

# The Ultimate Guide to Website Accessibility

The tools, tips, and resources you need to create an ADA compliant website that can be used by people of all abilities.

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**noble intent studio**

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# Introduction

## 01

**How Achieving Accessibility  
for All Users Will Result in  
ADA Compliance**

**The History of the Internet  
and ADA Regulations**

**The Current State of Lawsuits**

# How Achieving Accessibility for All Users Will Result in ADA Compliance

If your website isn't fully accessible yet, you're not alone. Sources estimate **only 2% of the internet is fully accessible**.

In the past, accessibility and ADA compliance was only a concern for government agencies and multinational corporations, but it is now becoming a hot topic for anyone who owns and operates a website.

As you'll soon learn, the regulations that dictate ADA compliance are moving targets, and compliance varies by country and region.

We encourage you to shift your thinking away from avoiding lawsuits by adhering to ADA regulations, but rather, toward striving for website accessibility for all users — which will ultimately result in ADA compliance both now and in the future.

Implementing best practices for more inclusive websites is easier than you'd think.

## In this ebook, you'll learn:



- Why website accessibility matters and the impact it has on your bottom line
- How to design and build inclusive websites to provide a better experience for all of your customers
- How to implement simple changes to create websites that can be accessed by people of all abilities, and ensure usability for assistive technologies

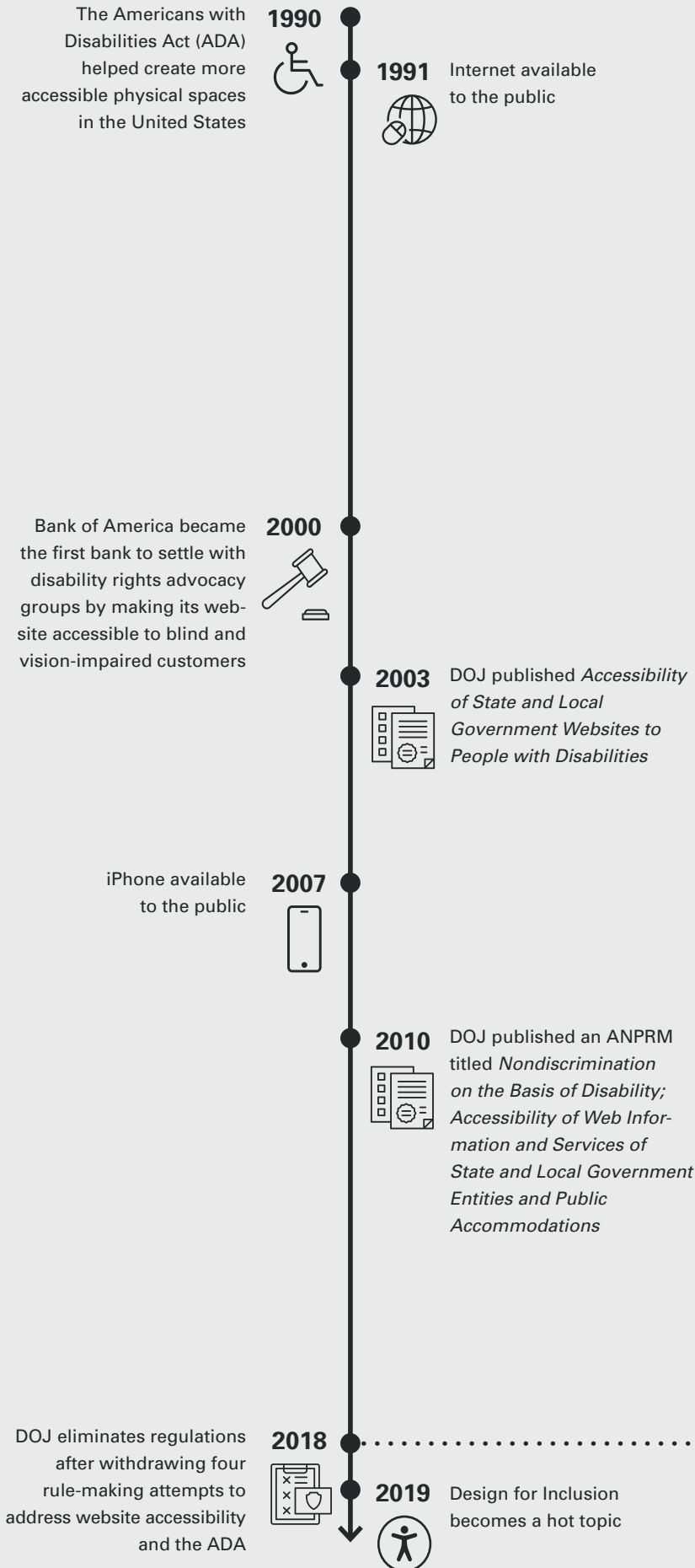
Let's help create a more inclusive internet.

