

The  
Public



AN INTRODUCTION TO:





The Public is an activist design studio specializing in changing the world.

This zine, a part of our *Creative Resistance How-to Series*, is designed to make our skill sets accessible to the communities with whom we work. We encourage you to copy, share, and adapt it to fit your needs as you change the world for the better, and to share your work with us along the way.

Special thanks to Shaïli Chibba a graduate of OCADU's Graphic Design program in Toronto, for developing this zine on behalf of The Public.

For more information, please visit [thepublicstudio.ca](http://thepublicstudio.ca).

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## CONTENTS

<b>Disclaimer</b>	<b>5</b>
<b>Introduction</b>	<b>6</b>
<b>History</b>	<b>7</b>
(Dis)ability	7
Accessibility on the web	8
At-a-glance	10
<b>Essential Components</b>	<b>14</b>
Common types of (dis)abilities and relating assistive technologies	14
What is essential for the web design to be accessible?	16
1. "How components relate"	16
2. "The implementation cycle"	17
3. Key guides	18
Meaningful inclusion	20
<b>Implementation</b>	<b>20</b>
Possibilities	20
What you can do	21
Layout & structure	21
Navigation	22
Colours	23
Text	24
Images	25
Multimedia	26
Mobile	27
<b>Glossary</b>	<b>28</b>
Terms	28
Acronyms	29
<b>Resources</b>	<b>31</b>
<b>References</b>	<b>32</b>

#### **DISCLAIMER**

We would like to start this zine by acknowledging that we do not identify as persons with (dis)abilities. We have taken care to choose our term from the many available and will be using "people with (dis)abilities." By doing this we are not negating the validity of any other terms. We feel that this is our best choice, because it is clear and direct in putting the person first. It can also work as an umbrella term to embrace a spectrum of (dis)abilities from physical to mental, visible to invisible. There is no one approach and what is accessible to some, may not be to others. With that in mind, we have attempted to cover as much information as possible to give a good understanding of what can be achieved.

# Introduction

People with (dis)abilities can encounter many barriers in life, the most significant of which is being seen as problems that must be fixed. This narrow perspective places all of the responsibility on the individual to navigate a world designed against them. Society has an obsession with normalization. What about the individual's particular type(s) of (dis)ability? The kind of assistive technology they use? Their environment? Their culture? Their personality? All of these are basic considerations that contribute to a person's experience of marginalization.

The Web is an incredible place offering freedom from many barriers found in the physical world. People with (dis)abilities can engage with so many things where they would usually need the assistance of another person. Getting the news, information, entertainment, shopping, and more, is so much easier. As a human right that is recognized by the *UN Convention on the Rights of Persons with Disabilities*, everyone should be able to interact with and contribute to the Web.

Unfortunately, web accessibility is surrounded by a myth that it strips websites of aesthetics and multimedia content, discouraging individuals and organizations from making changes. When actually, accessibility requires developers to be attentive to current proper coding and browser guidelines, resulting in websites that function smoothly. All the while looking beautiful. This practice encourages simpler and cleaner designs that are approachable and increase viewer interaction times. Supporting a variety of viewer groups, including older people, people with temporary (dis)abilities, people in rural areas, and people using older technologies. Web accessibility benefits websites by helping them reach their full potential of audience.

```
<!-- We recognize that there are many unethical Web practices. This is clear with recent developments in government surveillance and intrusions on privacy in the false name of protection. Many rights groups, like Reports Without Borders and the Electronic Frontier Foundation, have brought up concerns that this situation is developing into a mass surveillance society where personal freedoms are not important. -->
```

This zine aims to be a starting point on your web accessibility journey. For context, we explore the history of (dis)ability and accessibility on the web, and break down the relationships of essential components. To give you confidence to start transforming your website, we provide some examples of possibilities and describe the steps you can take. We have outlined the importance of extending this initiative to mobile devices, but do not go into detail. To learn more, we recommend browsing the glossary, resources, and references included at the end.

## History

### (DIS)ABILITY

The term "(dis)ability" is relatively new. With such a short history, it is remarkable how much discussion and development has surrounded the concept in the past few decades. Popular debates from opposing sides have led to defining two contrasting models: the medical and the social.

The medical model is the older of the two and more commonly known. The perspective considers (dis)ability to be a physical or mental impairment that causes the individual personal and social difficulties. It's the "dysfunctional" part of an individual that needs to be fixed using science and medicine. Essentially, the model asserts that the world is perfect and people with (dis)abilities are flaws.

Reacting to the harmful stigma born from this framing, the social model emerged in the

late 1960s and 1970s. A hectic economic and political time in the United Kingdom with a lot of social unrest catalyzed various activist groups focusing on (dis)ability. These groups were incredibly dissatisfied that social change was being driven by the use of force, and people without (dis)abilities were taking over organizations. Creating the "Union of the Physically Impaired Against Segregation" (UPIAS), led by people with (dis)abilities, they took an approach central to and from people with (dis)abilities. The group began challenging the dominant view that (dis)ability was, as termed then, a 'personal tragedy'. Exploring the deliberate exclusion of people with (dis)abilities through segregation in society and lack of consideration in built environments, they established alternatives. UPIAS considered people with (dis)abilities fully and completely human individuals who could participate just as much in society as anyone else with the right tools, techniques, and opportunity. This model soon became



Uninformed individuals incorrectly assumed everyone saw things as they did and invalid markup did the rest.

