

DIGITAL ACCESSIBILITY BASICS

...and then some

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“Good accessibility is a measurable collaboration between content, design, and technology through consistent, repeatable processes.”

- Oskar Westin (that's me)



OSKAR WESTIN

Digital content manager

Accessibility advocate

Author of fiction

@oskarwestinTO

Find me on LinkedIn:
[linkedin.com/in/oskarwestin/](https://www.linkedin.com/in/oskarwestin/)

WHAT IS DIGITAL ACCESSIBILITY?



Image credit: [Open Access Government](#)

DIGITAL ACCESSIBILITY (A11Y)

- Digital accessibility (a11y) provides equitable access to people who need assistive technology to access our digital content, products and services.
- **A11y** is a Numeronym for accessibility.
It's the eleven letters between the **A** and the **Y** in **Accessibility**.

WHAT IS DISABILITY?



**Disability is a mismatch between
a person's abilities and their
environment**

WHAT IS WCAG

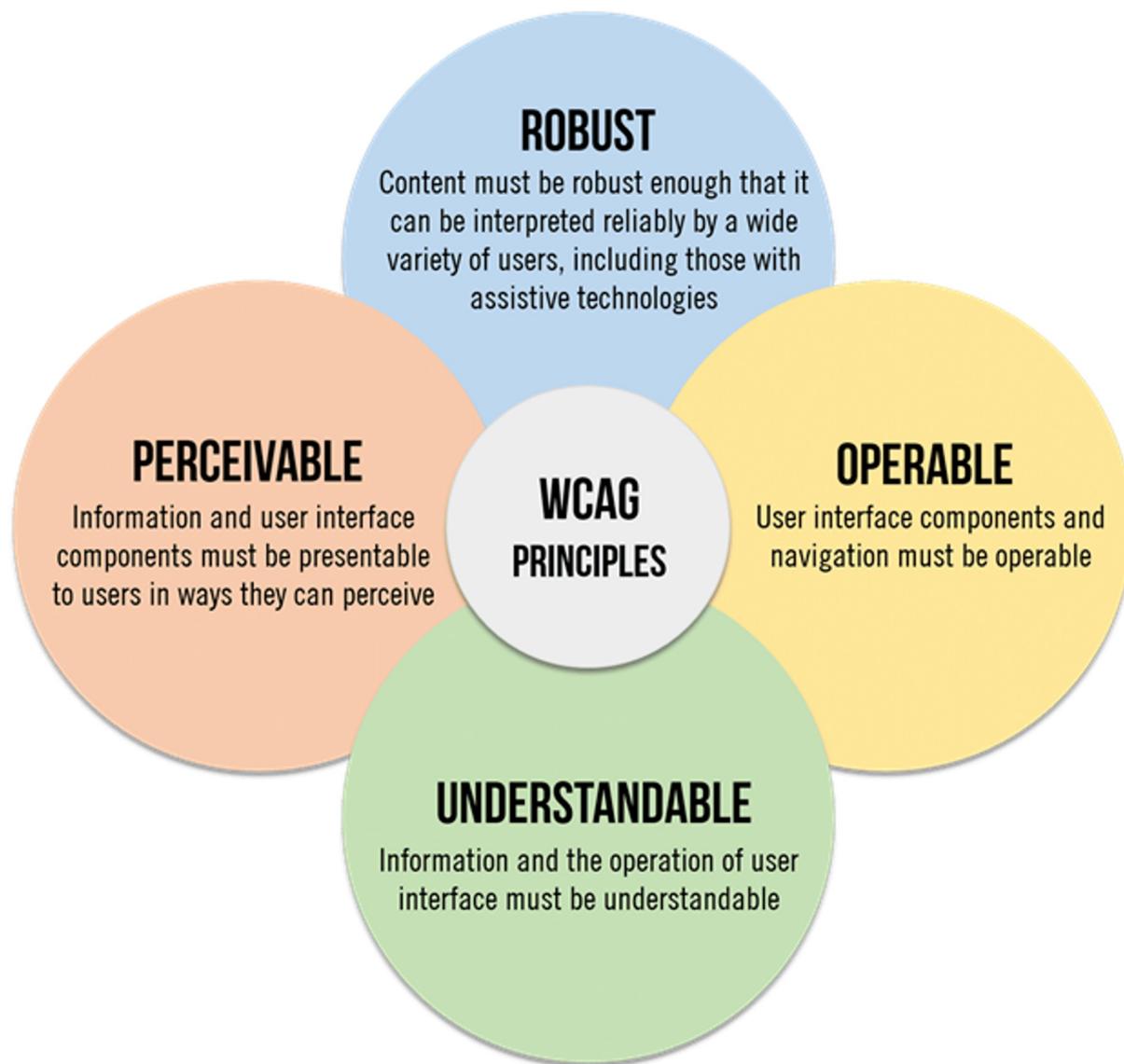


The web content accessibility guidelines (WCAG) are a resource to help you build inclusive content.