# The History of the Internet and ADA Regulations

It's been less than 30 years since the internet was made available to the public in 1991. Now, more people are accessing the internet and websites on a wider variety of devices than ever before, **website users are more diverse than at any other point in the World Wide Web's history.**

Throughout the last decade, marketers have been tasked with making websites that are accessible to users on a wide variety of devices — such as smartphones and tablets — a departure from the desktop-only sites created in the first fifteen years of internet history.

Now, with users of all ages and abilities using the internet, we need to create more accessible websites that can be used by anyone, regardless of their ability.



## Regulations & Milestones

Over the years, the DOJ has made attempts to regulate website accessibility.

In 2018 the DOJ stated that websites not in compliance with technical standards may still be considered accessible.

Essentially, in the U.S., there are no current laws to abide by, only guidelines. This hasn't stopped lawsuits from occurring.

- “Absent the adoption of specific
- technical requirements for websites
- through rule-making, public accom-
- modations have flexibility in how
- to comply with the ADA's general
- requirements of non-discrimination
- and effective communication.
- 
- Accordingly, noncompliance with a
- voluntary technical standard for web-
- site accessibility does not necessarily
- indicate noncompliance with the ADA.”

## The Current State of Lawsuits

[Usablenet.com](https://www.usablenet.com) tracked 2,285 website lawsuits in 2018, and found lawsuits were up 181 percent over 2017.

Their mid-year report in July 2019 showed the number of lawsuits would likely be similar in 2019 as in 2018 — around 2,000 total. The total amount is slightly inflated since 25% of all ADA lawsuits so far in 2019 name the defendant for at least the second time. Meaning if you're sued once, you're likely to be sued again if you don't take action.

The retail industry is the top industry to be targeted, along with food service, travel and hospitality, banking and financial industries, and more. As of 2019, lawsuits are only occurring in a handful of states, with 22% of cases in California, 21% in New York, 12% in Florida, 4% in New Jersey, and 4% in Texas.

Whether your priority is brand reputation, search engine optimization, conversions, revenue, customer service, or simply not being at risk of lawsuits — designing for accessibility is a must.

This guide will walk you through what accessibility means for business leaders and marketers, with tips and best practices for creating more inclusive websites.



# Why Does Accessibility Matter?

## 02

Disability Statistics

Business Results

## Disability Statistics

Making your website accessible means making it better for everyone. As humans, we are all only temporarily able-bodied. At one point or another, we may all experience a disability — whether that's a broken arm, vision loss, or permanent blindness.

There is a large and growing population with various disabilities, both temporary and permanent, that can make interacting with websites a challenge:

- The World Health Organization estimates there are around 1.3 billion people with visual impairments, 36 million of which are considered blind.
- Color blindness affects approximately every 1 in 12 men (8%) and 1 in every 200 women (0.5%).
- An estimated 15% of people have dyslexia. That means more than 30 million adults in the United States have trouble reading.
- Cognitive disabilities affect 4.8% of people in the United States.
- The world's population is aging, with people aged 60+ projected to be at 1.4 billion by 2030 — or more than 16% of the population.
- Situational disabilities, such as a broken arm or occupied hands, also contribute to people's ability to interact with websites.

