Tech Check: Digital Accessibility Tools Every Company Should Be Using

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Assessing Technology for Accessibility Toolkit

Color Contrast Checkers

Website Accessibility Scanning Tools

Screen readers

Screen magnification software

Speech input

WCAG-EM

Color Contrast Examples

Great (21:1)

Good (11:1)

Pass (4.5:1)

Bad (1.8:1)

Bad (1.2:1)

A B C D E

F G H I J K

L M N O P

Q R S T U V

W X Y Z 1.7

1 2 3 4

Foreground colour *(black)*

HEX #000000

Background colour *(white)*

HEX #FFFFFF

▼ Sample preview

example text showing contrast

WCAG 2.1 results

Contrast ratio
21:1

▶ 1.4.3 Contrast (Minimum) (AA)

⊘ Pass (regular text)   ⊘ Pass (large text)

▶ 1.4.6 Contrast (Enhanced) (AAA)

⊘ Pass (regular text)   ⊘ Pass (large text)

▶ 1.4.11 Non-text Contrast (AA)

⊘ Pass (UI components and graphical objects)

Color Contrast

WebAIM Contrast Checker
(WebAIM: Contrast Checker)

Microsoft Paint

Chrome Color Contrast
Analyzer plug-in

Scanning Tools

WAVE – WebAIM toolset

[WAVE Web Accessibility Evaluation Tool (webaim.org)](#)

Functional Accessibility Evaluator

[Run FAE : Functional Accessibility Evaluator 2.1 (illinois.edu)](#)

What is Assistive Technology?

The United States Access Board defines assistive technology as:

Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.
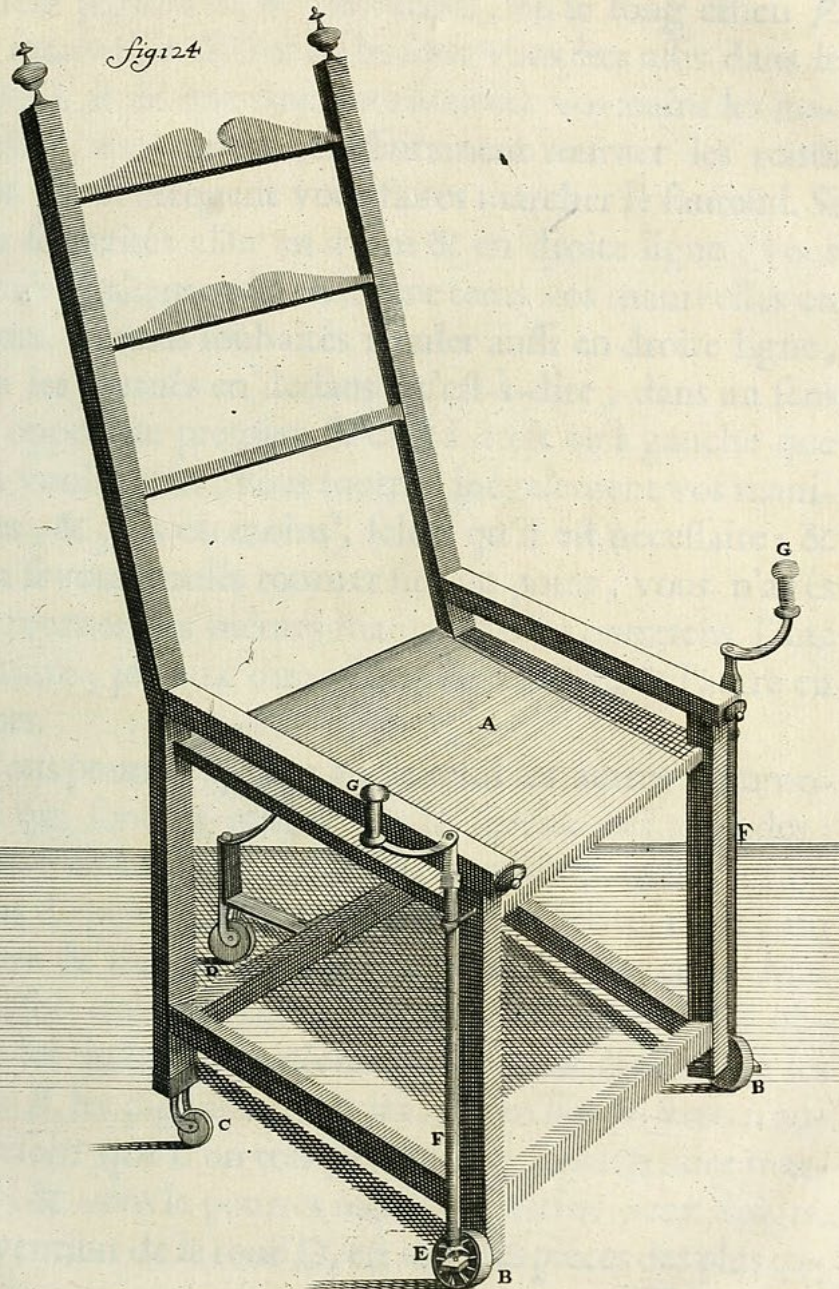
Adaptive and Assistive Technologies in History

