



Measure Your Accessibility Health

Dawn Watkins | Siteimprove



Objectives

- 🕒 Getting Started
- 🕒 Automated Testing
- 🕒 Manual Testing
- 🕒 Usability Testing
- 🕒 Reporting



Get Started

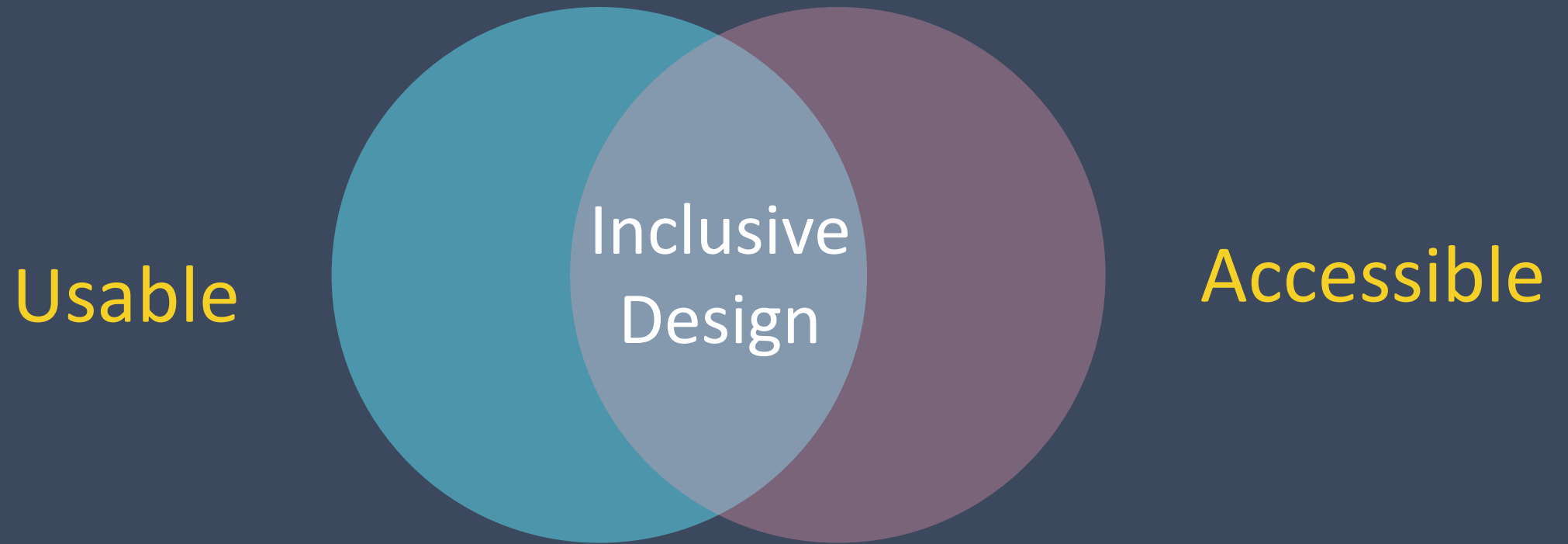
Measure Your Accessibility Health

Focus on accessibility





Create Inclusive Design





Global Legislation



☉ **Australia** - The Disability Discrimination Act

☉ **Canada** - Canadian Human Rights Act of 1977 and The Canadian Charter of Rights and Freedoms

☉ **European Union** – Directive (EU) 2016/2102

☉ **United States of America**

- ☉ Civil Rights

- ☉ Procurement Laws

- ☉ Technology Laws

☉ **UN Declaration and Convention**



Web Content Accessibility Guidelines

WCAG 2.0

Principles	Guidelines	Level A	Level AA	Level AAA
1. Perceivable	1.1 Text Alternatives 1.2 Time-based Media 1.3 Adaptable 1.4 Distinguishable	9	5	8
2. Operable	2.1 Keyboard Accessible 2.2 Enough Time 2.3 Seizures 2.4 Navigable	9	3	8
3. Understandable	3.1 Readable 3.2 Predictable 3.3 Input Assistance	5	5	7
4. Robust	4.1 Compatible	2		

Roles

Leadership

Procurement

Champion

Project Management

Designer

Communications/Marketing

Content Contributors

Developers

Quality Control (QA)





Where is Accessibility





Automated Testing

Measure Your Accessibility Health



Automated Testing

⌚ Enterprise Tools

⌚ Online Tools

⌚ Browser extensions

⌚ Desktop Applications



Features of the Platform

- 🕒 Quality Assurance
- 🕒 Accessibility
- 🕒 SEO
- 🕒 Analytics
- 🕒 Response
- 🕒 Policy