**Accessibility is how we address all of these challenges.**

When a website's content is available to everyone and can be used by anyone — regardless of their ability — website accessibility is achieved.

## Business Results

Website strategy, design, and development shouldn't be driven solely by laws. By building accessible websites, we ensure our websites are usable by the broadest number of people. More than the ethical benefits, building an accessible website also drives business success.

The ROD Group estimates the world's disabled population controls more than \$8 trillion in annual disposable income. **If you don't make your website accessible to everyone, you're leaving money on the table.**



"With an estimated population of 1.3 billion, people with disabilities (PWD) constitute an emerging market the size of China. Their Friends and Family add another 2.3 billion potential consumers who act on their emotional connection to PWD. Together, they control over \$8 trillion in annual disposable income. The aging Boomer population is adding to the number of PWD daily."

Source: Rod Group

It is no longer acceptable to build inaccessible websites. We have the tools, resources, and technology to make websites available to people that rely on assistive technology or those living with limited access to technology and data.

**A focus on accessibility can improve everyone's user experience, regardless of ability.**

# More on the ADA and the Guidelines

## 03

The ADA

The Guidelines

## The ADA

The Federal Americans with Disabilities Act (ADA) is often associated with physical locations and accommodations certain businesses must make for people with disabilities such as wheelchair accessibility, access to service animals, and the use of braille for customers who are visually-impaired.

**However, the ADA also extends to websites, requiring businesses to ensure website content is accessible to all users.** Website content should be accessible to visually-impaired users who navigate the web by voice, screen readers, and other assistive technologies.

Businesses that fall under ADA Title I, those that operate twenty or more weeks per year with at least 15 full-time employees, or Title III, those that fall under the category of “public accommodation,” such as hotels, banks, and public transportation, are required to comply with a website that offers “reasonable accessibility” to people with disabilities.

In the U.S., there are no enforceable ADA legal standards to follow for website accessibility, apart from those in place for government websites.



“As far as websites go, there is no federally codified direction on how to make websites comply,” said David Engelhardt, a New York City-based small business attorney. “We only know that the ADA does apply to websites based on cases, such as *Gil v. Winn-Dixie*.”

*Source: [Courthousenews.com](https://www.courthousenews.com)*

However, there are many guidelines available that outline how to best provide an accessible experience for users.

The World Wide Web Consortium (W3C) is an international community that develops Web standards such as the Web Content Accessibility Guidelines ([WCAG](https://www.w3.org/WAI/standards-guidelines/wcag/)). The most recent version, 2.1, was published mid-2018.

## The Guidelines

The Web Content Accessibility Guidelines (WCAG) make a wide range of recommendations for making the Web more accessible for people with disabilities, “including accommodations for blindness and low vision, deafness and hearing loss, limited movement, speech disabilities, photo-sensitivity, and combinations of these, and some accommodation for learning disabilities and cognitive limitations; but will not address every user need for people with these disabilities.”

Many tools exist to help you assess and test your website. These tools help you demonstrate that your business has made a good-faith effort toward compliance and will help your business avoid the penalties associated with the ADA, including lawsuits, financial penalties, and loss of brand reputation.

Unfortunately, some lawyers and website agencies are using fear tactics to scare business owners into settling in court or paying for website updates that may not be necessary. These methods only confuse what ADA compliance truly means and do nothing to aid or improve website experiences for disabled users.

**Our goal is to inform you about what you need to focus on to ensure compliance for the sake of the user and to protect yourself from lawsuits**, equipping you to understand your options as a business owner and not be scared into paying for costly website updates that may not be needed.

