

Web Accessibility in a Nutshell

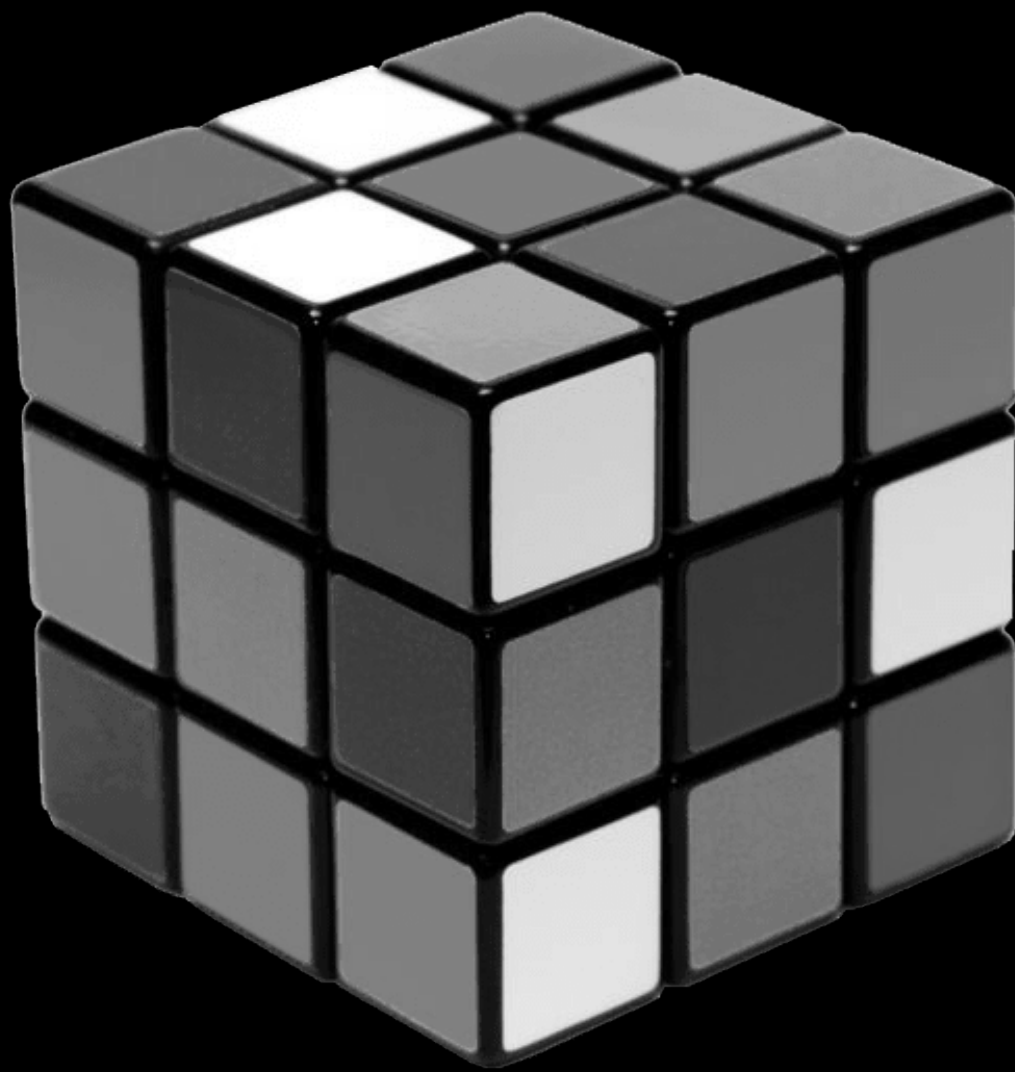
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otry.eu

39 000 000 (approx.)