Continuing evolution and greater usage of the Web by people with (dis)abilities started to bring these issues to the forefront. In 2008, the WCAG 2.0 was released and accessibility was finally more than just an idea or a niche. This update was so successful that we are still using it. It owes a great part of its success to approachability. Simply broken down into a "Level Success Criteria" at three levels: A, AA, and AAA, it gives everyone an opportunity to start somewhere and then aim to go even further. These levels even explain how they affect people with different types of abilities, how they provide supports for assistive technologies and web browsers, and come with interactive tools. The guide goes as far as to provide general and technology-specific examples for coding languages, authoring tools, and multimedia. Essentially, it gives developers everything they need. Gaining popularity in the past decade, it has inspired a holistic approach that ensures a professional and successful web presence.

## AT-A-GLANCE

<!-- Note: not all events have been recorded here. Just major developments in "/" ideologies, "/" legislation, and "/" cases around the world. -->

### 1972

/ UPIAS founded by Paul Hunt to challenge societal perspectives on (dis)ability

### 1975

/ UPIAS claims that society is the main cause for disadvantages faced by people with (dis)abilities

### 1983

/ Mike Oliver coins the phrase "social model of disability" to refer to these growing claims

### 1970s

### 1980s

### 1993

// UN Economic and Social Commission for Asia and the Pacific (UNESCAP) proclaims the "Declaration of Asia-Pacific Decade for Disabled Persons"

### Early 1990s

### 1996

/ Web community starts to grow and W3C starts to recognize the needs of users with (dis)abilities

/ WAI conceived and later established

### 1998

// US Congress adds "Section 508" to the Rehabilitation Act of 1973; becoming popular and profitable to use

### 1999

// WCAG 1.0 released

### Late 1990s

### 2000

// The Treasury Board of Canada Secretariat releases the "Common Look and Feel" (CLF), their first attempt

/// Australian blind man wins a court case v. the Sydney Organizing Committee of the Olympic Games (SOCOG) for a failure to design an accessible website; first successful case under the Disability Discrimination Act 1992

### 2001

// New Zealand establishes the law "Law No. 42 of 2008: Anti-Discrimination and Accessibility Act" requiring all websites to be accessibly designed

### Early 2000s

### 2002

// UNESCAP adopts the "Biwako Millennium Framework" for "promoting an inclusive, barrier-free, and rights-based society for people with disabilities in the Asian and Pacific region in the twenty-first century"

// Philippines: National Council for the Welfare of Disabled Persons creates a core group of webmasters to help in the implementation of the Biwako Millennium Framework

### 2003

// UNESCAP extends the Declaration of Asia-Pacific Decade for Disabled Persons

// Philippines: first workshop on accessible technologies for people with (dis)abilities is held, with representation from 11 Asia-Pacific nations

// "Manila Accessible Information and Communications Technologies (ICT) Design Recommendations" drafted and adopted

## 2004

// Philippines: First Regional Workshop on Accessible ICT for Persons with Disabilities held in Tagaytay City where the concept of web accessibility is proposed to 25 developers from various governments, non-government agencies, and academe

// Spain: introduces the "UNE 139803:2004," based on WCAG 1.0, to regulate web accessibility

// Italy's Gazzetta Ufficiale publish the "Technical Rules of Law 4/2004" based on WCAG 1.0 under Law No. 4/2004 ("Stanca" Law) as a requirement for all government websites

// "Japanese Industrial Standards (JIS) X 8341-3" established

## 2005

// The federal government of Brazil releases "e-MAG, Govt. Accessibility Model"

// France publishes the "SGQRI 008" based on WCAG 1.0 under Law No 2005-102, Article 47 that maintains any government and non-government websites be accessible by all persons

// Ireland implements the WCAG 1.0 AA under "The Disability Act 2005" for all government websites

// Government of Ontario establishes the "Accessibility for Ontarians with Disabilities Act" AODA based on the WCAG 2.0 for all Ontario websites to be accessible

## 2006

// Sweden: Verva, the Swedish Administrative Development Agency, releases an updated version of their Swedish National Guidelines for Public Sector Websites

// UK: "PAS 78" introduced by The Disability Rights Commission and British Standards Institution; provided guidance to organizations on how to achieve accessible websites

## 2007

// Sweden: A survey carried out in February 2007 shows that over 90% of the public sector is aware of the Guidelines and over 80% are implementing them

## 2010

// UK Equality Act of 2010 to combine numerous Acts and Regulations that previously formed the basis of anti-discrimination law in the nation, including the Disability Discrimination Act 1995

// UK: in December the "British Standards Institute" (BSI) releases the "BS 8878:2010 Web Accessibility – Code of practice" standard that supersedes the "PAS 78" as basis for e-Accessibility Action Plan

// Japan: "JIS X 8341-3" revised to adopt WCAG 2.0 very closely; new version published by the Web Accessibility Infrastructure Commission (WAIC)

## 2012

/// Canada: Donna Jodhan and the Alliance for Equality of Blind Canadians win against the Attorney General of Canada for a lack of accessibility on government websites

## 2011

// Canada rescinds the CLF with the "Standard on Web Accessibility" based on WCAG 2.0 - "Web Experience Toolkit" (WET) released

// Germany establishes the BITV 2 (based on WCAG 2.0) under the Federal Disabled Equalization Law (BGG) for all government websites

