

TAO Project Deliverable D 2.1b

Spreading Impact of Accessibility Improvements for MediaWiki

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Commented Summary of the Review (incl. corrective action / date of the review)	
<p>In the present deliverable the newly created Accessibility Tracking Group Platform for the Wikipedia and MediaWiki community is described, as well as an accessibility checklist and an assistance tool, the Content Accessibility Checker. The development and dissemination of these products greatly support continuous improvements on accessibility and usability of the Free Encyclopedia. Possibly some hints should be given on how the Content Accessibility Checker will be made available to the authors of Wikipedia articles. (H. Zimmermann; June 15, 2013)</p> <p>Stijn Banner; June 12, 2013: No comments. Everything is clear.</p> <p>E.Klein (June 17, 2013): Based on the feedback, the corresponding paragraphs have been adapted.</p>	
Date of acceptance of the deliverable	
June 15, 2013	



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Executive Summary

Based on the accessibility study on the German Wikipedia (see Deliverable D2.1a), the goal of the current project phase was to promote the results into the (developer and publisher) Wikimedia community, and to spread impact of accessibility improvements.

Accessibility requirements have been taken into consideration by Wikimedia Deutschland, which fixed some major and minor accessibility issues.

In order to establish an ongoing improvement process, an *Accessibility Tracking Platform* has been developed and brought to life within the Wikipedia resp. Mediawiki ecosystem. The implementation process of known and future issues is presented through an interactive table containing issues with traffic-light-like symbols visualizing the state of implementation.

Besides the tracking system, an accessibility checklist for authors and publishers has been developed and integrated, as well as an assistance tool (CAC – Content Accessibility Checker) which analyzes accessibility issues on MediaWiki based websites. The CAC tool will be made available on the Accessibility Tracking Platform during the current project phase. It has still to be discussed if it will be published as open source software as a Github project.

1 Introduction

1.1 Overview of the Deliverable

Take-over of accessibility requirements by the Wikimedia Foundation; specification of modalities for further collaboration between TAO partners and the Wikimedia Foundation for test & evaluation purposes.

Accessibility requirements (see deliverable D2.1a) have been taken over shortly after its publication in 2012 by Wikimedia Deutschland (German chapter). Subsequently, they fixed some major and minor accessibility issues.

Since we expect identified accessibility issues to be solved, but also new issues to emerge, in an ongoing process, we decided to bring to life a central platform within the Wikipedia/MediaWiki ecosystem to track known and new, yet unknown, accessibility issues: The *Accessibility Tracking Group* on mediawiki.org (ATG 2013). Based on the TAO results, this group page provides all necessary information for accessibility tracking and provides various assistance tools on how to create accessible web content.

1.2 Connections to other Deliverables

There are connections to the deliverables of Community Activities (SP 1) and Action Research (SP 4), where new methods for mobilization, inclusion and motivation are developed, and appropriate qualified approaches for mobilization are identified. The goal is to increase the number of active users in participating in senior communities.

Within SP 1, the *terz* Stiftung offers a service for assessment of web pages with respect to age-related issues. This is a complementary scenario-based approach in contrast to the WCAG criteria-based approach used in this subproject. In general, scenario-based approaches are used to optimize usability issues, while the WCAG criteria-approach is useful for optimizing accessibility issues.

1.3 Value Added by the Project TAO

To our knowledge, this new platform is the only one to coordinate Wikipedia/MediaWiki accessibility issues in a systematic and centralized way. The checklist and CAC are brand new and especially designed for Wikipedia/Media authors.

The CAC tool will be published on the Accessibility Tracking Platform. -Currently it is discussed if and how it can be published to the open source community, e.g. as a Github project, therefore fostering its further development and optimization.

2 Main Section

2.1.1 History and background

In the previous deliverable D2.1a, the German Language Accessibility Test Report (RRBK 2012) has been developed (see Fig. 1). Here we describe how the findings have been shared with and communicated to the appropriate audience at Wikimedia Deutschland (German chapter) and the Wikipedia and MediaWiki community respectively.

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Community & Collaboration

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1. Perceivable

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

1.1. Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

1.1.1. Non-text Content (Level A)



Success criteria not met, see further information.

