

# Moving towards an Accessible Web for All

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Web Accessibility and Usability



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*The power of the Web is in its universality.  
Access by everyone regardless of disability is an  
essential aspect.*

**Tim Berners-Lee, W3C Director and inventor of the World Wide Web**

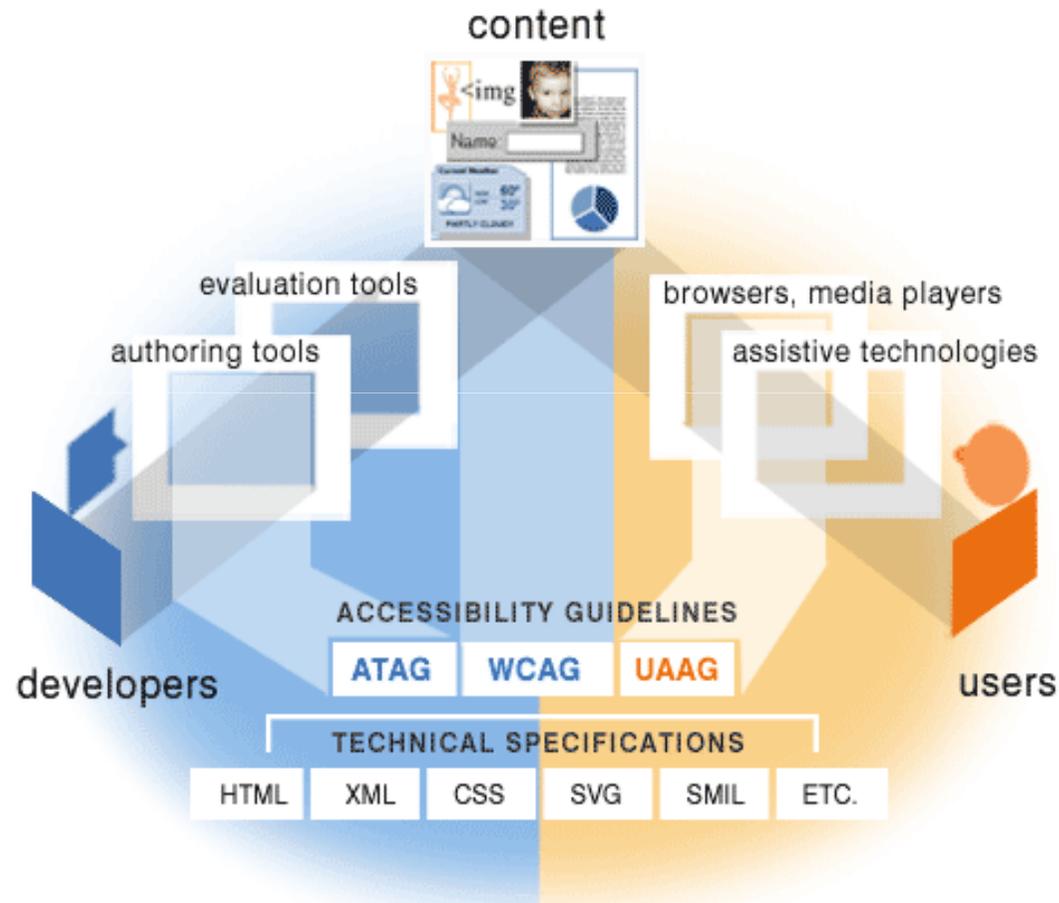
# What is Web Accessibility?

- **Web accessibility means that people with disabilities can use the Web:** Means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web.
- All disabilities that affect access to the Web, including visual, auditory, physical, speech, cognitive, and neurological disabilities [1]
- Web Content; Web Software; Web Tools; Web Sites

# Why is it important?

- Important resource in many aspects of life: education, employment, government, commerce, health care, recreation, and more. Nowadays required by law.
- Offers the possibility of **unprecedented access to information and interaction**
- Strong Business Case: overlaps with other best practices such as [mobile web design](#), device independence, multi-modal interaction, usability, [design for older users](#), and [search engine optimization \(SEO\)](#).
- Case studies show that accessible websites have better search results, reduced maintenance costs, and increased audience reach, among other benefits. [2]

# Components of Web Accessibility



# Examples of Web Accessibility

## Alternative Text for Images

```
<img alt="Web Accessibility Initiative logo" data-bbox="568 271 689 314"/>
```



## Keyboard Input

## Transcripts for Podcasts

**Podcast: Interview on WCAG 2**

[Shawn Henry](#) discussed WCAG 2.0 with [UK UPA](#) president.