// Spain introduces the 139803:2012 CEN accessibility requirements for web content

- Hong Kong adopts level AA of the WCAG 2.0 as a standard for all government websites

// The Govt. of Québec releases the "SGQRI 008" based on the WCAG 2.0 under the Standards sur l'accessibilité du Web

## 2014

// Spain adopts the WAI-ARIA

// A draft law is endorsed by the European Parliament requiring all public-sector websites to be accessible

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## Late 2000s

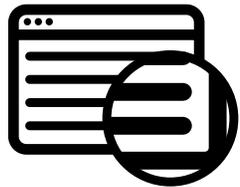
## 2010s

# Essential Components

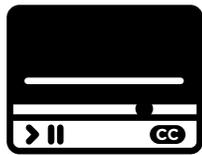
## COMMON TYPES OF (DIS)ABILITIES AND RELATING ASSISTIVE TECHNOLOGIES

Visual	Auditory	Physical
Colour-blindness, low vision, blindness, deaf-blindness	Hard of hearing, deafness	Slow response time, limited fine motor control

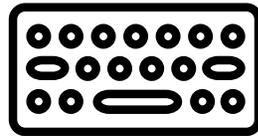
Speech	Cognitive	Software Programs
Stuttering, cluttering, weakness or paralysis of muscles that require speech, inability to form certain sounds, muteness, inability to use voice-only features	Difficulty focusing or remembering, easily distracted, learning (dis)abilities, photoepileptic seizures caused by visual strobe or flashing effects	eSSENTIAL Accessibility app that combines various assistive features and allows users to navigate the Web hands free



SCREEN MAGNIFICATION SOFTWARE



CLOSED CAPTIONING



KEYBOARD OVERLAYS

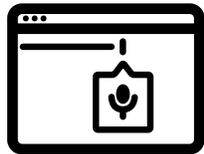


SIGN LANGUAGE



SCANNER

eSSENTIAL ACCESSIBILITY



TEXT-TO-SPEECH/ SPEECH-TO-TEXT SOFTWARE/HARDWARE



HEARING LOOP (OR INDUCTION LOOP) SYSTEMS



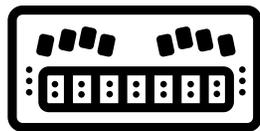
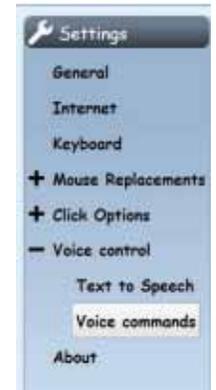
FOOT MOUSE OR LARGE TRACKBALL MOUSE



AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC)



TEXT-TO-SPEECH/ SPEECH-TO-TEXT SOFTWARE/HARDWARE



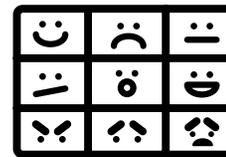
REFRESHABLE BRAILLE DISPLAY



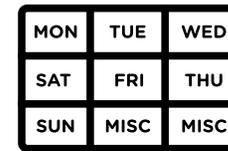
INFRARED SYSTEMS



SWITCH ACCESS DEVICE



COMMUNICATION BOARDS



MEMORY AIDS (PILL ORGANIZERS)

Also: Screen readers, video magnifiers, braille watches, braille printers

Also: Hearing aids, FM systems, personal amplifiers

Also: Hearing aids, FM systems, personal amplifiers

Also: Screen readers, text-to-speech software/hardware

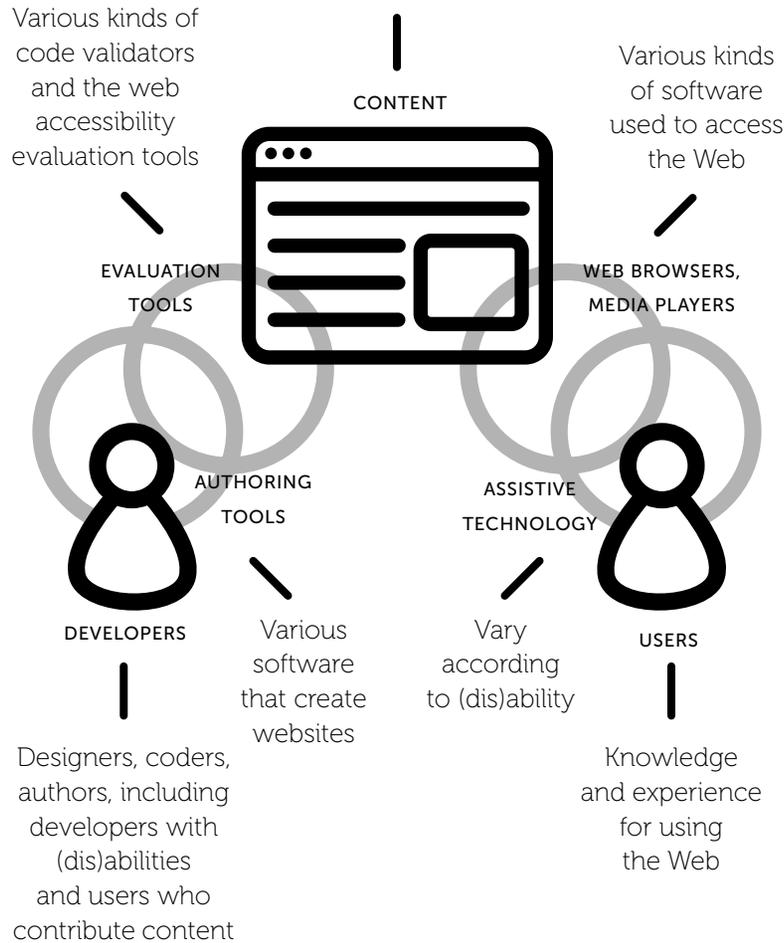
Also: Reminder aids, organizational aids, pager systems, personal digital assistants