Problem 1:

The symbols for various portals on the main page (homepage) of Wikipedia do not offer alternative text. Linked graphics should always be accompanied by alternative text, which describes the link target.

h2Willkommen bei Wikipedia

Wikipedia ist ein Projekt zum Aufbau einer Enzyklopädie aus freien Inhalten in allen Sprachen der Welt. Jeder kann mit seinem Wissen beitragen. Seit Mai 2001 sind so 1.249.560 Artikel in deutscher Sprache entstanden. Gute Autorinnen und Autoren sind stets willkommen.

 [Geographie](#)  [Geschichte](#)  [Gesellschaft](#)  [Kunst und Kultur](#)  [Religion](#)  [Sport](#)

 [Technik](#)  [Wissenschaft](#)

[Artikel nach Themen](#) · [Alphabetischer Index](#) · [Artikel nach Kategorien](#) · [Gesprochene Wikipedia](#)

[Kontakt](#) · [Presse](#) · [Statistik](#) · [Andere Sprachen](#) · [Mentorenprogramm](#)

Illustration 1: Missing alternative text to the portal symbols.

Figure 1: Excerpt from the Accessibility Test Report

At the beginning of the current project phase (mainly in 2012), we directly contacted prominent exponents at Wikimedia Deutschland as there are Pavel Richter, Kai Nissen and Daniel Kinzler. Kai Nissen and Daniel Kinzler at Wikimedia Deutschland already then implemented some major and minor accessibility issues that could be fixed by the single language chapters.

In general, three sources of accessibility issues at Wikipedia have to be distinguished:

1. Accessibility issues localized at the core of the MediaWiki platform (the underlying CMS software of Wikipedia) can be solved by programmers with access to the actual source code of the MediaWiki instance used for Wikipedia. These contacts directly work for the Wikipedia Foundation located in the United States of America.
2. Community based accessibility issues. In order to enhance accessibility of Wikipedia not only the underlying software must ensure accessible interaction and perception but also every single article must be written in an accessible way. In order to achieve this, the whole Wikipedia community must be sensitized, informed and taught in how accessible content is written.
3. A third category of accessibility issues in-between the two mentioned ones can be tackled and solved by the various chapters themselves. Great thanks to the valuable collaboration with Kai Nissen and Daniel Kinzler who already tackled large parts of the objected issues in our test report.

In order to address all three sources of accessibility issues with the limited available means, we decided to found and implement one central platform on accessibility issues on Wikipedia and in MediaWiki. Willingly we would have liked to visit the Wikimania Conference 2013 in Hong Kong to promote our commitment to a wider audience in a workshop. Unfortunately, we didn't succeed in applying funding proposals for this.

Nevertheless we succeeded in setting up an appropriate *Accessibility Tracking Group* (ATG 2013) on the mediawiki.org website with a worldwide audience.

Besides this, we submitted applications on specific topics of the CAC tool (see below) to the Wikimania conference and the AALforum in August and September 2013, where the platform could be promoted as a side effect.

2.1.2 Wikipedia Accessibility Platform

This Accessibility Tracking Group on the mediawiki.org Groups page (ATG 2013) provides all necessary information for further tracking and resolving known and yet unknown accessibility issues on Wikipedia and in the MediaWiki software.

2.1.2.1 The Tracking System

The core element of the new platform is an interactive table summarizing the above mentioned test report. Every single objection of it is represented with its WCAG 2.0 test criterion number, a traffic-light-like symbol indicating whether problems could be resolved or by whom they best get tackled, a short description of the problem and a column for additional information. The original test report is directly linked.