Audio files of a series of interviews are available from [this](#) file.

**Transcript**

**Giles:** Elsewhere in the conference I bumped into [Shawn](#) and called her after the conference to ask about the new guidelines. I began by asking her why we needed an update when many of the technologies and is updated for the state of Web technology develops in the future.

**Shawn:** WCAG 2.0 will be much more appropriate for current web and it focused on HTML. Obviously a lot has changed since WCAG 1.0 and it is updated for the state of Web technology develops in the future.

**Giles:** Are you talking about AJAX?

**Shawn:** Absolutely. Those types of things are definitely going on in the W3C WAI. We have a group focusing on...

# Where Are We Now? - 1

- **Online Shopper with colour blindness / full blindness**
- **Reporter with repetitive stress injury**
- **Online Student who is deaf**
- **Accountant with blindness**

## Where Are We Now? - 2

- **Retiree with several aging-related conditions, managing personal finances**
- **Teenager with deaf-blindness seeking entertainment**
- **Online Student who is deaf**
- **Classroom student with dyslexia**

# Causes

- Designed without People with disabilities in mind or involved
- Not knowledgeable/aware about Accessibility Issues
- No training / courses regarding Software Development for Accessibility
- Insufficient Tools / Software

# Problems [1]

- Images with no alternative text or complex images
- Video not described in text or audio
- Tables that do not make sense
- Incoherent structure that cannot be tabbed through in a logical sense - Webpages that are difficult to navigate
- Inappropriate use of colour
- Lack of captions/transcripts/audio
- No alternative input mechanisms
- Time limited responses
- Complex or distracting language / images / layout

# What can we do?

- Develop A Business Case for you organisation
- Implement Web Accessibility
- Evaluate Web Accessibility
- Reap the Benefits

# Business Case – Factors to Consider

- [Social Factors](#): Providing equal opportunity for people with disabilities; the overlap with digital divide issues; and benefits to people *without* disabilities, including older people, people with low literacy and people not fluent in the language, people with low bandwidth connections to the Internet, people using older technologies, and new and infrequent web users.
- [Technical Factors](#) addresses interoperability, quality, reducing site development and maintenance time, reducing server load, enabling content on different configurations, and being prepared for advanced web technologies.

# Business Case – Factors to Consider

- [Financial Factors](#) addresses the financial benefits of increased website use, for example, from engine optimization (SEO); direct cost savings; considerations for initial costs and on-going costs; and ways to decrease costs.
- [Legal and Policy Factors](#) addresses requirements for Web accessibility from governments and other organizations in the form of laws, policies, regulations, standards, guidelines, directives, communications, orders, or other types of documents.

# Implement Web Accessibility

- Establish Responsibilities
- Conduct Initial Assessment
- Develop Organisational Policy
- Select Software and Tools; Provide Training
- Develop Accessible Website
- Promote Organisational Awareness
- Monitor and Evaluate Web Accessibility

# Evaluate Web Accessibility

- Test using Online validators
- Use Evaluation tools
- Use of real person to test

# Benefits - Corporations

- Financial gains and cost savings from increased web use due to increased potential market share, search engine optimization (SEO), and increased usability
- Reducing risk of legal action, high legal expenses, and negative image
- Public relations benefits of demonstrating corporate social responsibility (CSR)
- Benefits of an inclusive workplace that supports employees with disabilities
- Increased productivity from supporting and retaining older employees and their experience

# Benefits - Government

- Laws and policies that require public services are available to all, such as anti-discrimination legislation or information and communications technology (ICT) policy reducing risk of legal action, high legal expenses, and negative image
- Demonstration of social responsibility and provision of information and services that are accessible to all citizens
- Savings from improved server performance and decreased site maintenance
- Benefits from enabling people with disabilities and older users to interact with them online instead of more costly ways

# Conclusion

- Web Accessibility can be easily achieved
- Bring about advantages beyond just for people with disabilities
- All that is required is a different mindset



# Thank You

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# References

- [1] <http://www.w3.org/WAI/EO/Drafts/PWD-Use-Web/#diff>
- [2] <http://www.w3.org/WAI/bcase/Overview>