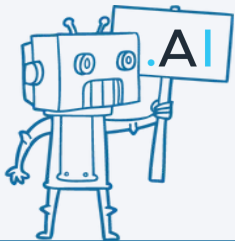# Accessibility and WCAG Compliance in Higher Education

WCAG AI - artificial intelligence in document accessibility

What is WCAG?
Web Content Accessibility Guidelines

WCAG is an international standard, providing guidelines for making web content accessible for people with disabilities.

❖ perceivable: provide text alternatives for non-text content, make it easier for users to see and hear content

❖ operable: make all functionality available from a keyboard, help users navigate and find content

❖ understandable: make text readable and understandable

❖ robust: maximize compatibility with current and future user tools

sages

Accessible Web content: is it only HTML?

Websites are usually not limited to HTML-based web pages. Especially in the case of digital repositories the user usually interacts with documents, which are potentially:

❖ very large in number (e.g. multiple thousands of documents in a library or a digital repository)

❖ very diverse in structure and format (e.g. books, theses, scientific papers, reports, official documents)

❖ very large in terms of size (e.g. books, containing several hundred pages)

sages

Accessibility of documents is a more difficult task than accessibility of web pages

Web pages

❖ are usually generated from templates, which may be made accessible just once

❖ are usually authored by a limited number of actors

❖ are controlled by the owning organization

Documents

❖ differ significantly in their structure and are not produced from a single template

❖ are usually authored by a large number of actors

❖ may either by acquired from the inside or outside of the organization

sages

Motivation: the case of Polish Platform of Medical Research

PPM GUMed   PPM IMP   PPM PUM   PPM SUM   PPM UMB   PPM UMLub   PPM UMW   PPM WUM

Dołączyli do nas

PZW UJ CM

Accessibility of a repository containing 380k+ documents

Manual work? Not a viable solution

10.1007!s10151-013-1081-0.pdf   dostępny od: 26-08-2020   Poproś o plik WCAG
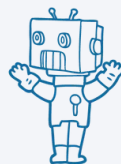
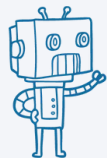10.1007!s10151-013-1081-0-wcag.pdf   dostępny od: 26-08-2020   Spełnia wymagania WCAG - Zgłoś problem z dostępem WCAG

sages

Adobe Acrobat
MANUAL ANNOTATION

WCAG AI
Artificial Intelligence in the task of making documents accessible

The results of a research project, co-financed by the European Union from the European Regional Development Fund under the Intelligent Development Operational Program.

The aim is to use AI models for (among others):

❖ automated annotation of document structure,

❖ automated generation of alternative text for non-text objects,

❖ disambiguating abbreviations,

❖ automatic annotation of foreign text.

sages

WCAG AI process

Automated generation of document accessibility layer

Structure tags, alternative text, etc.

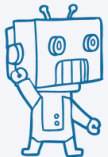**Verification and correction by a human expert (optional)**
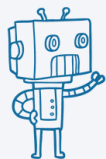
Cost and time reduction vs fully manual work

Accessible PDF document

Accessible HTML document

...

sages

WCAG AI
DEMO

sages

Questions and contact information

Thank you for your attention!

Questions?

Please contact:

❖ Łukasz Kobyliński (l.kobylinski@sages.com.pl)

   for further inquiries.

sages