Accessibility Tracking in German Wikipedia [en]			
<small>This is a POC/POC tracking table summarizing the accessibility issues identified in the extensive study on accessibility (PDF, 1.0.001) of the German Wikipedia chapter as part of the "Third Age Online Project". The table is organized according to the International (en) Content Accessibility Guidelines 2.0. It provides information on the problems and examples or where they have been found on the German Wikipedia. Icons/templets in column 2 allow to assign problems to the appropriate problem solvers, as there is the Wikimedia Foundation for deep programming issues, the German chapter of Wikimedia for more specific programming issues and the Wikipedia community as a whole for accessibility issues addressing actors and authors. Please feel free to change the respective templets. Note that the existing template is exemplar for the German Wikipedia chapter. We are sure that in most Wikipedia chapters, or whenever knowledge in service accessibility, problems are similar or equal.</small>			
1. Perceivable [en]			
1.1. Text Alternatives [en]			
1.1.1. Non-Text Content (Level A) [en]			
<ul style="list-style-type: none"> There is a meaningful and equivalent alternative for all non-text content, such as images, graphics, sounds, graphic controls in forms and hotspots in image maps. The alternative text is not sufficient for the text alternative, a long description is provided and is referred to in the alternative text. Decorative graphics or sound graphics have empty alt attributes or they are concealed from assistive technologies (e.g. screen readers) in some other way. There are no graphic CAPTCHAs or an alternative is present. 			
Problem 1-1: Linked graphics 	Problem 1-1: Linked graphics (German chapter)	Linked graphics must contain the link purpose within the altattribute	Example: Symbolic images for the different parties (main page)
Problem 4: Inappropriate alternative text 	Problem 4: Inappropriate alternative text (Wikipedia Community)	Alternative text of informative graphics must be short and clearly inform of what can be seen on graphics	This issue must be considered by every single Wikipedia author. Accessibility Checker for authors and publishers (PDF, 4/14/13) and Content Accessibility Checker for Wikimedia authors
Problem 5: CAPTCHAs 	Problem 5: CAPTCHAs (Problem identified)	The CAPTCHAs now present for opening new user accounts are not accessible for blind and visually impaired people.	Possible alternatives: email-assistance, honeypot method, Re-CAPTCHA, Audio-CAPTCHA, ...
Problem 6: Unicode symbols 	Problem 6: Unicode symbols (Problem identified)	Some Unicode symbols are not correctly read by screenreaders	Example: http://de.wikipedia.org/wiki/Hausnummeration

Figure 2: Table with accessibility issues from the Accessibility Tracking Platform

The group page will be open for editing to everybody. Issues can independently be resolved and traffic lights can be changed accordingly. We expect new accessibility issues to be added and we hope that also issues from other than the German chapter will be entered.

2.1.2.2 Accessibility Assistance Tools for Wikipedia/MediaWiki Authors

Additionally to the Accessibility Issues Tracking System at the core, the Group page provides some assistance tools helping Wikipedia/MediaWiki authors to create accessible contents. As for now there is

- an Accessibility Checklist for Wikipedia/Media authors and publishers (see Figure 3), and
- the Content Accessibility Checker (CAC) for MediaWiki authors (see Figure 4), which is under review until end of June 2013



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Publisher Accessibility Checklist for MediaWiki / Wikipedia

Text content

When dealing with text content it is important to explicitly tag the semantic structure elements in HTML. Headings must be tagged as headings <h>, paragraphs as paragraphs <p>, listings as lists etc. Especially blind people are reliant on any semantic structure that is visually perceivable to be discernible from the HTML code. Visual accentuations comprise font changes, font size, underlining, numbering, colouring, increased spacing as well as special positioning of content, e.g. info boxes.

Assistive technologies interpret empty <p>-elements as empty paragraphs. As such they carry semantic meaning. Only for visual users this semantic meaning is not perceivable. It is present though for all kinds of reading machines such as search engine bots and screenreaders. HTML is not designed for visual design but for semantic structuring of contents.

Checklist

- Headings are tagged using the heading element h
- No heading levels are skipped
- Bold tagging is only used to accent segments inline in a running text
- Paragraphs are marked up using <p>
- There are no empty paragraphs <p> to create space in the layout

MediaWiki Syntax

Heading Structure

Headings are marked up in MediaWiki editor as follows:

Html Syntax	MediaWiki Syntax
<h1> Heading (level 1) </h1>	<ul style="list-style-type: none"> • Page names, e.g. "Heading (level 1)" are displayed as H1 headings • = Heading (level 1) = also makes a heading of level 1. Don't use, see below: • Recommendation: Start content heading levels with heading level 2 (== Heading (level 2) ==). All content is part of the subject introduced by the page name (heading level 1) and is semantically subsumed.
<h2> Heading (level 2) </h2>	<ul style="list-style-type: none"> • == Heading (level 2) == • Recommendation: Start content heading levels with heading level 2 (== Heading (level 2) ==). All content is part of the subject introduced by the page name (heading level 1) and is semantically subsumed.
<h3> Heading (level 3) </h3> ...	<ul style="list-style-type: none"> • === Heading (level 3) ===