Also: Hands-free tracking, on screen keyboard, page reader, manual scan, auto scan, XY mouse, direction mouse, radar mouse, customizable toolbar, multilanguage

# WHAT IS ESSENTIAL FOR THE WEB DESIGN TO BE ACCESSIBLE?

## 1. "How Components Relate"

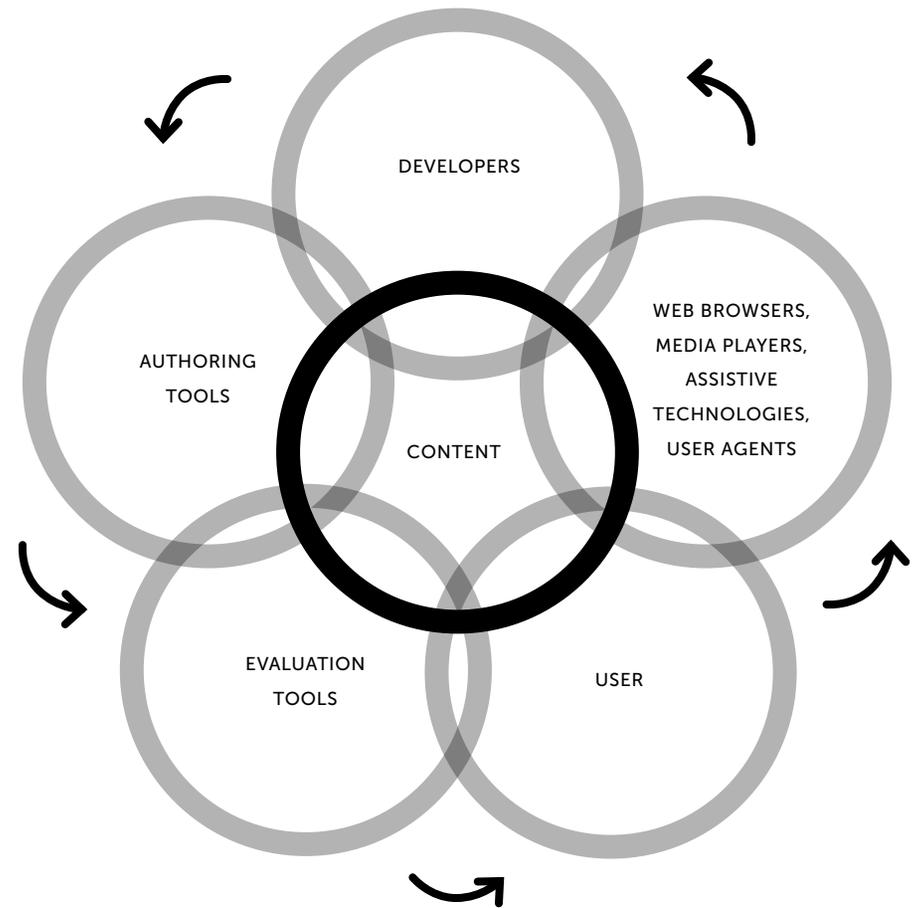
This includes natural information such as your text, images, and other multimedia content, as well as any coding



## 2. "The Implementation Cycle"

If web browsers, media players, assistive technologies, and other user agents are created with accessibility in mind, users will seek more opportunities for engagement and motivate developers to take action. When developers take initiative, they are likely to use authoring tools that

provide support. When authoring tools provide support (e.g., evaluation tools) it is easier for developers to implement. When all of these factors are working with the content, developers and users will seek to complete the circle by encouraging user agents to follow through.

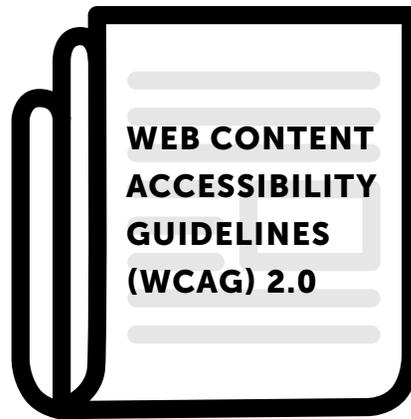


### 3. Key Guides



Provides 28 guidance checkpoints on how to make authoring tools accessible for developers with (dis)abilities.

E.g. WYSIWYG HTML Editors, software's that convert to web content (word processors "Save as HTML), websites that let users contribute content (blogs, wikis, forums, social networking, image hosting, etc), and more



Intends to create an international standard for web content accessibility that works with the needs of individuals, organizations, and governments.

#### **Follows the four principles "POUR":**

- PERCEIVABLE to the senses (mainly vision and hearing) through a browser or assistive technologies
- OPERABLE thoroughly through a mouse, keyboard, or an assistive device
- UNDERSTANDABLE content presented in a clear and logical manner
- ROBUST content and reliable response to multiple devices



Explains how to make user-agents such as web browsers, media players, and assistive technologies (in terms of software) accessible to people with (dis)abilities.

