

WAI-Tools SONAAR

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About me

- Professor at the Faculty of Sciences of the University of Lisbon
- Researcher at LASIGE
- WAI-Tools' FCUL coordinator
- SONAAR's PI
- LEAD-ME management committee
- Co-chair of the W3C ACT Rules Community Group
- Member of the W3C WAI Curricula Task Force
- W3C Advisory Committee representative for the University of Lisbon



WAI-Tools

Horizon 2020

Started: November 2017 -- Ends: January 2021

<https://www.w3.org/WAI/about/projects/wai-tools/>

Context (1) Accessibility

- Access to information is a Human Right (UN CRPD)
- Accessibility (of public services) is required by law (DIRECTIVE (EU) 2016/2102)
- Standards:
 - EN 301 549 V2.1.2 (2018-08): Accessibility requirements for ICT products and services
 - WCAG 2.1 (2018): Web Content Accessibility Guidelines

Context (2) WCAG Techniques

- The WCAG techniques are designed to teach developers about accessibility
 - The language is not written for unambiguous interpretation
 - There is insufficient detail in techniques for consistent implementation
 - They have a strong reliance on human analyses
 - Techniques often go beyond setting the minimal requirements for WCAG

Context (3) Testing and Monitoring

- Checking if the law is being followed requires
 - Testing
 - Monitoring
- The WCAG techniques are not designed as a method for conformance testing

Context (4) ACT-Rules

- Accessibility Conformance Testing (ACT) Rules
 - Establish consensus interpretation of accessibility requirements
 - Provide transparency and comparability of test tools and implementations
 - Enable increased tool support by documenting structured testing procedures
- ACT Rules Format 1.0 (W3C Recommendation from October 2019)
- Rules developed in the scope of the ACT CG with overview from the ACT TF

Goals (1) WAI-Tools

- Building on the W3C efforts on WCAG Accessibility Conformance Testing
- Ensuring consistent accuracy across automated, semi and manual testing
- Leveraging the existing market of commercial, free, and open source evaluation tools
- Demonstrating large-scale accessibility monitoring built on open standards and tools

Outcomes (1) Testing

- ACT-Rules
 - <https://act-rules.github.io/rules/>
 - 70 rules planned
 - Currently 58 rules finalized
 - 29 automatable + 18 semi-automatable + 11 manual
 - All non-manual are implemented in at least 2 tools
 - Alfa, axe-core, QualWeb

Outcomes (2) Monitoring

- Deployment of test rules in national accessibility observatories
 - Portuguese national accessibility observatory
 - <https://observatorio.accessibilidade.gov.pt/> (available from the end of November 2020)
 - Mostly automated
 - Norwegian national accessibility observatory
 - <https://uu.difi.no/om-oss/english/>
 - Mostly manual

Outcomes (3) Support

- Open Format for Test Results
- Accessibility Statement Generator (individual countries might have their own)
 - <https://www.w3.org/WAI/planning/statements/>
- Extended Accessibility Report Tool
 - <https://www.w3.org/WAI/eval/report-tool/#!/>
- Large-Scale Test Data Browser
 - <http://www.qualweb.di.fc.ul.pt/placm/>



SONAAR

Social Networks Accessible Authoring

Preparatory Action – Application of web accessibility requirements in web-authoring tools and platforms by default (Web Access By Default)

Started: February 2020 -- Ends: July 2021

<https://di.fc.ul.pt/~cad/SONAAR/>

Context (1) User-generated content

- User-generated content is a largest part the of content available on the web
- Social networks are the origin of a large percentage of that content
- Images and videos are a large part of that content (thanks to camera equipped mobile devices)

Context (2) Social Networks

- Social networks (their interface) are fairly accessible
- But their media content is not!
 - Even if social networks provide automated textual descriptions

Goals (1) SONAAR

- Facilitate authoring of accessible content
 - Help users judge the quality of automatic textual descriptions
 - Suggest concepts to include when there are no automated textual descriptions
- Deploy user-generated accessible content on mobile and web platforms
 - Re-use textual alternatives for the “same” image when it has no textual alternative
 - On the web and mobile

Goals (2) SONAAR

- Ensure an accessible content authoring process
 - Find the problems users face when authoring accessible content and when consuming media content
- Engage users in the production of accessible content
 - Promote awareness to the benefits of authoring accessible media content
 - Educate users on how to create accessible media content

Activities (1) Usage Research

- **Questionnaire** on authoring and consumption of media content on social networks
 - 4 languages
 - 259 responses (67 from people reporting a disability)
- Follow-up **Interviews**
 - 20 interviewees (7 self-reporting a visual disability)

Activities (2) Developments

- Backend service to identify the “same” image
- Prototyping
 - Google Chrome extension(s)
 - Suggest textual description when authoring content for social networks that includes images
 - Educates on how to author accessible content
 - Mobile app or service

Thank You!

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