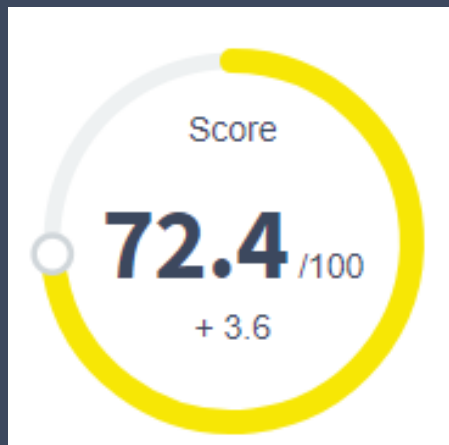




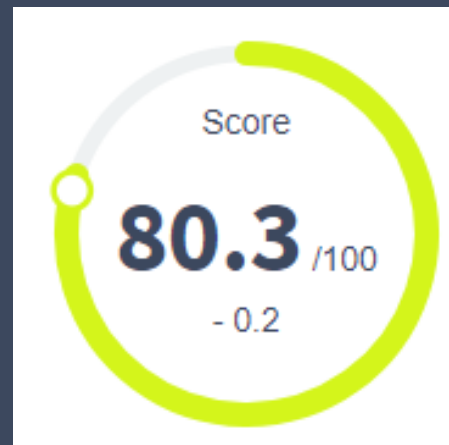
Siteimprove Intelligence Platform

Siteimprove provides on-going, real time WCAG 2.0 Accessibility monitoring through its Intelligence Platform.

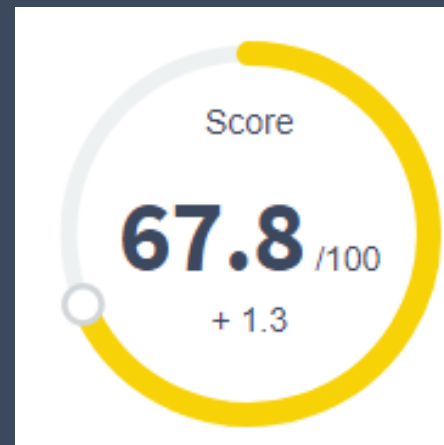
Digital Certainty Index



Quality Assurance



Accessibility



SEO

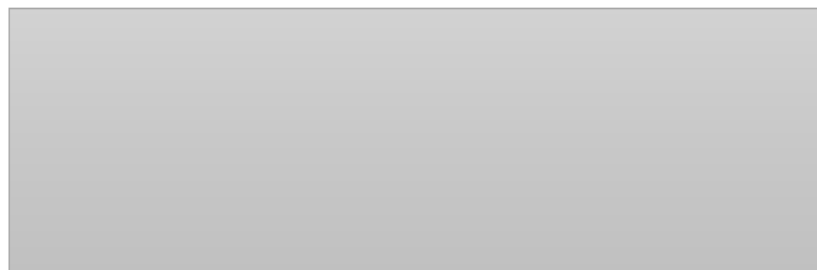




Language Notification

1

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



2

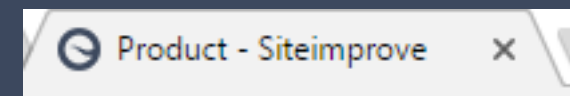
```
<blockquote xml:lang="de">  
  <p></p>  
</blockquote>
```



Page Titles

Important for:

- usability,
- search engines optimization, and
- sharing.



[Accessibility check - Test your website - siteimprove.com](https://go.siteimprove.com/Accessibility)

Ad go.siteimprove.com/Accessibility ▼

Improve your web **accessibility**, SEO rank etc. with Siteimprove. Request a demo

Automated Reporting · Easy to Use · Highly Reviewed

Services: Fix Broken Links, Fix Misspellings, Web Policy Standards, Website Accessibility, SEO Manage...



Headings



`<h1>` Headings `</h1>`

Headings communicate the organization of the content on the page. Web browsers, plug-ins, and assistive technologies can use them to provide in-page navigation.

`<h2>` Heading ranks `</h2>`

[← SHARE](#)

Nest headings by their rank (or level). The most important heading has the rank 1 (`<h1>`), the least important heading rank 6 (`<h6>`). Headings with an equal or higher rank start a new section, headings with a lower rank start new subsections that are part of the higher ranked section.

Skipping heading ranks can be confusing and should be avoided where possible: Skipping heading ranks can be confusing and should be avoided where possible: Make sure that a `<h2>` is **not** followed directly by an `<h4>`, for example. It is ok to skip ranks when closing subsections, for instance, a `<h2>` beginning a new section, can follow an `<h4>` as it closes the previous section.

`<h3>` Exception for fixed page sections `</h3>`

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In fixed sections of the page, for example in sidebars, the heading ranks *should not* change depending on the ranks in the content area. In those cases, consistency across pages is more important.