#### **Contains a comprehensive set of checkpoints to determine:**

- Access to content, including content triggered by a mouse or keyboard
- User control over how content is rendered
- User control over the graphic user interface, including accessibility features
- Standard programming interfaces, for ease of access by assistive technologies



Works with dynamic content such as Ajax, JavaScript, and advanced HTML to create even more possibilities for accessible web content and web applications.

It is so useful that even in it's current draft stage it is being used by governments, organizations and individuals.

## “MEANINGFUL INCLUSION”

The Web is a great place to start with an accessibility initiative. With so much information, guidelines, support, evaluation tools, and programs, it is very easy to make a difference. It is important to take this effort and apply it to physical spaces as well. You can start by simply integrating more options for contact. A TTY / Teletypewriter or an online chat can make a great difference for people with hearing or speech impairments. Extending to your location, you can follow your region specific accessibility guidelines and serve a greater amount of people and achieve greater goals. An incredible opportunity exists in involving people with (dis)abilities in your initiative. Who better to improve things than people who understand what is missing and how particular changes will come to effect. If certain factors are not achievable or yet available for use, note so on your contact page. Inclusion is the ultimate goal and integrity is foundation it is built upon.

## Implementation

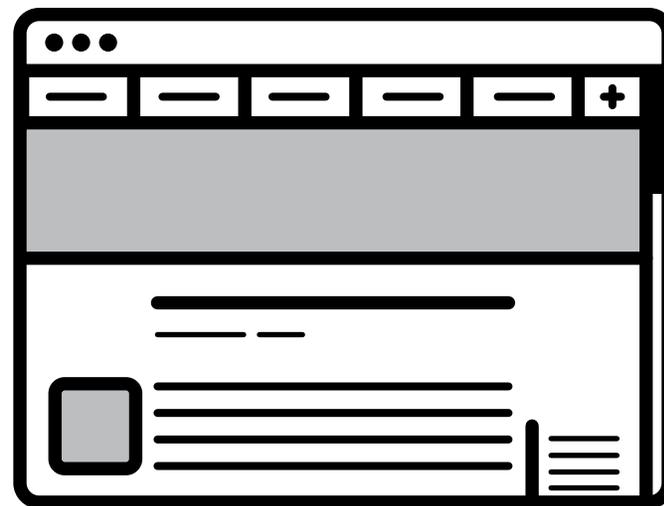
### POSSIBILITIES



Apple, and Campaign Monitor are just two examples of the striking, dynamic, interactive, and memorable websites that can be achieved while having full accessibility. Imagine everything you want to do with your website, but better.

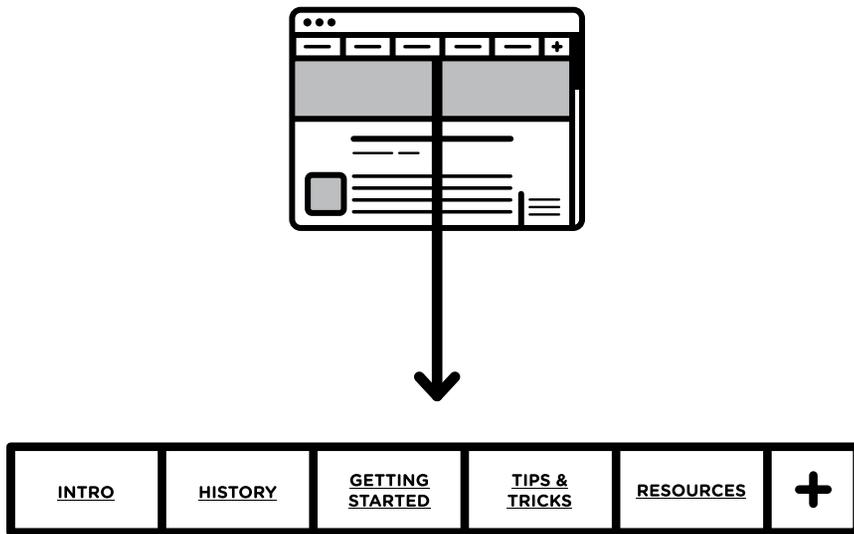
## WHAT YOU CAN DO

### Layout and Structure



- Clear and logical to follow
- Descriptive titles, headings, and labels
- Helpful error and success messages
- Enough white space to avoid clutter
- Sufficient time limits to respond to or complete tasks (e.g., fill out forms, answer questions)
- Allow users to skip repetitive parts of the content
- Pages are resizable without the loss of information
- Provide a sitemap that breaks down the entire website with an indicator of the current page
- Effects are device-independent (e.g., do not require a mouse)
- Coding is not solely based on JavaScript
- Keep your coding up to date as the Web is being constantly updated to allow for easier and better access of content
- Follow WCAG 2.0 as closely as possible