First verified use of wheelchairs dates to the 5th – 6th century BCE – China

Hearing aids date back to the 17th century and were adopted in mainstream Europe by the close of the 18th century when hearing aids move from a conceptual stage to implementation

In 1824 Louis Braille learned about a writing system "night writing" developed that used heavy and raised black ink
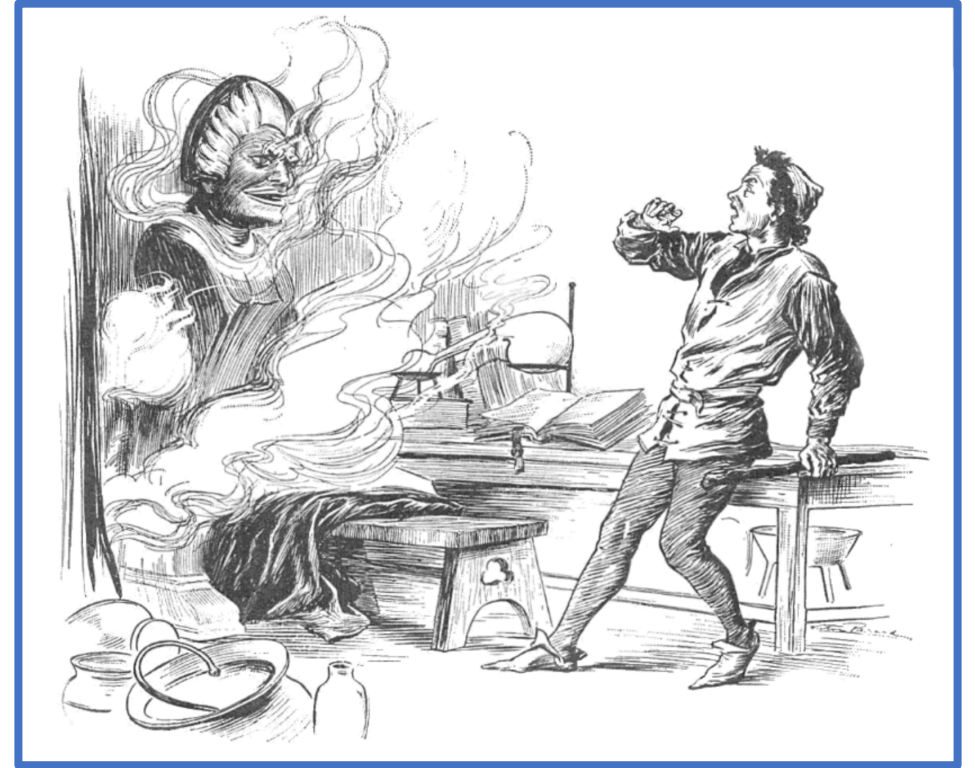
In 1971, Julia Child's cooking show became the first television program to broadcast with captioning technology

Modern Advances

Audio Books/Talking

Books

Text-messaging

Voice Assistants – SIRI, Alexa, Hey Google

What can I help you with?