`<h2>` Organize passages of text `</h2>`

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In the following example, headings are used to only organize passages of text on a page, for example the main content:



Readability

Summary	Value
Total sentences	279
Total words	2941
Average words per Sentence	10.54
Words with 1 Syllable	1845
Words with 2 Syllables	675
Words with 3 Syllables	300
Words with 4 or more Syllables	121
Percentage of word with three or more syllables	14.31%
Average Syllables per Word	1.56
Gunning Fog Index	9.94
Flesch Reading Ease	64.42
Flesch-Kincaid Grade	6.89

- ⌚ Total Sentences
- ⌚ Words per Sentence
- ⌚ Syllables per Word
- ⌚ Complexity of Content





Using Color



<p>Low Contrast #FFFF00 and #FFFFFF Not Compliant 1.07 Ratio</p>	<p>High Contrast #0A34E0 and #FFFF00 Compliant 7.58 Ratio</p>
<p>Low Contrast #FF8000 and #FFFFFF Not Compliant 2.52 Ratio</p>	<p>High Contrast #757575 and #FFFFFF Compliant 4.61 Ratio</p>



HTML Example: Link



Web Address

Location

```
<a href="https://www.webpage.com/" target="_blank">  
Visit our contacts page.</a>
```

Descriptive Text

Content Suite

Content is the core of your website. Implement Siteimprove and you'll never go another day worrying if content is polished, up-to-date, and accessible.

[Learn More About the Content Suite](#)



Distinctive Links

Accessibility Tips for Designers

Intro text as a teaser
to get you to be
interested enough in
the content to click
to the full articles.

[Read More](#)

How to Understand Accessibility

Intro text as a teaser
to get you to be
interested enough in
the content to click
to the full articles.

[Read More](#)

Make Accessibility a Priority

Intro text as a teaser
to get you to be
interested enough in
the content to click
to the full articles.

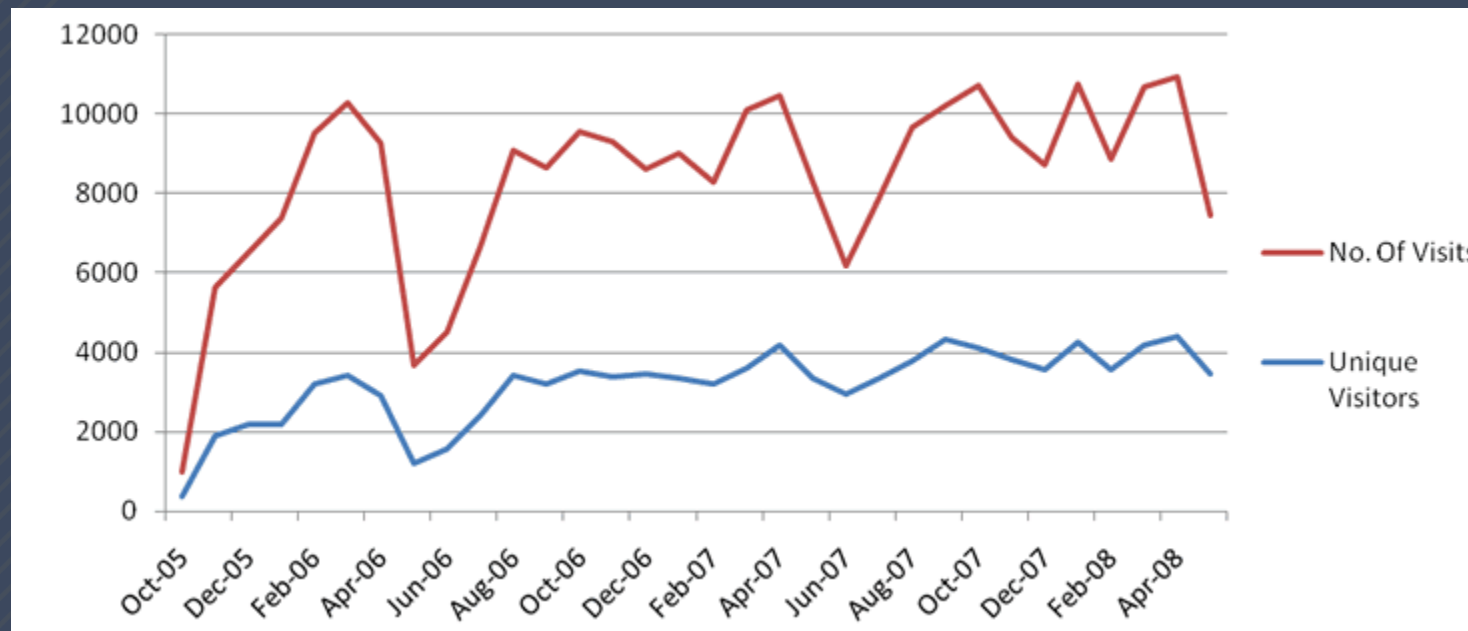
[Read More](#)



