

Web Accessibility Fundamentals

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“Development of information systems
flexible enough to accommodate the
needs of the broadest range of users...
regardless of age or disability”

accessibility is...

... a continuum.

... a process.

... never fully reached.

accessibility ...

... encourages good design and
development practices.

... supports SEO.

... supports internationalization.

... supports mobile-friendly content.

8.5% of the population has a disability that affects computer use

accessibility benefits everyone

assistive technologies





Guidelines are measures on
the continuum of
accessibility

Web Content Accessibility Guidelines 1.0



Section 508



Web Content Accessibility Guidelines 2.0

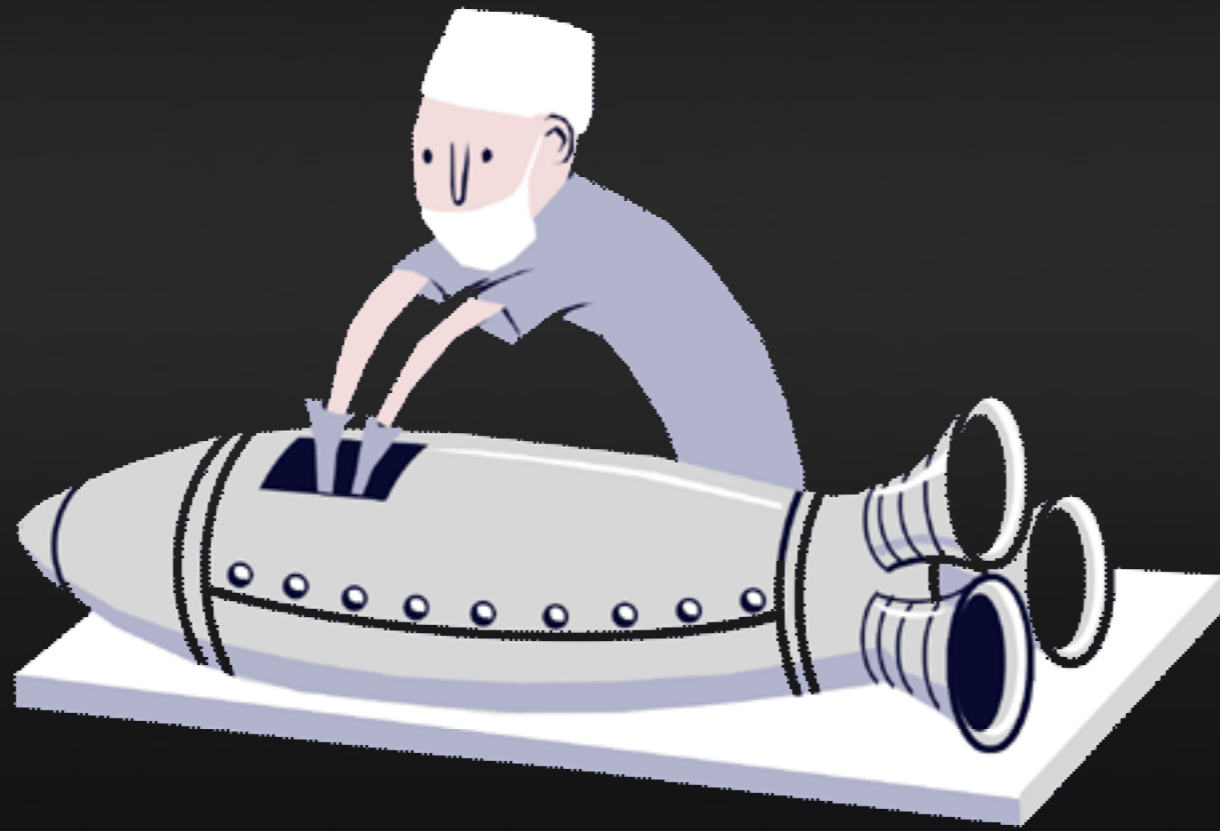


Your site can be compliant,
yet inaccessible

Your site can be technically
accessible, yet functionally
inaccessible

accessibility > compliance

web accessibility is not rocket surgery



Perceivable
Operable
Understandable
Robust

Perceivable



Auditory Disabilities

- Captions for video & live audio
- Text transcripts for all audio content

Auditory Disabilities



Visual Disabilities

- Blindness
- Low vision
- Color deficiency



Zoom	▶	◆ 2 X
Size	▶	3 X
Shape	▶	4 X
Zoom Filter	▶	8 X

[sing Programs](#) - [Business](#)



Visual Disabilities

- Web pages are linear
- Use meaningful links. Avoid “click here”.
- Alternative text for non-text elements
- Associate text labels with form elements
- Associate data cells to row/column headers

Visual Disabilities

- Sufficient contrast - <http://webaim.org/resources/contrastchecker/>
- Ensure that meaning is not conveyed with color alone

common
sense
is
vital
when
considering
color
contrast

pass

pass

pass

pass

fail

fail

fail

fail

The **green** mushrooms listed here are OK to eat.
The **red** mushrooms will kill you.

- Amanita
- Chanterelle
- Porcini
- Shitake
- Tylopilus

The **green** mushrooms listed here are OK to eat.
The **red** mushrooms will kill you.

- Amanita
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Operable



Motor Disabilities



Avoid flashing/strobing content

- More than 3 times in any one-second period
- Size, brightness, and red threshold
- Annoying rule

Operable

- Ensure keyboard accessibility
- Don't remove focus indicators
- Ensure interactive elements are clearly distinguishable
- Logical reading/navigation order

Operable

- Allow user to skip over repetitive and/or lengthy lists of links
- Error-prevention and recovery mechanisms
- Give users control over time-sensitive changes

Secret of Everlasting Happiness

Secret of Everlasting Happiness

Please finish reading this text – it will give you the secret to everlasting happiness. The secret is simple, all you need to do is to stop worrying about the key to everlasting happiness and enjoy the moment.

Secret of Everlasting Happiness

Secret of Everlasting Happiness

Sorry! Time's up!

Better luck next time!







Understandable



Who does this affect?

- Cognitive disabilities
- Largest disability group. Larger than all the others put together.
- Everyone!

Understandable

- Be careful with movement and other distracters
- Semantic organization (headings, lists, etc.)
- Be consistent and follow interaction models (ARIA design patterns).
- Strive for brevity. Use the simplest language appropriate to the content.

Understandable

- Focus the user's attention
- “Chunk” and simplify content
- Balance cognitive load vs. functionality

Understandable



Understandable



Robust

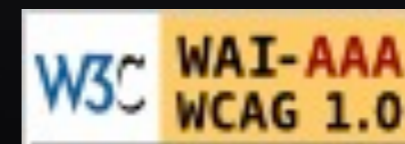


Robust

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Perceivable
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tools are valuable, but no
replacement for knowledgeable
practitioners



wave.webaim.org

“For people without disabilities,
technology makes things convenient,
whereas for people with disabilities,
it makes things possible.”

- Judy Hueman

thank you

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