Screenreaders

JAWS – Freedom Scientific

Microsoft Narrator

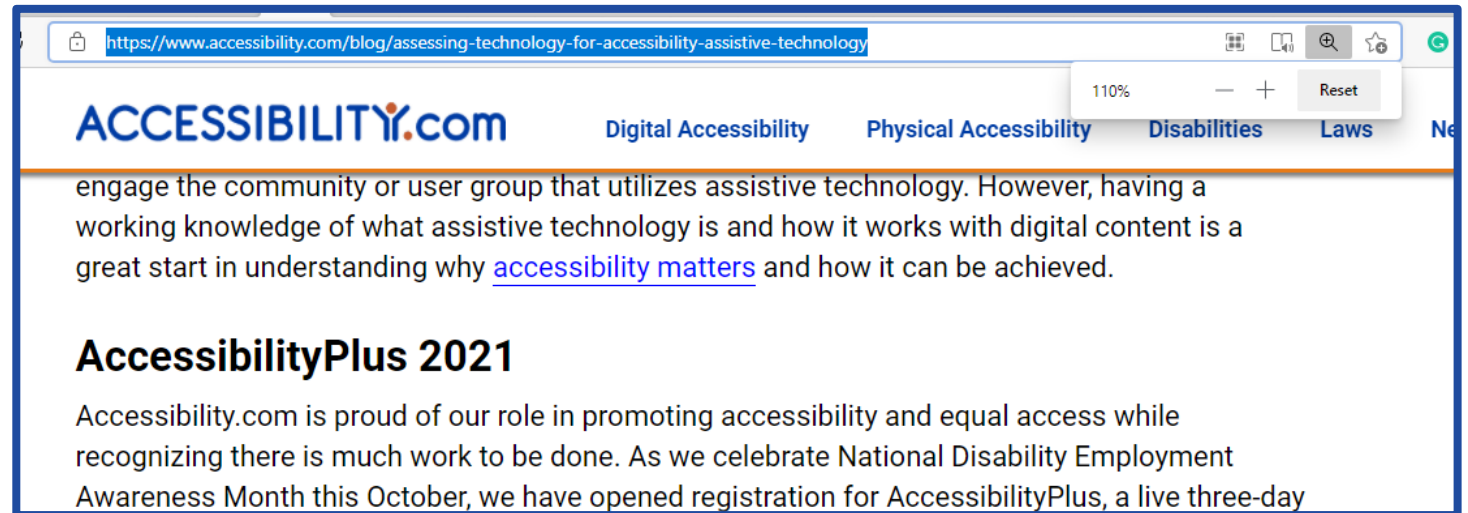NVDA

TalkBack – Google

VoiceOver – Apple

Screen magnification software
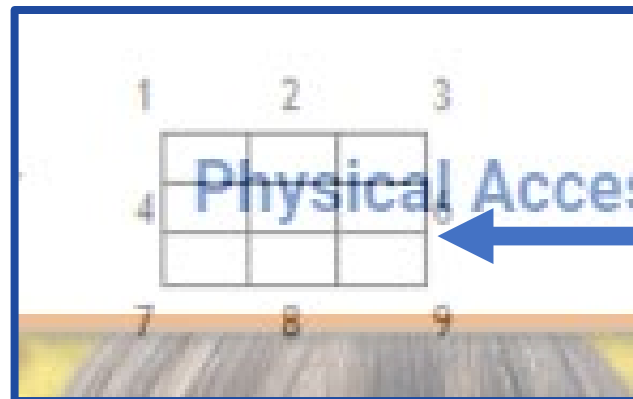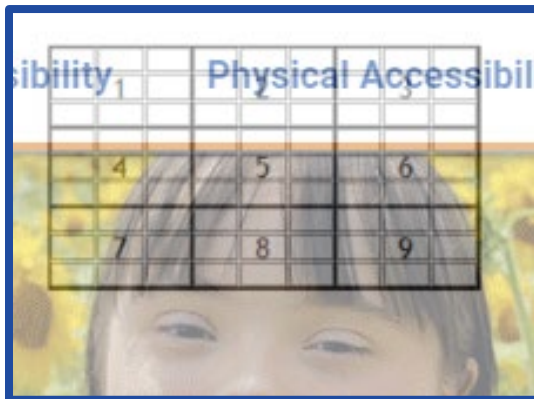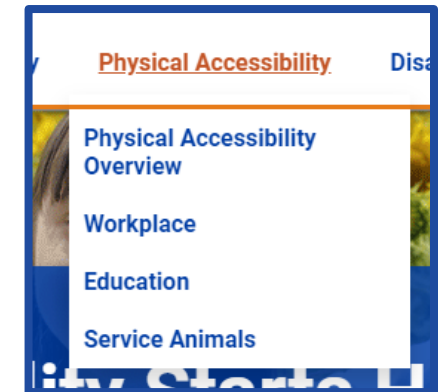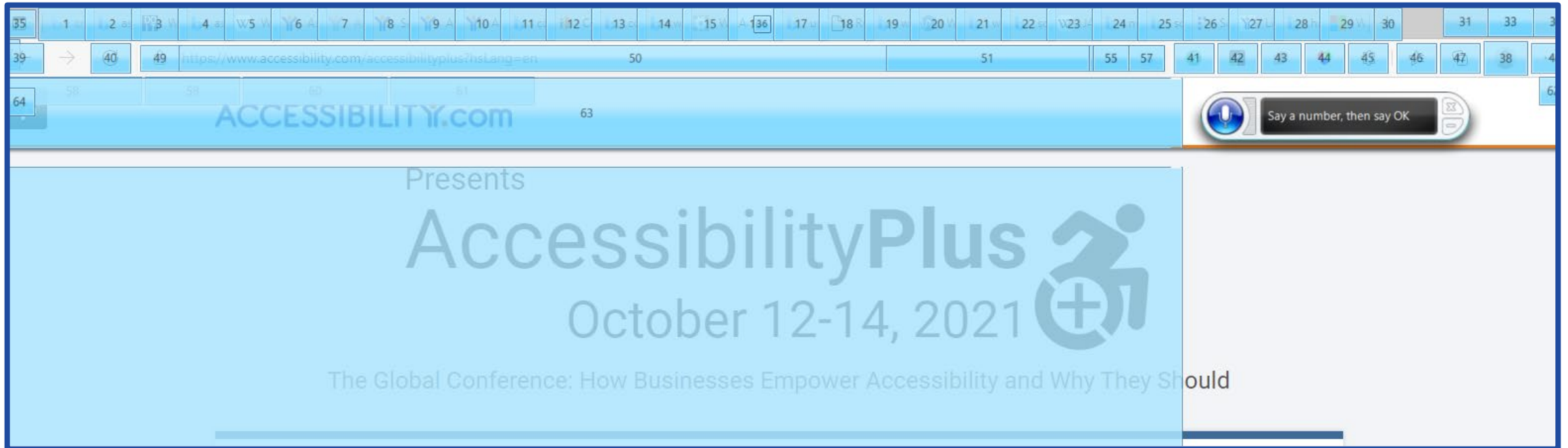
ZoomText