Informative Images

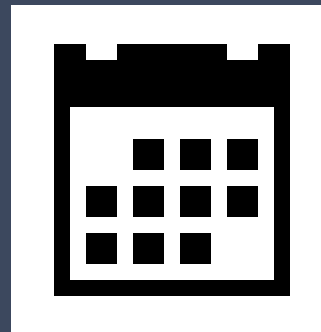
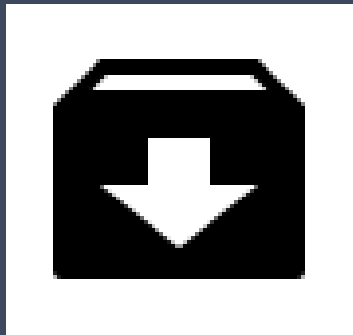


Ms. Lamar





Functional Images



Color Contrast





Data Tables

```
<table>
<tr>
  <th>Month</th>
  <th>Savings</th>
</tr>
<tr>
  <td>January</td>
  <td>$100</td>
</tr>
</table>
```

Caption: This table gives information on city, state and zip code.

City	State	Zip
Lawton	Oklahoma	73501
Austin	Texas	78756
Minneapolis	Minnesota	55432



No Coding Errors

☹ Your website has no major code errors.

☹ How to achieve:

- Ensure HTML elements have complete start and end tags
- Nest all HTML elements correctly
- Use unique IDs
- Check that HTML elements don't contain duplicate attributes

☹ Tool: [W3C Markup Validation Service](#)



Manual Testing

Measure Your Accessibility Health



Manual Testing

⌚ Content Analysis

⌚ Browser Manipulation

⌚ Hardware Manipulation

Web Accessibility Advanced

⌚ Form Inspection



Content Review

🕒 Shapes

- 🕒 Example: Click the small round button
- 🕒 Try: Click on the accept button

🕒 Location on the page

- 🕒 Example: Click the button on the right
- 🕒 Try: Click on the button labeled next

🕒 Sounds

- 🕒 Example: Begin when you hear the ping
- 🕒 Try: Begin when you are prompted (includes visual and sound)



Evaluation Tools Used

1. [WebAIM's Wave](#)
2. [HTML Code Sniffer](#)
3. [Siteimprove Chrome Checker](#)
4. [Fangs Screen Reader Emulator](#)
5. [NoCoffee Vision Simulator](#)
6. [Pauljadam Bookmarklets](#)
7. [Colorzilla](#)
8. [Accessibility Color Wheel](#)
9. [Color Contrast Analyzer](#)
10. [Zoom Text Only](#)
11. [W3C Markup Validation Service](#)



Color to Convey Meaning

Name (required)

Name*

Status (optional)