Many legislative bodies refer to WCAG 2.x

Conforming to WCAG does not guarantee that your website is accessible

This is not the only reference you need to consider.



WCAG PRINCIPLES AND GUIDELINES

Perceivable

Operable

Understandable

Robust





PRINCIPLE 1: PERCEIVABLE

Information and user interface components must be presentable to users in ways they can perceive

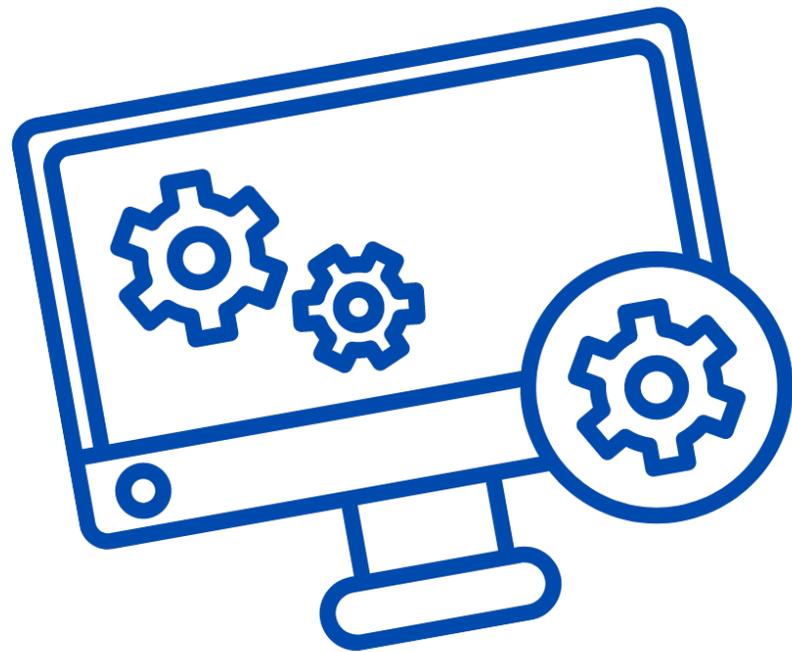
This means that users must be able to perceive the information being presented (it can't be invisible to all of their senses)



PRINCIPLE 2: OPERABLE

User interface components and navigation must be operable.

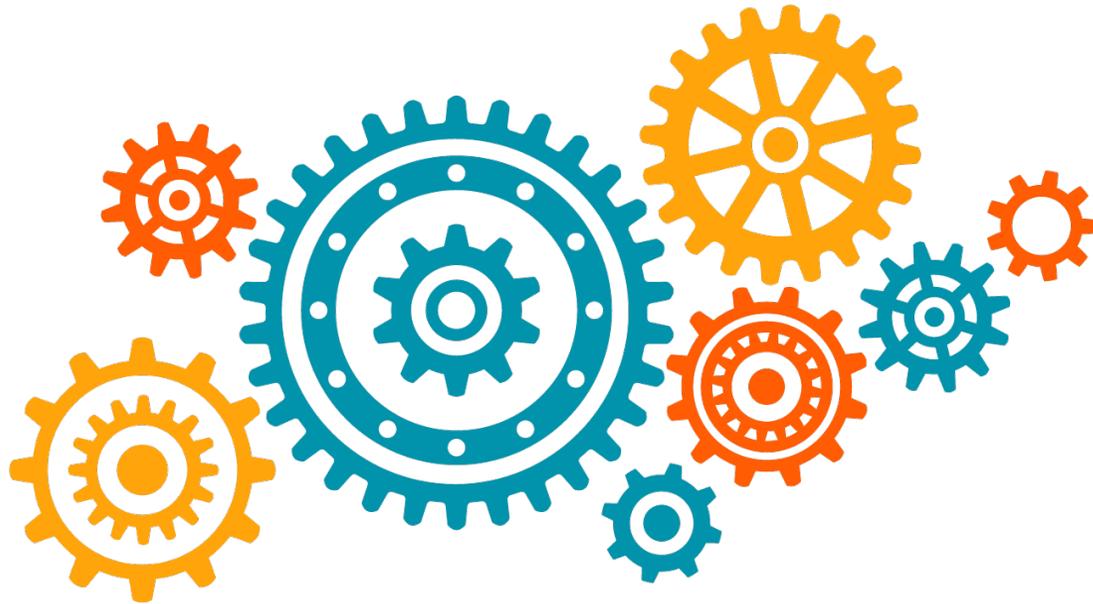
This means that users must be able to operate the interface (the interface cannot require interaction that a user cannot perform)