Figure 3: Accessibility Checklist for Wikipedia/Media authors and publishers

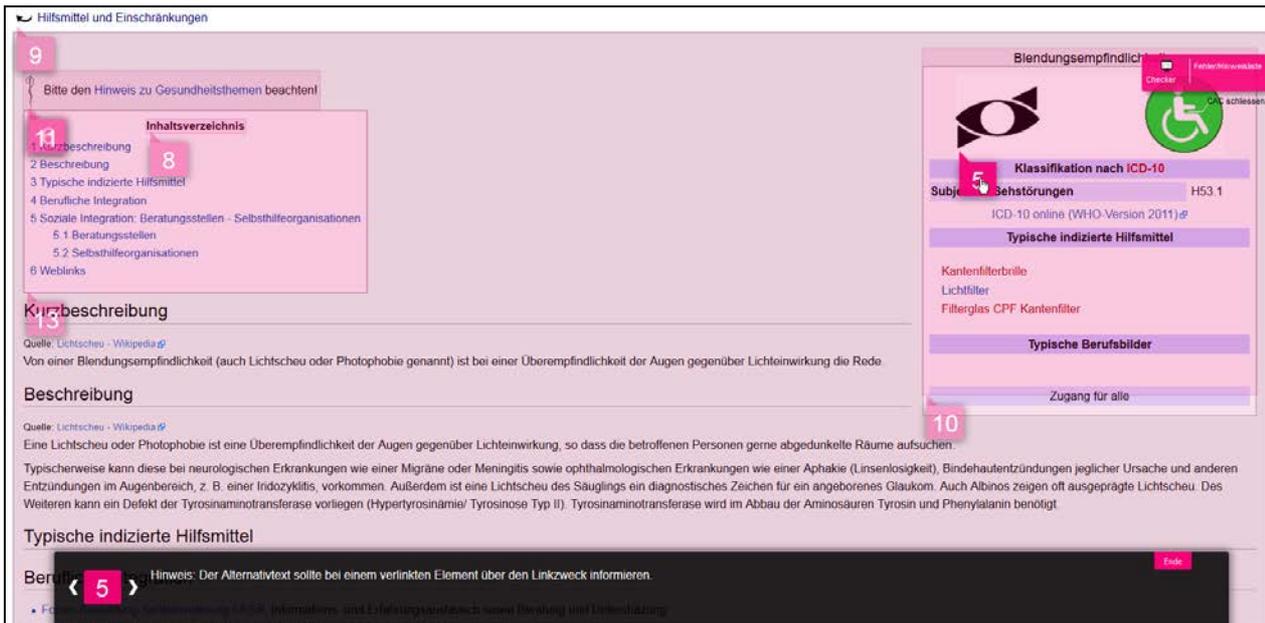


Figure 4: Content Accessibility Checker (CAC) for MediaWiki authors

Although CAC is optimized for various accessibility issues regarding website content already, we will upload it to the *Accessibility Tracking Platform* (see below) after finalizing a version specifically adapted to the MediaWiki editor/syntax and localized for English and German language.

2.1.2.3 Coordinating Commitment for Accessibility

Last but not least, the platform is designed to gather people all over the world interested in an Accessible Wikipedia and an Accessible MediaWiki system.

The *Accessibility Tracking Group* page is planned to become the main information platform for Wikipedians when dealing with accessibility issues. The Group page is great place to concentrate and coordinate actions regarding the enhancement of accessibility in Wikipedia/MediaWiki worldwide.

2.1.2.4 Organisation and Support

The group page is open to everybody. As any group page, the Accessibility Tracking Group page is expected to run as a self-administered organism after some time of active promotion and circularization. «Access for all» will accompany the page in the first few months but remain an important member above the end of the TAO project life time.

3 Summary and Conclusion

We are satisfied to be able to present this new platform and hope that MediaWiki and the Wikipedia authors make excessive use of it. For a better world with a Free Encyclopedia called Wikipedia really open to everybody.

4 References

(ATG 2013)

Accessibility Tracking Group Platform on mediawiki.org:

https://www.mediawiki.org/wiki/Groups/Proposals/Accessibility_Tracking

(RRBK 2012)

Ritter, Petra; Riesch, Markus; Bolting, Anton; Klein, Eduard: Accessibility Requirements for MediaWiki Improvement – Based on a WCAG 2.0 test report; TAO Deliverable D2.1a; July 2012.

http://www.thirdageonline.eu/wp-content/uploads/2012/02/Accessibility_Test_Report_Wikipedia.pdf

5 Appendix

None – follow the links in the text.

Contributing Partners:



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