Favorite Food



Audio and Video Accessibility

- 🕒 Transcripts
- 🕒 Closed captioning
- 🕒 Audio descriptions

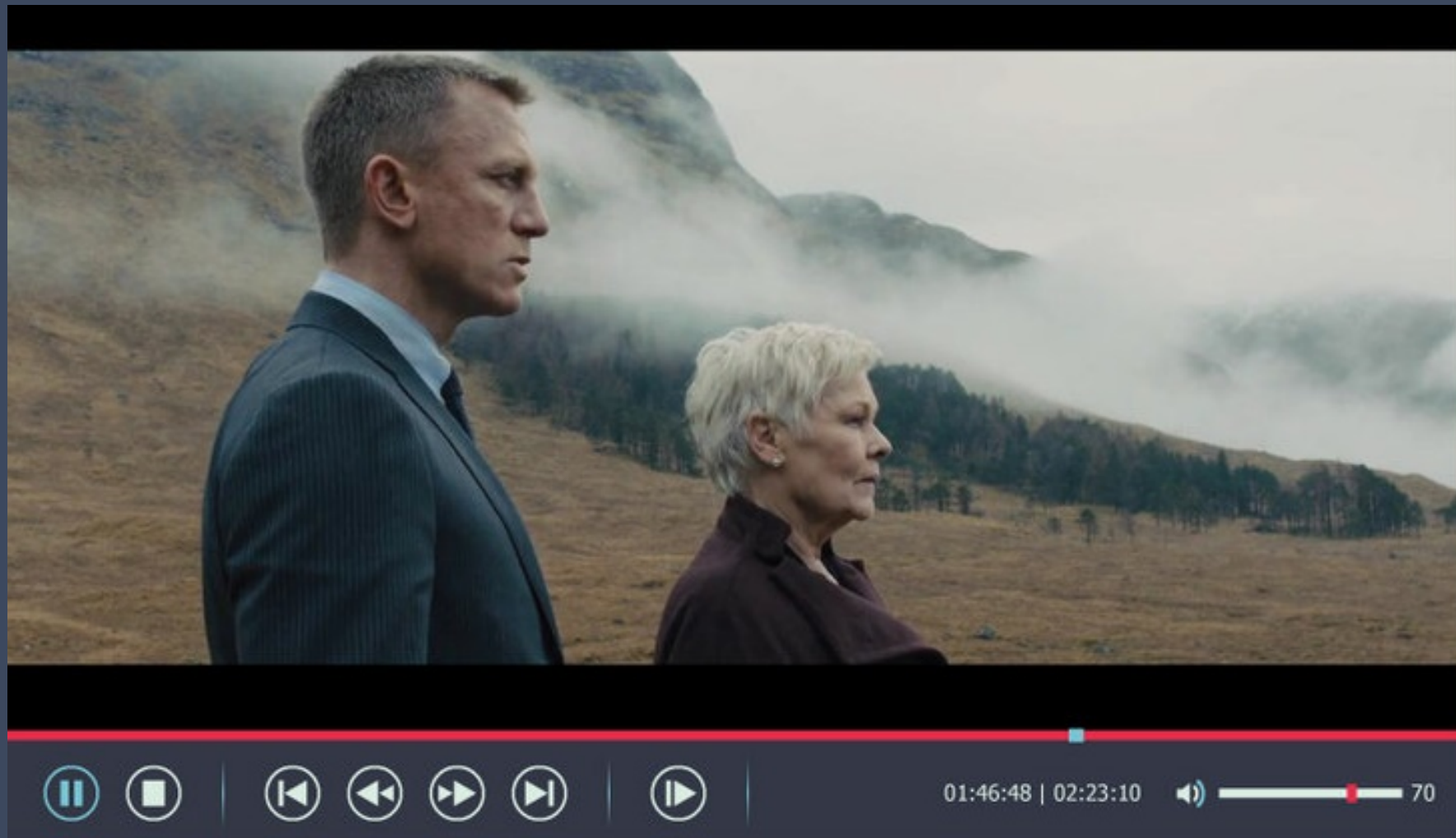


Note:

Do not design content that is known to cause seizures.



Media Player





Assistive Technology Testing

- ☹ Tab order

- ☹ Use shortcut keys to test:

 - ☹ Headings,

 - ☹ Links, and

 - ☹ Lists.

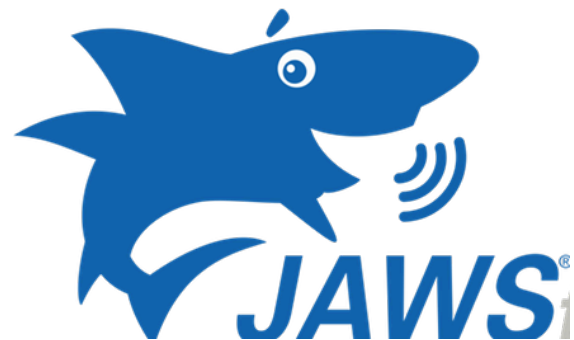
- ☹ Make sure all elements can be accessed.