## Navigation



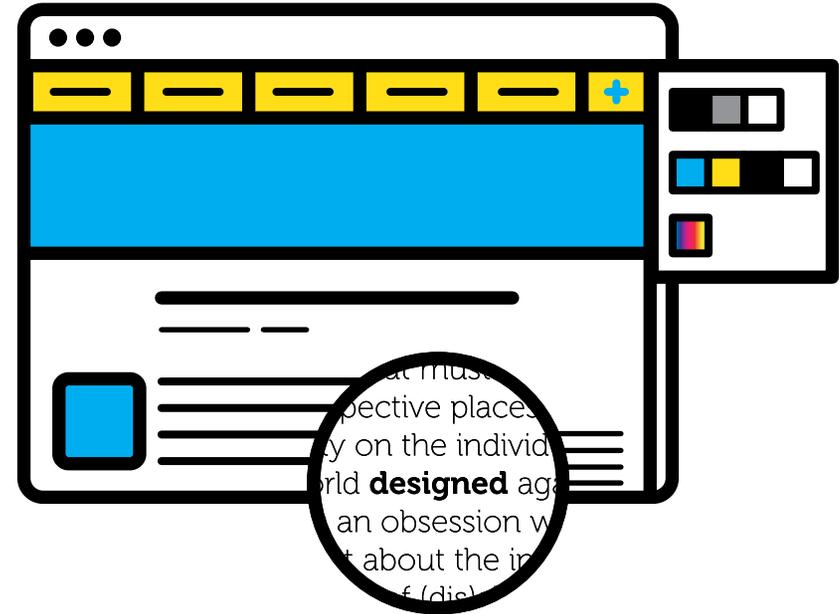
• Easy to find

•• All links make sense out of context, avoid ambiguous words and phrases (e.g., "more," "click here")

••• All links are underlined so that they are easily noticeable and distinguishable to colour-blind users

••• Fully navigable through a keyboard or a switch access device

## Colours



• Consistent

•• Enough contrast to distinguish between different elements

••• Avoid using colour to convey meaning, as this information is not available to colour-blind users (e.g., red text for sale prices in a shop)

••• Employ primarily blues, yellows, whites, and blacks for all information to be available to colour-blind users

••• Allow users to choose from multiple colour themes

## Text



- Use a legible and readable typeface

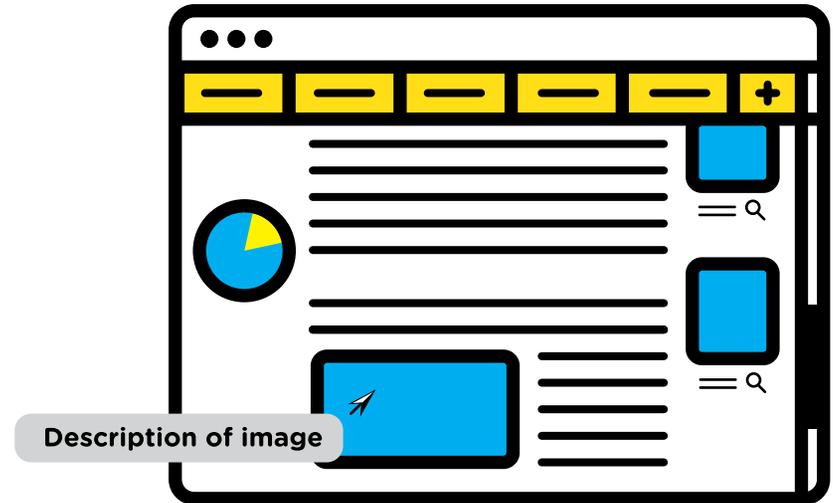
- Allow the text-sizes to be enlargeable

- Allow various options for the typeface, typestyle, and text-sizes

- Use a large text-size that is easy to read

- Avoid clumping large amounts of text together

## Images

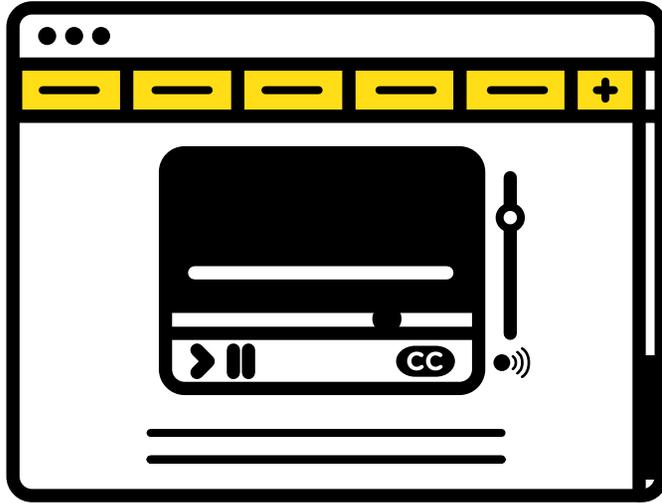


- Use alternative text

- Include illustrations, instructional diagrams, and/or animations to help understanding of text content for users with dyslexia and learning difficulties

- Allow users to enlarge images

## Multimedia



- Closed-captioning of video content

- Controllable background music

- Make strobing lights, flashing lights, or moving content optional

- Options to stop, pause, or adjust volume of video/audio content independently of system

- Background noise in video/audio content is clearly filtered out

- Transcripts available

- A sign-language version/split-screen available of video/audio content

- Ensure that all external files, non-HTML content is accessible (e.g., PDFs, Documents, etc)

Most of these implementations are pretty simple and easy to accomplish, as well as inexpensive. There are a few, like transcribing or getting a sign-language interpreter that may be more costly, but they are ultimately beneficial. If you can't go all the way, it truly matters that you go as far as you can.