# The Current State of Website Accessibility

# 04

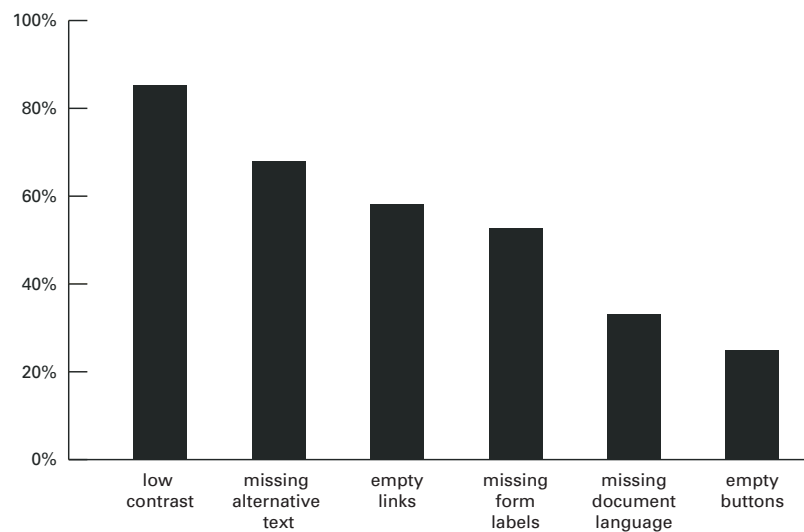


## Accessibility is a Fundamental Aspect of the Internet's Power.

From accessing information to making purchasing decisions, if your website isn't accessible to users, you're creating a bad experience for your customers and losing out on business.

A [study conducted by WebAim](#) and updated in August of 2019 regarding website accessibility showed that out of the top 1 million home pages on the internet, 98% had accessibility failures.

Most common WCAG failures (% of home pages)



Why? Many business leaders, as well as website designers and developers, don't know where to start when it comes to accessibility.

A common misconception is that optimizing your website for accessibility is difficult. The reality is, **small changes to your website may make a big difference in ensuring accessibility and compliance.**

# What are Assistive Technologies

# 05

## Assistive technologies are designed to improve the functional capabilities of a person.

Assistive technologies could include something as simple and commonplace as eyeglasses. Some assistive technologies enable disabled people to use different devices to browse the internet.

Online, and as they relate to website accessibility, one of the most common and essential assistive technologies is the screen reader. Screen reader software translates website content seen on the screen into audio, allowing low-vision and blind users to access that content.

### Common Screen Readers

There are a variety of first- and third-party screen reader applications. Most operating systems have screen reader software built-in.



Some of the more popular screen readers include:

- JAWS from Freedom Scientific
- NVDA from NV Access
- Window-Eyes from GW Micro, Inc.
- VoiceOver on Apple devices
- Narrator on Windows devices
- TalkBack on Android devices

Besides screen readers, non-blind but low-vision users can employ assistive technologies, such as zoom settings to increase the text size on the screen, or dark and high contrast modes of many operating systems, to improve contrast and clarity of content.

Users can utilize hardware, such as screen enlargers, that help magnify content on screen without the use of software. For users with limited mobility or other physical disabilities, pointing devices may be used to enable better interactions with devices.

More recently, assistive technologies have jumped into the mainstream with the help of voice assistant-enabled devices such as Amazon Alexa, Apple's Siri, and Google Assistant.

People of all abilities are using voice assistants to do a number of tasks online. **By creating accessible websites, we can empower users to interact with websites in the way they prefer.**

# Changes You Can Implement for Accessibility

## 06

**Design: Designing with  
Accessibility in Mind**

**Develop: Make Your Website  
Code More Accessible**

## Ensure all users can engage with the content on your website in a meaningful way.

There are many different aspects of web design (how your website looks aesthetically) and web development (how your website is coded) that will help you achieve accessibility.