MAGic

Windows Magnifier

Pinch to Zoom

CTRL+/CTRL-
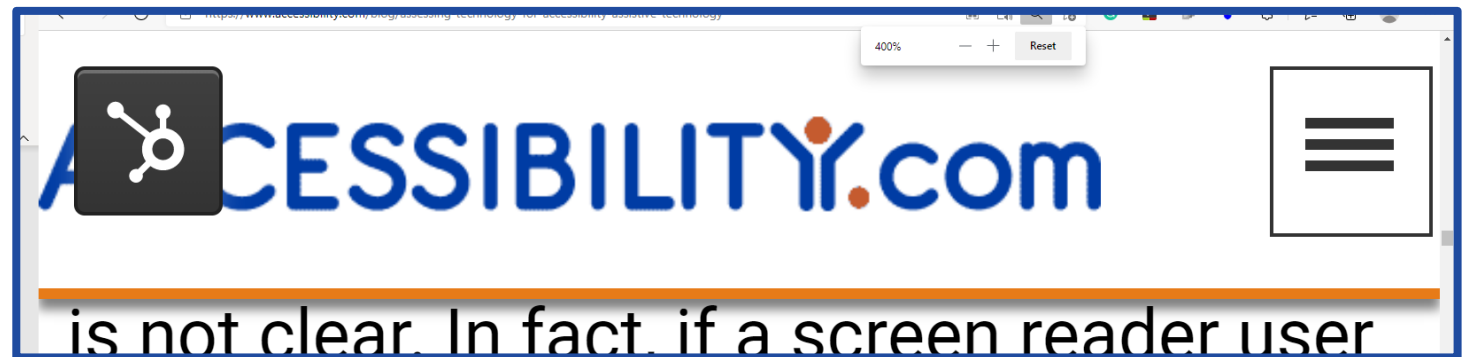
Speech Input - SG

Say "Click 5" to activate mouse left click on area

Speech Input

WCAG-EM: Website Accessibility Conformance Evaluation Methodology

Use of WCAG-EM (https://www.w3.org/WAI/eval/report-tool):

- Web consultants who want to analyze accessibility
- Web accessibility evaluation service providers
- Website developers
- Website owners and procurement officers
- Website compliance and quality assurance manager
- Training staff and educators
- Web masters and content authors

Overview   1. Define Scope   2. Explore Website   3. Select Sample   4. Audit Sample   5. Report Findings   View Report

Overview

Welcome to the updated WCAG-EM Report Tool. You can open your existing reports with this tool. The previous version is available, and is no longer supported.

Dismiss

WCAG-EM Report Tool turns your accessibility evaluation findings into a report. It is based on the Web Content Accessibility Guidelines Evaluation Methodology (WCAG-EM).

Start New Report   **Open Report**

[+Expand All Sections] [—Collapse All Sections]

[+] **Tips for using this tool**

[+] **About this tool**

[+] **How this tool works**

Define the Evaluation Scope

1. Website Name

2. Scope of the Website

3. WCAG Version

4. Conformance Target

5. Accessibility Support Baseline

6. Additional Evaluation Requirements

Explore the Target Website

1. Web technologies relied upon

2. Add web technologies

3. Optional Exploration Notes
   1. Essential functionality of the website
   2. Variety of web page types

Select a Representative Sample

1. Variety of web page types

2. Structured Sample Web Pages

3. Randomly Selected Sample

Audit the Selected Sample

Report the Evaluation Findings

Questions?