



Website Accessibility: The Internet is for Everyone

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Website developer, graphics guru, Drupal diva, broke technophile, and Star Wars fan (by default). Carie has been focused professionally on Drupal since 2009. In her role as a Senior Front-End Developer at Mediacurrent, she thrives on the challenge of turning a static mock-up into a responsive, live site that is both beautiful and functional.

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Accessibility Facts

What is website **accessibility** anyway?

Web accessibility refers to the inclusive practice of removing barriers that prevent interaction with, or access to websites, by people with disabilities. When sites are correctly designed, developed and edited, all users have equal access to information and functionality.

- Wikipedia



Who is website accessibility for?

EVERYONE!!!

57 million Americans (~20%) have some type of DISABILITY

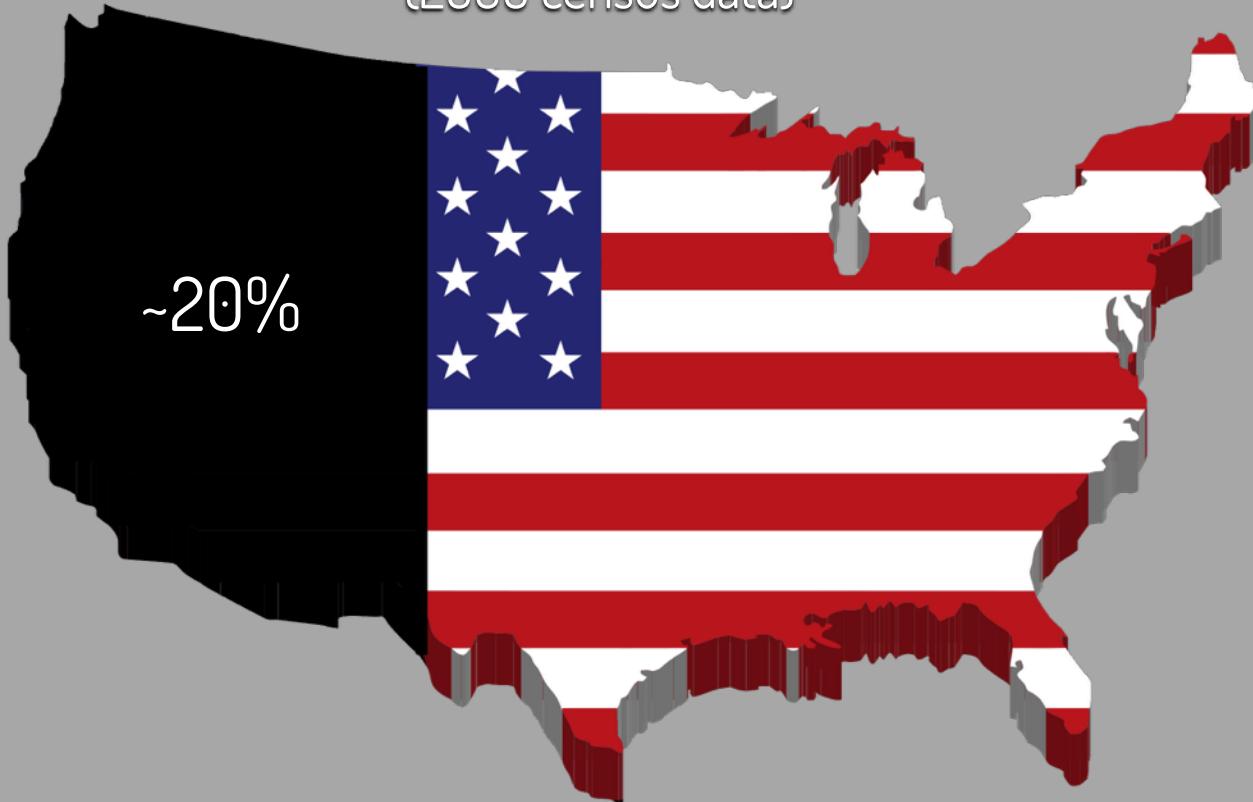
- Visual impairments
- Hearing impairments
- Cognitive impairments
- Mobility impairments
- Temporary Disabilities
- Seizure Disorders
- Aging population
- Search engine bots

US Population = 282,000,000

(2000 census data)



Total Disabled Population = 57,000,000
(2000 census data)



Severely Disabled Population = 28,000,000
(2000 census data)



State of Maryland + DC = 5,870,000
(2000 census data)



Why should I care about website **accessibility**?