You can begin by checking the current state of your website's compliance by using WAVE's Web Accessibility Tool. Just type in your website address at [wave.webaim.org](https://wave.webaim.org), and this tool will begin to compile a report with any issues you might have.

**TRY IT OUT NOW →**

## Design: Designing with Accessibility in Mind

### 1. Keep color contrast top-of-mind.

For visually-impaired users — including those who are color blind (1 in 12 men, and 1 in 200 women, or about 4.5% of the entire population) — ensuring appropriate color contrast is the number one thing you can do to ensure legibility and compliance.

People with low-vision will have a tough time distinguishing between elements of various colors, including reading the text, if the color contrast is too low.

Use [WebAIM's Contrast Checker](#) to ensure the color of your foreground elements has enough contrast against the background elements.

TRY IT OUT NOW →

A good goal to aim for is WCAG 2 level AA.

WCAG 2 level AA requires a contrast ratio of at least 4.5:1 for normal text and 3:1 for large text, and a contrast ratio of at least 3:1 for graphics and user interface components (such as form input borders).

Large text is defined as 14 point (typically 18.66px) and bold or larger, or 18 point (typically 24px) or larger.



WCAG AA: **Fail**  
WCAG AAA: **Fail**

Does this element have enough color contrast?



WCAG AA: **Pass**  
WCAG AAA: **Pass**

Does this element have enough color contrast?



## 2. Use real text: Don't use image-based text, even within PDFs.

While you or your graphic designer may sometimes want to use those fancy fonts that aren't supported on the web, resist the urge to make them into an image and put them on your website. Although this allows for high levels of visual customization, using real, coded text on your website has a number of benefits when it comes to accessibility (and SEO).

Assistive technologies such as screen readers cannot "see" text that is within images or PDFs (neither can Google). Screen readers can only access the underlying code of your website, not the text in an image.

So, users utilizing screen readers will not be able to access any text that is within an image. Plus, screen enlargers and zoom settings often yield blurry, unreadable images.

In some circumstances, PDFs may be necessary for large volumes of information, but try to minimize their use. When needed, you can create a tagged PDF, which provides accessibility within the PDF.

Alternatively, you could provide a statement adjacent to the PDF stating to contact you if a text-based version is necessary. Think of this in the same way you might handle an accommodation request at your physical location.

Real text rather than image-based text or PDF files will also load quickly over poor internet connections, so users without access to fast internet connections will be able to use your website more efficiently as well.

**With all these reasons in mind, always avoid using image-based text in any digital marketing application, whether that's your on website, in email marketing, or social media marketing.**

### 3. Create a consistent, organized layout.

Though important for users of all abilities, for both assistive technologies and users with disabilities such as dyslexia, the layout of your website and the hierarchy of information are especially important to usability.

Delineate menus, links, and buttons from one another to make them easily navigated throughout the entire site.

**Establishing hierarchy through layout, text size, and color is important for users of all abilities. Your website should be easily scanned and read.**

For users with both cognitive and situational disabilities (such as being in a hurry or being distracted), reading and understanding long blocks of text isn't easy. Hierarchy helps users quickly read and understand the content on a website.

## 4. Consider the size, line spacing, and justification of your text.

### Size

Use a minimum font size of 14px. Always ensure your text is large enough for people to easily read, regardless of the device they are using to navigate your website.

### Line Spacing

Finding the balance between enough space between lines of text, but not too much, is an important design consideration.

“Many people with cognitive disabilities have trouble tracking lines of text when a block of text is single-spaced. Providing spacing between 1.5 to 2 allows them to start a new line more easily once they have finished the previous one.”

Source: W3G states

### Justification

Design considerations such as using left-justified text for large sections of copy can also aid in usability.

Readers rely on visual cues to make sense of where they are on a page or screen. One of the most important cues is the start of a new line, which acts as an anchor for the eye as we're reading or skimming content. With left-justified text, that anchor lives at the left edge of the content block. Left-justification is one of the best ways to keep long blocks of copy readable.

