinks

- Use clear, descriptive, concise link text
- Avoid vague text like "Click here" and "Read more"
- Ensure links with different destinations do not have the same link text

Text Styling

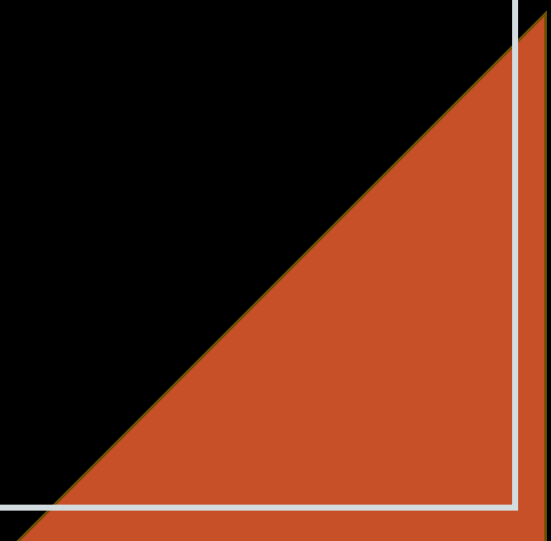
- Leave your text plain
- Use fonts that are commonly available – this helps ensures consistency across devices
- Use bold and italics sparingly
- Do not underline text

Accessible Colors

- Don't use color alone to convey meaning
- Check contrast – there are many online tools available

This is easy to read

This is not



Measuring Color Contrast

WCAG Minimum Requirements

- Regular Text
 - 4.5:1 (AA)
 - 7:1 (AAA)
- Large Text
 - 3:1 (AA)
 - 4.5:1 (AAA)
- Graphical Objects & UI Components
 - 3:1
- Hyperlinked Text
 - Link text to body text 3:1

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground Color: #FFFFFF
Background Color: #002E49

Lightness

Contrast Ratio: 14.12:1

[permalink](#)

Normal Text

WCAG AA: Pass
WCAG AAA: Pass

The five boxing wizards jump quickly.

Large Text

WCAG AA: Pass
WCAG AAA: Pass

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: Pass

Text Input

[Webaim.org/resources/contrastchecker](https://webaim.org/resources/contrastchecker)

Color contrast



Addresses glare on devices

Alt text



Search-engine optimization

Avoiding text
as images



Better for social media
algorithms

The Canva Dilemma

- Choose templates thoughtfully
 - Here are a few to avoid
- Plan to do a bit of extra work to ensure Canva creations are accessible



- WebAIM
- WAVE tool
- Boise State University's accessibility resources and guides

Additional
Resources

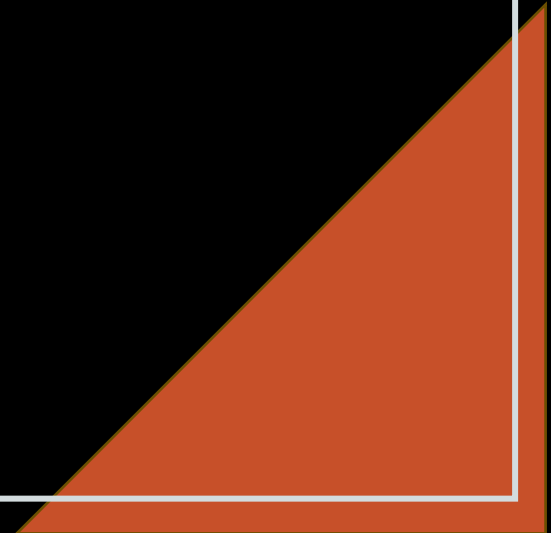
Computing and Phone Accessibility 101

Tuesday, September 19

10:30 a.m. MDT

Zoom

University of Idaho Extension's Digital Economy Program
and the Idaho Assistive Technology Project



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Questions?