People are blind

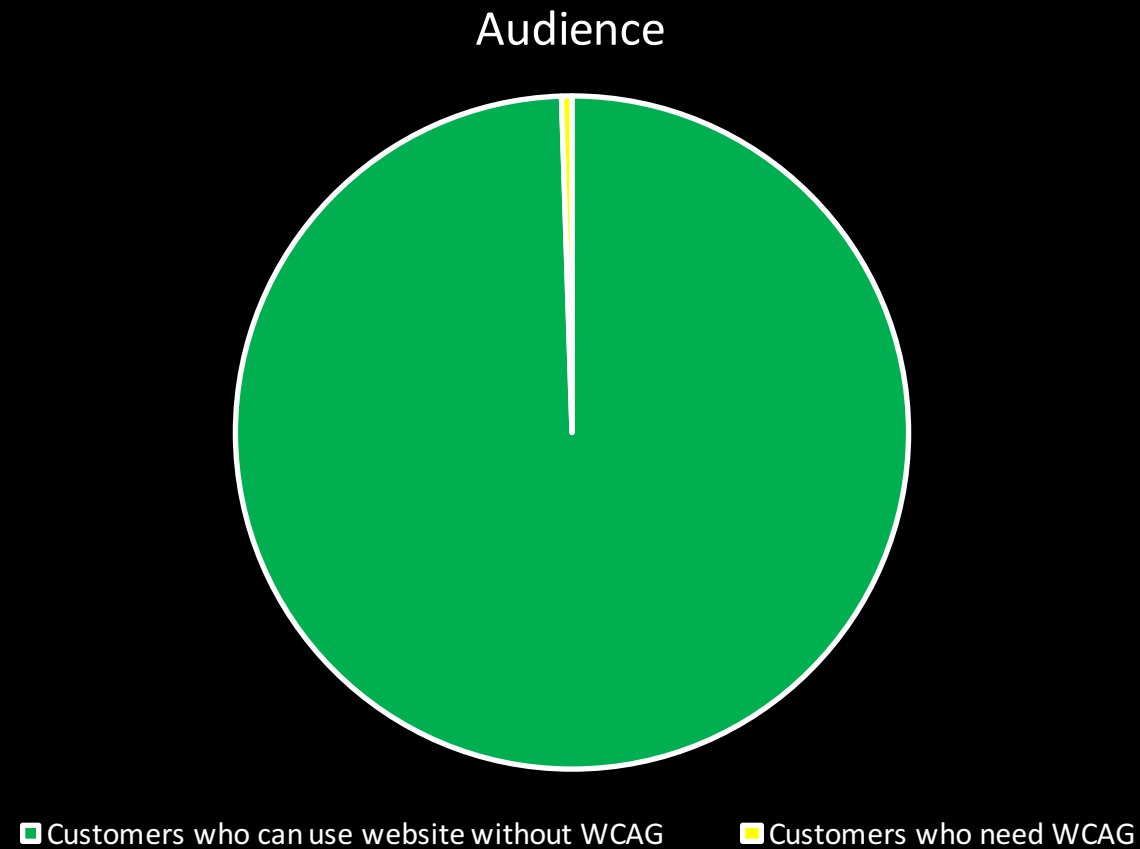








Problem



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- Required effort is much bigger than achieved result.
- In terms of business – it is not reasonable to do it all

Problem

- Required effort is much bigger than achieved result.
- In terms of business – it is WAS not reasonable to do it all
- Government, regulations and activists have done a good job
- It's still not enough for the whole industry though
- Lack of awareness regarding the topic