Karma Points - Everyone should have full access to cat videos & ridiculous internet memes...as well as all the useful information

Smart Thing to Do - Opens your site to a wider audience, good for SEO/search bots/Google ranking, etc

It is the Law* - Federal/state agencies, airlines, Section 504 & 508, Americans with Disabilities Act (ADA) 2018



We are ALL just
Temporarily
Able-bodied

②

Easy Accessibility Rules



What can I do about
website accessibility?

Rule #1: Don't Freak Out



Rule #2: Learn a Few Things

Rule #3: Build from the Ground Up

Rule #4: Use the Right Tools



Do or do not.
There is no try.

Rule #5: Try, Try Again

③

Accessibility Guidelines

The screenshot shows the official website of the White House under President Barack Obama. At the top, there's a navigation bar with links to 'BRIEFING ROOM', 'ISSUES', 'THE ADMINISTRATION', 'PARTICIPATE', '1600 PENN', 'Contact Us', and 'Get Email Updates'. A search bar is also present.

A prominent feature is a line graph titled 'The Unemployment Rate Is the Lowest It's Been in 8 Years'. The graph tracks the unemployment rate from 2008 to 2016, starting at approximately 9% in 2008 and ending at 4.9% in January 2016. The graph includes a callout pointing to the final data point.

Below the graph, a text box states: 'In January, the unemployment rate fell below 5% for the first time in 8 years as our businesses extended the longest streak of job growth on record.' A 'LEARN MORE' button is provided.

Two news cards are displayed below the graph:

- ZIKA VIRUS RESPONSE**: 'Here's what you need to know about the Zika virus.'
- NATIONAL PRAYER BREAKFAST**: 'Watch President Obama's speech on protecting religious liberty for all.'

At the bottom, there's a section titled 'GET PLUGGED IN' featuring three small video thumbnail images of President Obama in various settings.

Structure

- Plan out heading & page structure
- Add page titles for browser tabs
- Add a 'skip to content' link
- The heading hierarchy is meaningful
- Try not to skip heading levels
- Use a markup validator tool



Color & Contrast

- Use colors on the opposite ends of the color spectrum
- Be careful with light shades
- Do not rely on color alone to convey info to your users
- Use solid color backgrounds
- Use color/contrast WCAG standard testing tools

The screenshot shows the homepage of the New York State Senate website (www.nysenate.gov). At the top, there's a search bar and a "FIND YOUR SENATOR" button. Below the header, a featured story about a bill to end the GEA for the 2016-17 school year is displayed, accompanied by a photo of students in a classroom. A "Black History Month" banner is also visible. The page includes sections for recent updates and press releases.

Find your Senator and share your views on important issues.

FEATURED STORY

Senate Passes Bill To End The GEA for the 2016-17 School Year

Education, Gap Elimination Adjustment (GEA)

February is Black History Month

RECENT UPDATES

PRESS RELEASE February 02, 2016

Senate Passes Bill to Increase Community Awareness of Sex Offender Placements

PRESS RELEASE February 01, 2016

Senate Passes Bill Legalizing Mixed Martial Arts in New York

MIXED MARTIAL ARTS, TOURISM

CORRECTIONAL, CRIME, OPWDD

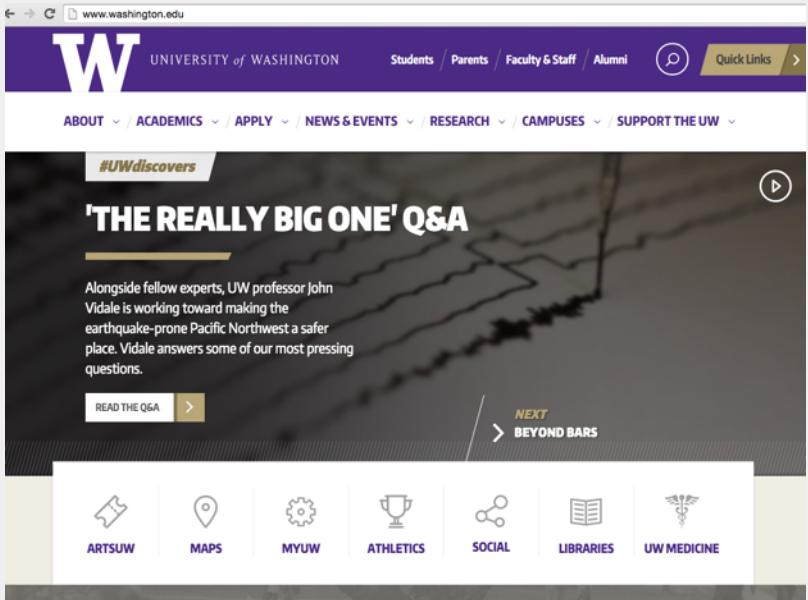
Fonts

- Use a limited number of fonts & provide alternative fonts
- Specify the font size in terms of %, em or a relative value
- Use adequate font size - 10pt min
- Limit the use of ALL CAPS
- Limit the use of font variations