## CHECK OUT

A great resource is the "Before and After Demonstration" that shows a website both in it's inaccessible form and accessible form. With each page you get notes on what design factors create barriers and how they are repaired. Most of all, you get informative evaluation reports on how closely a page is following the WCAG guidelines. This way, you can directly see some of the recommendations in action.



## MOBILE

Smart phones and/or a tablets are growing in popularity. With increasing support available for people with (dis)abilities, it is now imperative to extend accessibility to mobile technology. A great place to start is by implementing the recommendations in the previous section. To accomplish more, consider applying the WCAG 2.0 with the "Mobile Web Best Practices" (MWBP) and "Mobile Web Application Best Practices" (MWABP) guides from the WAI. All of them work together seamlessly and it is best to consider them at the start of a project. With responsiveness already in mind, you are bound to create a successful web presence with the potential to reach your greatest audience.

# Glossary

## TERMS

**Assistive Technologies** Any software and hardware that increases or maintains the level of interaction of people with (dis)abilities with their environment.

**Captions** Textual descriptions or details that accompany a visual or multimedia.

**Column groups** An addition to the TABLE element that allows for multiple columns and therefore better organization of content.

**Constraints** These include the type of (dis)ability, assistive technology, device, and web browser a person has/uses to interpret the Web.

**Developers** Designers and authors, including people with (dis)abilities who create the source code for web content.

**Elements** HTML documents are constructed with elements that have various specific functions. They always have a starting tag and a closing tag, for example, a document is always enclosed in <html> </html>.

**Markup** Various coding languages that construct web content. E.g. HTML is used for describing web pages, whereas CSS is used for describing the display of HTML elements.

**Medical Model of (Dis)ability** A definition that considers (dis)ability to be a physical or mental impairment that needs to be fixed using science and medicine.

**Open source** Software with an original source code that is freely available without any restrictions for use and distribution.

**Render** The loading and display of web pages on web browsers.

**Social Model of (Dis)ability** A definition that considers (dis)ability to be a result of deliberate exclusion from society.

**Source Code** A text of commands that come together to create websites and software.

**Style sheets** Usually referred to as CSS (Cascading Style Sheets). A command file for the visual settings of websites, including: layout, colour, fonts, links, images, and more.

**Tables** HTML tables are defined with the <table> tag and are used to organize content (usually data) in rows, columns, and headings.

**Users** Anyone who access and uses the Web.

**Web Accessibility Tool Developers** Developers that create various software and hardware that help create accessible web content. E.g. Form builders, table builders, navigation builders, and more.

**Web Authoring Tools** Various software that create and build websites. E.g. WYSIWYG editors, code editors, CMS, etc.

**Web Content Developers** see "developers."

**Web Evaluation Tools** Various software and human services used to verify if your code meets accessibility guidelines.

## ACRONYMS

**AAC** Augmentative and Alternative Communication

**ATAG** Authoring Tool Accessibility Guidelines

**CMS** Content Management System

**CSS** Cascading Style Sheets

**HTML** HyperText Markup Language

**ICF** WHO's International Classification of Function, (Dis)ability and Health

**MWABP** Mobile Web Application Best Practices

**MWBP** Mobile Web Best Practices

**UAAG** User Agent Accessibility Guidelines

**UPIAS** Union of the Physically Impaired Against Segregation

**W3C** World Wide Web Consortium

**WAI** Web Accessibility Initiative

**WAI-ARIA** WAI-Accessible Rich Internet Applications Suite

**WCAG** Web Content Accessibility Guidelines

**WYSIWYG** "What You See Is What You Get" editors

## Resources

### **Standards by the International Organization for Standardization (ISO)**

A comprehensive database that has more than 19,500 International Standards for a spectrum of products and services

### **Internet Standard (STD) by the Internet Engineering Task Force (IETF)**

Various specifications that regulate techniques or software for the Internet

### **RGD Accessibility: A Practical Handbook on Accessible Web Design**

An accessible practical guide based on the WCAG 2.0

### **The Unicode Standard by the Unicode Consortium**

An initiative by the non-profit organization to replace existing codes with Unicode, claiming unlimited applications and compatibility

### **W3C Before and After Demonstration — [www.w3.org/WAI/demos/bad](http://www.w3.org/WAI/demos/bad)**

A practical demo that shows an inaccessible website and an improved version

### **WebAIM - [www.webaim.com](http://www.webaim.com)**

Accessibility training, technical assistance, accessible site

certification, and evaluation and reporting tools

### **Web Standards for the Government of Canada**

#### **Standard on Web Accessibility**

- Ensures that Government of Canada websites comply with an international standard

#### **Standard on Web Usability**

- Ensures that Government of Canada websites and web applications are accessible

#### **Standard on Web Interoperability**

- Ensures that all Government of Canada web content is consistently available and accessible across websites, applications, and platforms

#### **Standard on Optimizing Websites and Applications for Mobile Devices**

- Ensures that Government of Canada web presence is accessibly extended to mobile technology

#### **The Web Experience Toolkit (WET)**

- Includes usable content for creating accessible websites through free open source software

# References

**"Accessibility Principles." WAI. Ed. Shadi Abou-Zahra. W3C, 1 Aug. 2012. Web. 9 Apr. 2015. <<http://www.w3.org/WAI/intro/people-use-web/principles>>.**

This article uses "POUR" principles from the WCAG 2.0 to introduce web accessibility requirements for various components. This is not a comprehensive resource for all requirements, only the basics.