Solution

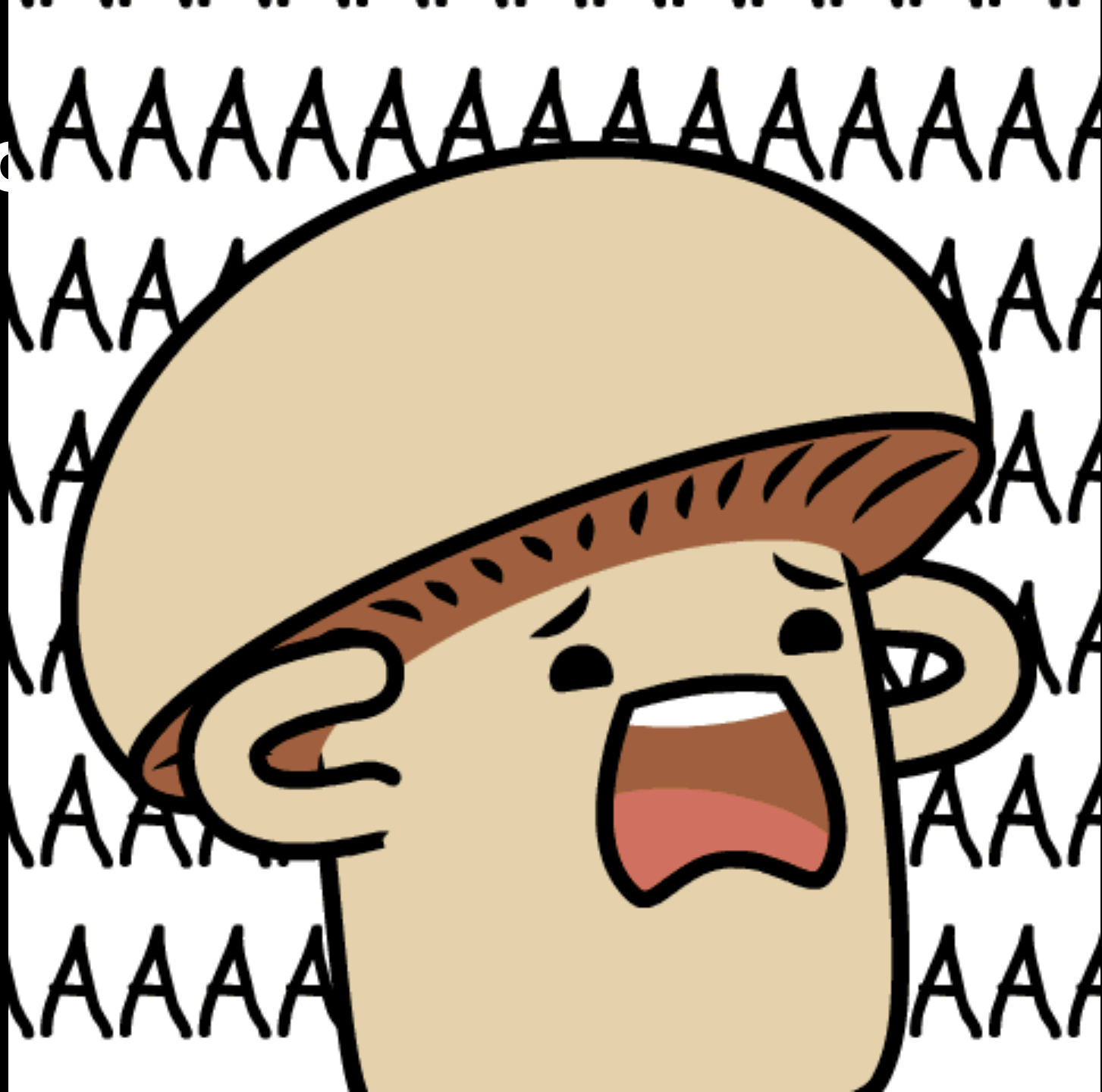
- Building new websites with accessibility in mind is not that big effort
- Regulations would force the rest of guys to do so anyway
- Tools for people with disabilities became better
- Tools for developers evolved either
- We still need to carry on with spreading the idea

Following explanations are simplified

Please do not consider them as a full reference.