Refrain from using fully justified text as that produces large gaps of white space that create hurdles for people with cognitive disabilities.

## 5. Make sure all links and buttons are usable.

When it comes to interacting with your website, ensure your users can use all links and buttons.

Make text links distinguishable from surrounding text with underlines. Solely relying on color or bold weights for link styling makes it very difficult for colorblind users to see them.

Ensure all buttons or clickable elements are large enough for all users, including those that may not have a steady hand, or who may be using a pointing device.

Include ample space around click targets to reduce accidental link taps and avoid user frustration.



Don't rely on **colors** or **bold weights** to delineate links.



Make links stand out by underlining them.



CLICK HERE

Buttons less than 44px high are not accessible.



CLICK HERE

Make buttons at least 44px high.

## Develop: Make Your Website Code More Accessible

While visual design is important, improving the code behind your website is one of the most powerful ways to create a more accessible website, especially for users relying on assistive technologies such as screen readers.

Screen readers work by looking at the code of an interface — whether that's a program on a computer, or in this case, a website — and then translating that into audio that the device reads aloud to the user.

**Optimizing your code is the best way to ensure what users hear read aloud makes sense and is usable.**

The good news is, coding for search engine optimization (SEO) is very similar to coding for screen readers.

Google and other search engines crawl the internet with robots, and screen readers and other assistive technologies are just that — robots. So if you've already optimized your website for search, you're already on the right path. If you haven't, you can feed two birds with one seed by using accessible code.

## 1. Use semantic HTML.

HTML elements provide context around content. This context, or semantic meaning, helps users navigate and consume content more easily. It also aids search engines in indexing your content.

Strive for proper semantic structure in your HTML by utilizing HTML elements for their intended purpose.

Headlines should use heading elements, which include h1, h2, h3, h4, h5, and h6 in HTML. The h1 element is reserved for the most important headline or title of a document, with each subsequent heading decreasing in importance.

Other elements include address, header, footer, nav, p (paragraph), img (image), block quote, button, and many more.

Reference Mozilla's [HTML elements](#) reference page for more details.

## 2. Include a “skip navigation” link.

Screen readers function by reading what they find in the code of a website to the user. Imagine a robot reading the text of a website aloud to you. The first thing it would read is the navigation/menu items.

Including a skip navigation link (which is typically hidden from view to sighted users) will allow the user operating the screen reader to skip this and move on to the actual content. This is especially important as users navigate to multiple pages — they don’t want to hear the entire menu of pages read aloud each time.

```
<a href="#main" class="visually-hidden">Skip to main content</a>
```



### 3. Always include alternative text for images, videos, and audio files.

An alt tag, also known as “alt attribute” and “alt description,” is an HTML attribute applied to image tags to provide a text alternative. This alternative text describes your images and provides critical missing context for users who can’t see them.

Alt tags are important for both screen readers and search engines. They allow users (or Google) to read or hear alternative descriptions of content that they might not otherwise be able to view. Alt tags describe the object itself and, generally, the purpose it serves on the website.

```
alt="alternative text goes here"
```

Images are typically used on websites for a few different reasons:

1. Informative images provide additional information to users, supporting copy surrounding them.
2. Active images prompt a user to take some action — essentially a call to action.
3. Decorative images are there solely for visual design and don't provide any additional information to users.

Only provide alt text to informative and active images. Providing alt text for decorative images adds unnecessary information when read aloud by screen readers, potentially resulting in frustration and confusion for users.