The screenshot shows the homepage of the WEBAXE website. At the top, there's a navigation bar with links for 'Skip to content' and 'Skip to sidebar'. The main header features the word 'WEBAXE' in large, bold, black letters. Below it, a subtitle reads 'blog and podcast on web accessibility'. There are two buttons: 'ABOUT WEB AXE' and 'ABOUT WEB ACCESSIBILITY'. A date 'JANUARY 23, 2016' is followed by a post title 'Color Contrast Tools'. The post content discusses tools for color contrast and includes a list of links. To the right of the post are several sidebar modules: 'SOCIAL MEDIA' with icons for RSS, Twitter, and Facebook; 'SEARCH' with a search bar; 'RECENT POSTS' listing 'Color Contrast Tools', 'Recent Web Accessibility', 'Lawsuits', 'Accessibility Jobs, November 2015', 'Upcoming Accessibility Events', 'Infinite Scrolling and Accessibility (It's Usually Bad)', and 'CheckMyColors'; 'ARCHIVES' listing months from January 2016 down to July 2015; and a 'TAG CLOUD' section with various tags like 'assistive technology', 'fixing alt', 'administrative', etc.

Links

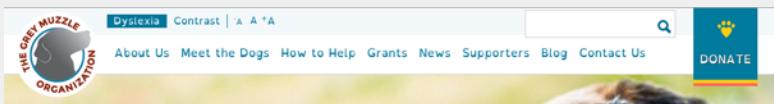
- Differentiate links with theme elements besides color
- Use descriptive link text
- Do not use images for links
- Avoid super short or long links
- Design link focus indicators
- Ensure link text makes sense on its own



Media

- Use animation, video & audio carefully & selectively
- Avoid flashing/strobing content
- Provide alt ways to access content
- USE ALT TAGS! Be accurate, be succinct, avoid being redundant, avoid “image of” phrases, & use empty alt attributes for decorative images

The screenshot shows the WAVE web accessibility evaluation tool interface. The URL is wave.webaim.org/report/l/graymuzzle.org. The main content area displays the website for "The Grey Muzzle Organization". The WAVE report sidebar on the left lists detected issues: 24 Errors, 2 Alerts, 24 Structural Elements, 24 HTMLs and ARIA, and 2 Contrast Errors. The main content includes a header with a dog logo, a navigation bar with links like "About Us", "Meet the Dogs", "How to Help", etc., and a "DONATE" button. Below the header is a large image of a dog's face. The "Our Mission" section follows, featuring a "Grey Muzzle Supporter Thank You" video thumbnail.



Misc Features

- Accessible menus
- Dyslexia font
- Contrast theme
- Font resizing buttons
- Visual focus indicators
- Sitemap
- Accessibility statement

A large, diverse crowd of people, mostly men, are gathered indoors, likely at a conference. They are all smiling and waving their hands in the air. Many people are wearing colorful feathered leis around their necks. In the foreground, a man in a blue shirt and pink feathered lei is holding a microphone and gesturing with his hands. The background is filled with more people, creating a dense, celebratory atmosphere.

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Drupal All the Things



Great News!
D8 Does a Lot of Heavy Lifting

Accessibility in D8

- **More Semantic** - more HTML5 elements and WAI-ARIA landmarks, live regions, roles & properties
- **Aural Alerts** - `Drupal.announce()` is now part of D8 now users can confidently provide timely messages
- **Controlled Tab Order** - The TabbingManager is a guide to both non-visual users and non-mouse users to access the elements on the page in a logical order
- **Hidden/Invisible/On-focus** - alternative to CSS `display:none` built in



Accessibility in D8 (cont)

- **Fieldsets** - for radios & checkboxes now in the Form API. Also used in the advanced search
- **jQuery UI** - jQuery UI is now delivering Drupal's autocomplete and modal dialog in Views UI
- **Alt Text** - Alternative text is now required by default
- **Accessible Inline Form Errors** - Drupal forms have become more accessible with the addition of accessible inline form errors as an optional experimental Core module



Extend Drupal Accessibility

Accessible Forms (D7)

https://www.drupal.org/project/accessible_forms

This is a simple Drupal 7 module for adding form attributes for improved accessibility.