Confo

- A
- AA
- AAA



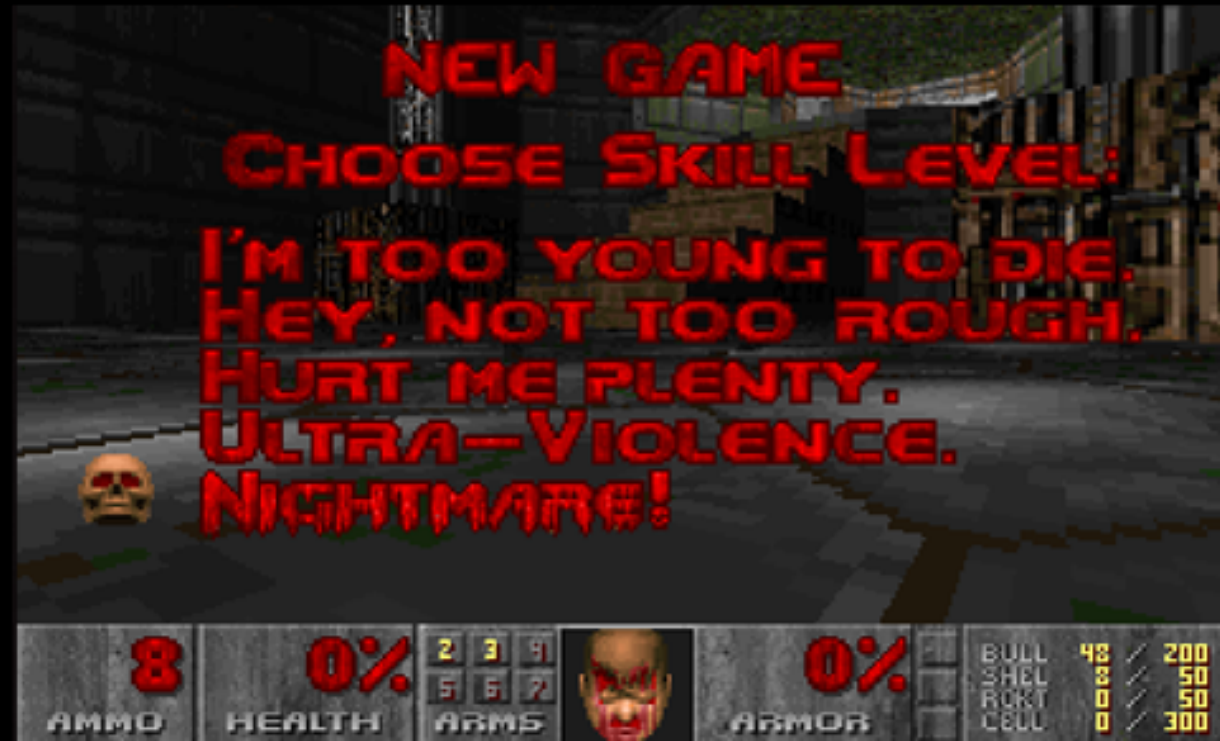
A

- Non-text content (prerecorded) alternative
- Media controls
- User can do everything with keyboard
- Accessible and readable markup
- Reasonable color use
- Accessible forms
- *Logical structure*
- *Skipping blocks*

AA

- Non-text content (all) alternative. Audio descriptions for video.
- More aggressive contrast policy
- Resizeability (☐ yes, you need to get rid of typical viewport tag)
- “Multiple ways” navigation
- Visible Focus

AAA



Relief

“It is not recommended that Level AAA conformance be required as a general policy for entire sites because it is not possible to satisfy all Level AAA Success Criteria for some content.”

Expected Efforts

- Design
- Markup
- Content replacements
- Scripts for navigation
- Legal

Screen Reader



- Aria tags
- Role tags

Keep Markup Consistent



Valid HTML



ARIA Tags



- aria-label
- aria-labeledby
- aria-describedby
- role
- aria-hidden

Content



- Video – alternative description, subtitles.
- Picture – image description
- Audio – written version of spoken content, description

Keyboard Navigation

- Correct tabindex

...

- Tables / Grids
- Charts
- Canvas

Keyboard Navigation



How to verify



- Detach a mouse and execute all possible cases with keyboard only

Tooling



- Safari Screen Reader (OSX)
- NVDA (Windows)
- WAVE (Chrome extension)
- Mobile Screen Readers
- Lighthouse

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Tooling



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<https://github.com/Muhnad/a11y-checker>

<http://ffoodd.github.io/a11y.css/>

<https://github.com/paypal/AATT>

Lighthouse





Additional items to manually check

10 audits ^

These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

- | | | |
|----|---------------------------------------------------------------|---|
| 1 | The page has a logical tab order | ▼ |
| 2 | Interactive controls are keyboard focusable | ▼ |
| 3 | The user's focus is directed to new content added to the page | ▼ |
| 4 | User focus is not accidentally trapped in a region | ▼ |
| 5 | Custom controls have associated labels | ▼ |
| 6 | Custom controls have ARIA roles | ▼ |
| 7 | Visual order on the page follows DOM order | ▼ |
| 8 | Offscreen content is hidden from assistive technology | ▼ |
| 9 | Headings don't skip levels | ▼ |
| 10 | HTML5 landmark elements are used to improve navigation | ▼ |

Legal

- Statement of Partial Conformance - Third Party Content
- Statement of Partial Conformance – Language
- [Section 508 of the Rehabilitation Act](#) in the US
- [Federal Ordinance on Barrier-Free Information Technology](#) in Germany,
- the [Equality Act](#) in the UK,
- [Accessibilità](#) in Italy,
- [Disability Discrimination Act](#) in Australia

Materials

- <https://developers.google.com/web/fundamentals/accessibility/how-to-review>
- <https://www.wuhcag.com/wcag-checklist/>
- <https://www.w3.org/TR/2018/WD-wai-aria-practices-1.2-20180719/examples/grid/dataGrids.html>

Thank you!
Would you send me a pigeon?



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