For decorative images, simply leave the alt tag blank.

```

```

```

```

```

```

## The following guidelines will help you keep your images and website accessible and usable:

1. Alt text for informative images should describe the information in that image and repeat the text in the image if there is any. Avoid repeating information if the surrounding copy states the same thing as the image.
2. Alt text for active images should describe the result of the intended action. Think of them like buttons or text links.
3. Include an empty alt attribute (e.g. alt="") for decorative images. Failing to do so will result in most screen readers reading the entire image source URL, creating a confusing and frustrating experience for users.
4. Avoid calling attention to the fact that it is an image. Don't use language like, "This is a picture of..." or "Here's an image of..." Calling out imagery doesn't add any value to the user and only serves as a reminder that they can't see your images.
5. Don't use alt text as a prompt for users to download or enable images, as not all users will have this ability or benefit from it.
6. When in doubt, read your alternative text aloud along with the rest of the surrounding content. If it sounds natural to you and provides the intended value, your alt text is doing its job.

*Adapted from Litmus' The Ultimate Guide to Email Accessibility*

## 4. Create text transcripts for video and audio content.

Text transcripts help hearing-impaired users understand content that would otherwise be inaccessible to them.

Think of closed captions on television and movies. These captions were developed for deaf and hard of hearing viewers. The same need is present on the internet, where websites now contain rich video and audio content.

Closed captioning is also a great practice in general both for SEO and because many users view video and audio content at work or in locations where audio may not be desired or may not load due to internet connectivity.

Incorporating transcription and closed captioning into your video and audio content will broaden your audience and assist those with both physical and situational disabilities.

## 5. Identify the website's language in the header code.

A global audience views many websites, so it's important to use the HTML language attribute when coding your website.

The language attribute tells any assistive technology which language profile to use for the content. It will adjust accordingly and use the correct pronunciations and accents, resulting in a much better experience for your users.

It is important to note that the language attribute doesn't translate content for you. It simply ensures the content sounds natural in the appropriate language.

```
<html lang="en">
```

# Conclusion

# 07

## You're on the path to accessibility and ADA compliance.

Adhering to the design and development guidelines outlined here when creating or updating your website will put you on the path to accessibility and ADA compliance.

Between strategy, design, and development, there's a lot that goes into creating results-driven, accessible websites. We hope this guide will be a resource in helping you understand how to strive for accessibility and achieve compliance, all while safeguarding your business from regulatory consequences.

Accessibility and compliance both come down to putting the customer first. **When you serve the customer by providing a great user experience on your website — in creating a website accessible to people of all abilities — you end up serving your business interests too.**

When you evaluate the potential impact, both of a customer's experience and your organization's bottom line, it's clear accessibility is an effort worth making.

### Connect with us.

Are you ready to help create a more inclusive internet? Call us at (619) 719-1769 or email [info@nobleintentstudio.com](mailto:info@nobleintentstudio.com) to get started.

EMAIL US TO GET STARTED →

# Who is Noble Intent Studio?

# 08





## Noble Intent Studio is a full-service marketing firm that specializes in creating accessible websites.

We're passionate about website usability and strive to create a more inclusive internet with each website we design and build.

**We see the benefit of accessible websites not only to end-users, but also to our clients' business goals.**

Through our experience designing and building websites since 2011, we've come to a deep understanding of website best practices and user experience.

We're ahead of the industry curve when it comes to website accessibility, and now consult on website accessibility. We can provide solutions to ensure your website is accessible and ADA compliant.



## We specialize in creating results-driven, accessible websites.

Business leaders partner with us to ensure their organizations' websites provide a great online experience for every customer.

Building and maintaining websites is complex. But through intentional, results-focused solutions and exceptional service, you can trust we will enable your organization to do what you do best — engage and delight your customers and future customers both off and online.

Let us be your guide through the confusing regulations surrounding website accessibility and compliance. We'll give you the tools and solutions you need to provide users of all abilities with an incredible website experience — and get bottom-line results for your business in return.

## Keep up with the latest in accessibility and more.

Join other business leaders who rely on Noble Intent Studio for expert advice and solutions. Sign up for our emails to get notifications of new reports like this one, announcements about our educational seminars, and more.



SUBSCRIBE TO EMAILS →

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