Includes: required attribute to required fields,
required label to required fields (instead of asterix *),
aria-invalid to form fields with errors



Accessible Mega Menu (D7)

https://www.drupal.org/project/accessible_mega_menu

This module provides integration with the Accessible Mega Menu jQuery plugin. An Accessible Mega Menu block is created for each menu. Accessible Mega Menu is an open source jQuery plugin provided by Adobe Accessibility (<https://github.com/adobe-accessibility>).



Add to Any (D7 & D8)

<https://www.drupal.org/project/addtoany>

Share buttons for Drupal including the AddToAny universal share button, Facebook, Twitter, Google+, Pinterest, WhatsApp and many more.



Block ARIA Landmark Roles (D7)

https://www.drupal.org/project/block_aria_landmark_roles

Inspired by Block Class, this module adds additional elements to the block configuration forms that allow users to assign a ARIA landmark role to a block.



High contrast (D7)

https://www.drupal.org/project/high_contrast

Provides a quick solution to allow the user to switch between the active theme and a high contrast version of it.



HTML Tidy (D7)

<https://www.drupal.org/project/htmltidy>

This module tidies Drupal's HTML output with HTML Tidy by optionally sanitizing it when it is saved or when it is displayed, like a traditional input formatter. Missing and mis-ordered tag components are replaced and reordered automatically so that user input doesn't break site structure with open tags and the like.



Readability Analyzer (D7)

<https://www.drupal.org/project/readability>

This module is designed to help copywriters and editors develop more consistently readable content across a Drupal site. It performs five popular automated readability tests that provide a grade level equivalency of the difficulty of a page's readability. It enables you to set a target grade range for your site's content.



Switch Theme (D7)

<https://www.drupal.org/project/switchtheme>

Adds a block to allow users to switch between enabled themes. Themes can be given 'user friendly' names and access can be controlled by user role. Switchtheme provides optional support for Browscap module to switch themes based on the browser of a visitor.



Text Resize (D7 & D8)

https://www.drupal.org/project/text_resize

The Text Resize module provides your end-users with a block that can be used to quickly change the font size of text on your Drupal site. This module is primarily focused on increasing the accessibility of your pages, by helping visually-impaired users to adjust the text size so that it is most comfortable for their eyesight.



The background of the image shows a stack of books on shelves. In the foreground, an open book is visible, showing its pages. The books have various colored covers, including brown, blue, and green.

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Accessibility Resources

Accessibility Resources - General

- **Types of Disabilities** - <https://www.w3.org/WAI/intro/people-use-web/diversity>
- **Accessibility Law** - <http://webaim.org/articles/laws/usa>
- **Understanding Web Accessibility** - <http://uiaccess.com/understanding.html>
- **User Stories** - <https://www.w3.org/WAI/intro/people-use-web/stories>
- **Design/Theme Specific** - <http://alistapart.com/topic/accessibility>

Accessibility Resources - Guidelines & Checklists

- **WCAG 2.0** - <https://www.w3.org/TR/WCAG20/#guidelines>
- **WCAG 2.0 Checklist** - <http://webaim.org/standards/wcag/checklist>
- **Section 508** - <http://www.section508.gov>
- **Section 508 Checklist** - <http://webaim.org/standards/508/checklist>
- **ATAG** - <https://www.w3.org/WAI/intro/atag.php>
- **UAAG** - <https://www.w3.org/WAI/intro/uaag.php>
- **General checklist** - <http://allyproject.com/checklist.html>

Accessibility Resources - Tools

- **Overview of Tools** - <http://webaim.org/articles/tools>
- **General Tool** - <http://pally.org>
- **Visualization Toolkit** - <http://khan.github.io/totally>
- **Color Blindness Simulator** - <http://www.color-blindness.com/coblis-color-blindness-simulator>
- **Color Safe** - <http://colorsafe.co>
- **VoiceOver** - <http://webaim.org/articles/voiceover>
- **Wave** - <http://wave.webaim.org>

Accessibility Resources - Drupal

- **Accessibility Statement** - <https://www.drupal.org/about/features/accessibility>
- **Accessibility in D8** - <https://www.drupal.org/node/2004876>
- **Front-end accessibility** - <https://www.drupal.org/node/464472>
- **Back-end accessibility** - <https://www.drupal.org/node/1637990>
- **Site builder accessibility** - <https://www.drupal.org/node/394094>
- **Accessible modules** - <https://www.drupal.org/node/394252>



The background of the slide features a wide-angle photograph of a landscape at either sunrise or sunset. The sky is filled with dramatic, colorful clouds ranging from deep blues and purples to bright orange and yellow near the horizon. The sun itself is visible on the left side, partially obscured by clouds, casting a warm glow across the scene. In the foreground, there's a flat, light-colored field that stretches towards the horizon.

Questions/Comments?

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