**Barnes, Colin, and Geof Mercer. "Theorising and Researching Disability from a Social Model Perspective." Implementing the Social Model of Disability: Theory and Research. N.p.: Leeds: The Disability, 2004. 1-17. Centre for Disability Studies. Leeds. Web. 20 Apr. 2015. <<http://disability-studies.leeds.ac.uk/files/library/Barnes-implementing-the-social-model-chapter-1.pdf>>.**

This chapter from the book explores the contributions of various individuals and groups of activists with (dis)abilities in forming the social model of (dis)ability. The authors explain this through a historic account of events that triggered these initiatives and later formed the foundations of a growing effort.

**Dardailler, Daniel. "WAI History." WAI History. W3C, June 2009. Web. 20 Apr. 2015. <<http://www.w3.org/WAI/history>>.**

Dardailler, a founding leader of the WAI, details a personal account of the initial development of the WAI. He highlights when it began, how long it took, and its progression over time.

**"Diversity in Web Use." WAI. Ed. Shadi Abou-Zahra. W3C, 1 Aug. 2012. Web. 9 May 2015. <<http://www.w3.org/WAI/intro/people-use-web/browsing>>.**

WAI breaks down the various methods and technologies people use to perceive the web, such as the content format, content presentation, user interaction, and design solutions. They also include various examples and resources for each category.

**"Essential Components of Web Accessibility." Essential Components of Web Accessibility. Ed. Shawn Lawton Henry. W3C, Aug. 2005. Web. 22 Apr. 2015. <<http://www.w3.org/WAI/intro/components.php>>.**

The W3C provides detailed explanations and visual descriptions of the various components essential for a web experience. They break down how they relate, how they affect each other, what happens if something isn't functioning, and provide guidelines for further understanding.

**"Introduction to Web Accessibility." Introduction to Web Accessibility. Ed. Shawn Lawton Henry. W3C, n.d. Web. 7 Apr. 2015. <<http://www.w3.org/WAI/intro/accessibility.php>>.**

The WAI provides an introduction through an exploration of what is accessibility on the web, why it is important, what it means to make a website accessible, how to make your own website accessible, and evaluation tools available.

**"Introduction to Web Accessibility." WebAIM. WebAIM, n.d. Web. 04 May 2015. <<http://webaim.org/intro/>>.**

WebAIM's introduction to web accessibility provides simple and concise explanations on the opportunities available, the audience being addressed, what can be done, and how it can be accomplished.

**Rogers, Mark. "PowerMapper Software Blog." Government Accessibility Standards and WCAG 2.0. PowerMapper, 13 Nov. 2012. Web. 21 Apr. 2015. <<http://blog.powermapper.com/blog/post/Government-Accessibility-Standards.aspx>>.**

Rogers has organized a basic summary of web accessibility standards from various countries around the world. Presented in a table, he details the country, standard name, corresponding legislation, and what it applies to.

**Scano, Robert. "A Journey Through Accessibility." Juicy Studio. Juicy Studio, 27 Mar. 2006. Web. 20 Apr. 2015. <<http://juicystudio.com/article/journey-through-accessibility.php>>.**

Scano examines a concise history of accessibility on the web, starting as far back as the first major development in 1997.

**"W3C." Accessibility. Ed. Shawn Lawton Henry and Liam McGee. W3C, n.d. Web. 20 Apr. 2015. <<http://www.w3.org/standards/webdesign/accessibility>>.**

The W3C illustrates why accessibility on the web is important, provides some examples, and explains how to make your website accessible. The article includes a short description of the WAI and provides various resources for further research.

**Wasserman, David, Adrienne Asch, Jeffrey Blustein, and Daniel Putnam. "Disability: Definitions, Models, Experience." Stanford Encyclopedia of Philosophy. The Metaphysics Research Lab, Center for the Study of Language and Information (CSLI), Stanford University, 16 Dec. 2011. Web. 20 Apr. 2015. <<http://plato.stanford.edu/entries/disability/>>.**

This article provides a thorough examination of '(dis)ability' through an exploration of its definitions, models, and experience. The authors discuss historical developments, explain controversies, activism efforts, policy creation, and consider a spectrum of perspectives.



the 1990s, the number of people in the world who are illiterate has increased from 400 million to 600 million.

It is not only the illiterate who are at risk of being left behind in the new global economy. The world's population is growing rapidly, and the number of people who are poor is increasing. In 1990, there were 1.2 billion people living on less than \$1 a day. By 2000, there were 1.5 billion, and by 2010, there will be 2 billion.

The world's population is also becoming more diverse. There are now over 200 different languages spoken in the world, and the number of different ethnic groups is increasing. This diversity is a source of strength, but it also presents challenges for education and development.

Despite these challenges, there are many reasons to be optimistic about the future. The world's population is becoming more educated, and the number of people who are poor is decreasing. The world's economy is growing, and there are many opportunities for development.

One of the most important reasons to be optimistic is the progress that has been made in education. The number of people who are literate has increased from 400 million in 1990 to 600 million in 2000. This progress has been made possible by the efforts of governments, educators, and parents.

Another reason to be optimistic is the progress that has been made in economic development. The number of people who are poor has decreased from 1.2 billion in 1990 to 1 billion in 2000. This progress has been made possible by the efforts of governments, businesses, and individuals.

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