- ☹ JavaScript event handlers

- ☹ No actions require a mouse




Screen Readers




Keyboard Interactions

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Simpler, clearer, faster

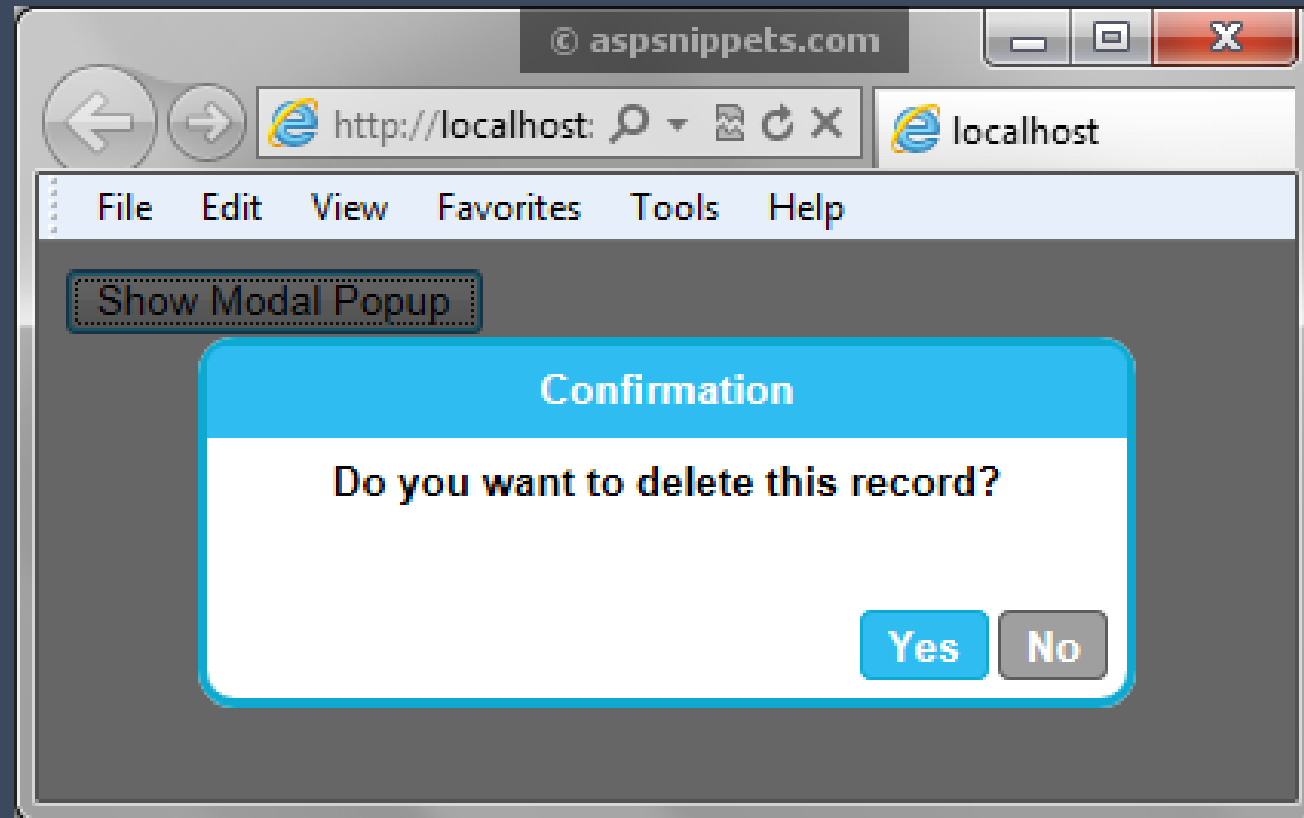
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<p>Benefits</p> <p>Includes tax credits, eligibility and appeals</p>	<p>Disabled people</p> <p>Includes carers, your rights, benefits and the Equality Act</p>	<p>Money and tax</p> <p>Includes debt and Self Assessment</p>
<p>Births, deaths, marriages and care</p> <p>Parenting, civil partnerships, divorce and Lasting Power of Attorney</p>	<p>Driving and transport</p> <p>Includes vehicle tax, MOT and driving licences</p>	<p>Passports, travel and living abroad</p> <p>Includes renewing passports and travel advice by country</p>
<p>Business and self-employed</p> <p>Tools and guidance for businesses</p>	<p>Education and learning</p> <p>Includes student loans, admissions and apprenticeships</p>	<p>Visas and immigration</p> <p>Visas, asylum and sponsorship</p>
<p>Childcare and parenting</p> <p>Includes giving birth, fostering, adopting, benefits for children, childcare and schools</p>	<p>Employing people</p> <p>Includes pay, contracts and hiring</p>	<p>Working, jobs and pensions</p> <p>Includes holidays and finding a job</p>
<p>Citizenship and living in the UK</p> <p>Voting, community participation, life in the</p>	<p>Environment and countryside</p> <p>Includes flooding, recycling and wildlife</p>	

Caution: Modal or Pop-up Boxes





Forms Fields



- ☉ Clearly Labeled Elements
- ☉ Instructions & Input Type
- ☉ Helpful Suggestions
- ☉ Prevent Errors
- ☉ Best Layout

EXISTING CLIENTS
please login here:

Your Social Security Number format must be 111-22-3333.

Social Security Number



Widgets and Plug-ins



Hardware Manipulation

- ⌘ Turn off images
- ⌘ Turn off sound
- ⌘ Vary font size (zoom up to 200%)
- ⌘ Change screen resolution and resize window
- ⌘ Change display color to gray scale
- ⌘ Tab through the page (unplug mouse)