PRINCIPLE 3: UNDERSTANDABLE

Information and the operation of user interface must be understandable.

This means that users must be able to understand the information as well as the operation of the user interface (the content or operation cannot be beyond their understanding)



PRINCIPLE 4: ROBUST

Content must be robust enough that it can be interpreted reliably by various user agents, including assistive technologies.

This means that users must be able to access the content as technologies advance (as technologies and user agents evolve, the content should remain accessible)

DOES WCAG HELP PEOPLE?



WCAG provides success criteria and guidelines to help create a more inclusive experience for people

WCAG can also be a barrier leading to a false sense of success

Who are the people we're designing for?

INCLUSIVE DESIGN

PERMANENT TEMPORARY SITUATIONAL

See



Blind



Cataract



Distracted Driver

Speak



Non-Verbal



Laryngitis



Heavy Accent

Think*



ADHD



Blood Clot



Stress

*The Cognitive category (Think) was added by me

PERMANENT TEMPORARY SITUATIONAL

Touch



One Arm



Arm Injury



New Parent

Hear



Deaf



Ear Infection



Bartender

Microsoft Inclusive Design

ACCESSIBLE USER PERSONAS AND EXPERIENCES

 Content
  Design
  Technology

| Practice | Persona | Experience |
|---|--------------------------------------|--|
| Content  | Content order (keyboard) | dexterity, cognitive, blind/low-vision |
| Content, design   | Magnification/text resize | low-vision, cognitive |
| Design, content   | Colour contrast | low-vision, cognitive |
| Design, technology   | Contrast themes | low-vision, cognitive |
| Design, technology   | Time-based (reduced motion and text) | low-vision, cognitive |
| Content, technology   | Screen reader | blind/low-vision, cognitive/ language barriers |

FUNCTIONAL ACCESSIBILITY REQUIREMENTS (FARs)



| | | | |
|--|---|---|--|
| | Where visual modes of presentation are provided  | Where auditory modes of presentation are provided  | Where speech is required to operate a function  |
|  | Where manual dexterity is required for operation | Where hand strength is required for operation | Where operation requires reach |
|  | Where memorization is required for use | Where text literacy is required for use | Where extended attention is required for use |
|  | Where operation has time limits | Where controlled focus is required for use | Where specific sequencing of steps for operation is required |
|  | Where abstract thinking is required | Where accuracy of input is required | Where biometrics are employed |

FUNCTIONAL COGNITIVE NEEDS



| Functional Needs | Examples of related experience |
|-------------------------|--|
| Attention | Attention Deficit (Hyperactivity) Disorder (ADD/ADHD) |
| Language & literacy | Aphasia, Dyslexia, Visual Processing Disorders |
| Learning | ADHD, Autism, Brain Injury, Dyscalculia |
| Memory | Mild Cognitive Impairments, Brain Injury, Depression, PTSD |
| Executive function | Brain Injury, Autism, Aging, Environmental Factors |

WHAT ABOUT WCAG



WCAG is still a good resource

Target the latest recommendations WCAG 2.0

Be ready to adapt changes to WCAG by adopting user-based perspectives

W3C®

WCAG 2.0

~~2.0~~ 2.2 3.0

yetil.net

WCAG 3 is not ready yet

Eric Eggert

Web Accessibility Expert



WCAG 3.0 ...

WCAG 3.0 will address

- a wider range of users
- a wider range of technologies
- approaches to testing and conformance

WCAG 3.0 is not ready

- User-centred design will help to anticipate the future of accessibility

A REMINDER: WHAT IS DISABILITY?



a person's abilities and their environment



DIGITAL ACCESSIBILITY

**The basics of accessibility
are people-driven**

And not rooted in
requirements or
conformance

Understand the experiences
you are building for

And don't create barriers to
your content or products

THANK YOU



Discussion ...

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