Resize Text

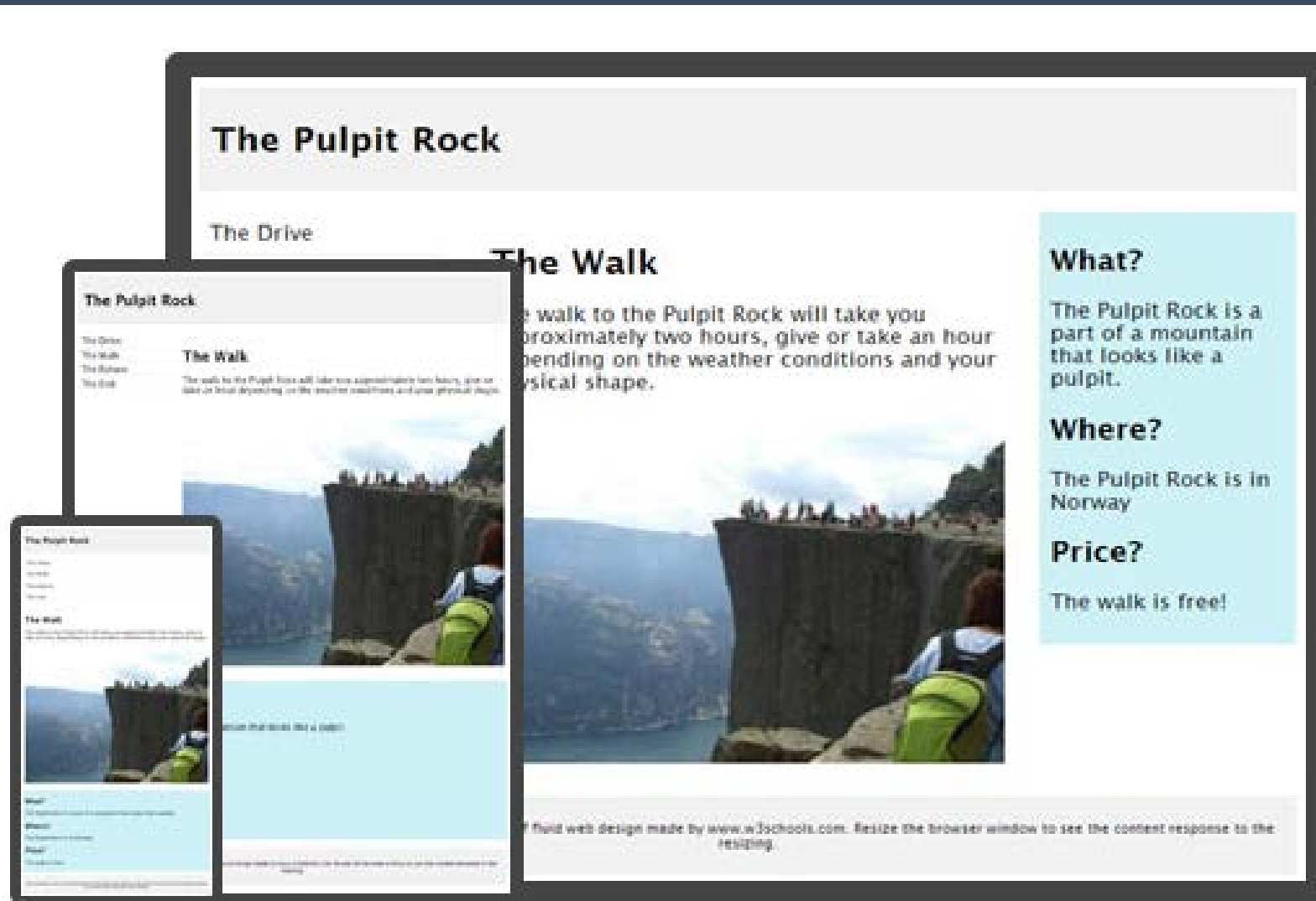
100%

200%

300%



Flexible





User Testing

Measure Your Accessibility Health

Can Users Use My Site?



Can Users Use My Site?



Testing: Usability

Usability testing helps understand user needs, identify potential issues, and generate ideas for improvement.

Factors:

⌚ User Task analysis

⌚ Readability

⌚ Site Navigability

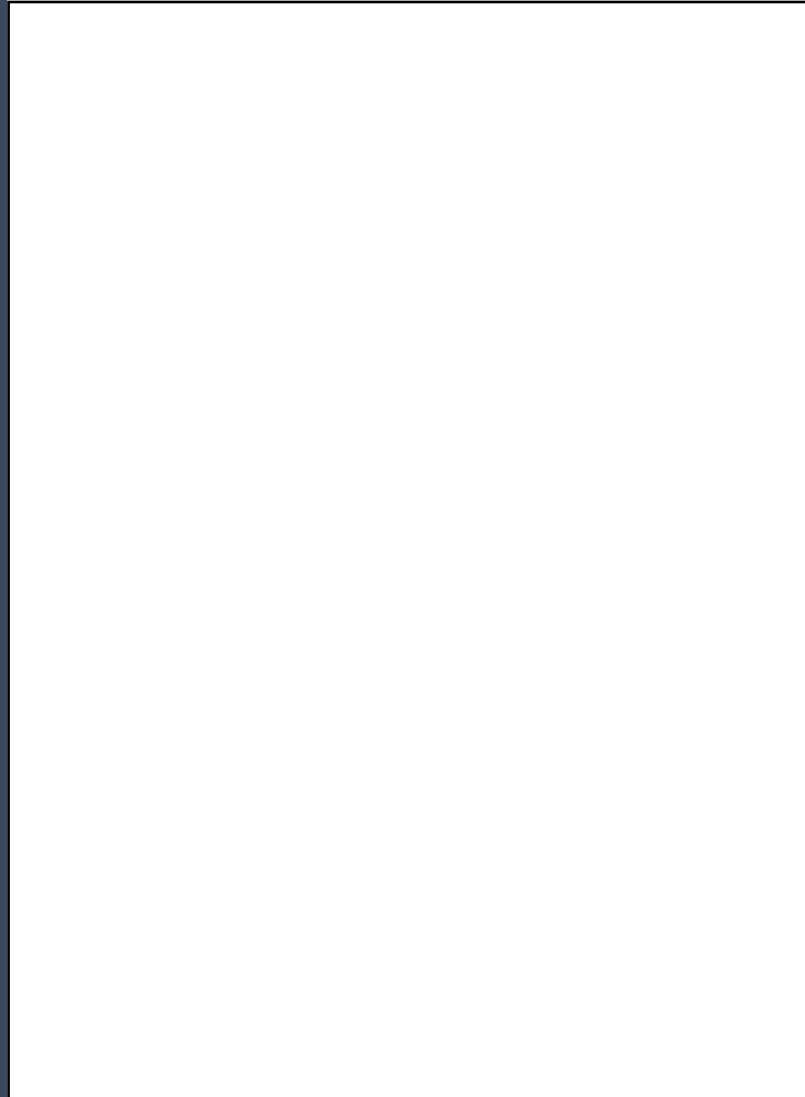
⌚ User Experience

Predictable





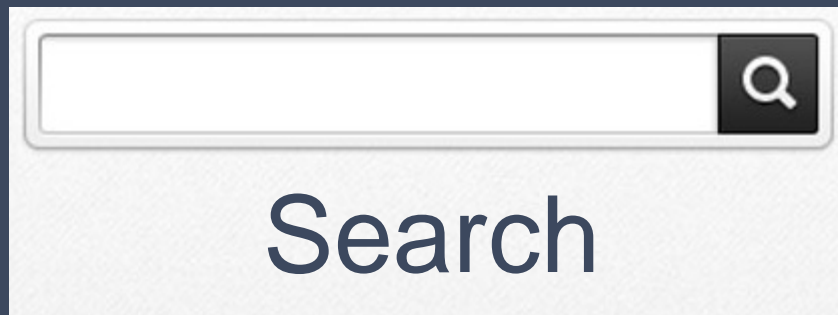
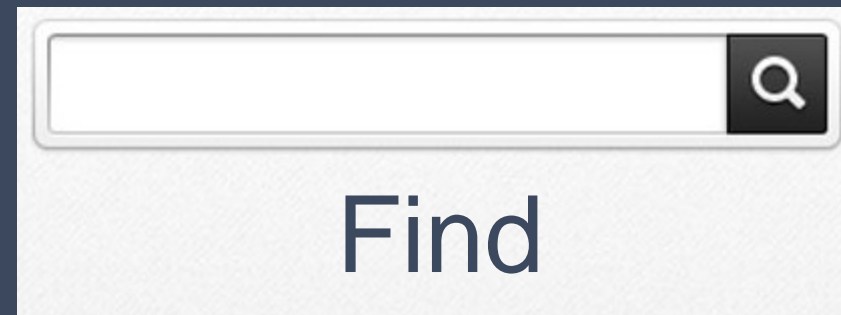
Mouse Interactions





Consistent

⌚ Maintain consistent identification of components that have the same functionality.

A white rectangular button with a thin grey border. At the top, there is a search input field with a magnifying glass icon on the right. Below the input field, the word "Search" is centered in a dark blue font.A white rectangular button with a thin grey border. At the top, there is a search input field with a magnifying glass icon on the right. Below the input field, the word "Find" is centered in a dark blue font.



Reporting

Measure Your Accessibility Health



**Accessibility is an ongoing process
NOT a one-time Project!**



Testing Report

- ⌚ Items tested and any excluded
- ⌚ Date of testing
- ⌚ Reviewer
- ⌚ Tools used
- ⌚ Results of testing
- ⌚ Plan to correct



Next Steps

- ⌚ Evaluate existing sites and resources
- ⌚ Learn skills necessary for compliance
- ⌚ Make a plan for compliance
- ⌚ Document exceptions

A person is shown from the side, sitting at a desk and writing in a spiral-bound notebook with a pen. The scene is dimly lit, with a teal-colored overlay covering the entire image. On the left side of the desk, there is a small decorative house-shaped object with the words "Happy Holidays" visible. A yellow horizontal line is positioned above the word "Questions?".

Questions?

Contact

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