

Factorial

Introduction

Digital Accessibility

2025-03-04



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they/them

- Frontend developer at Factorial
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“

The web is for
everyone.



Tim Berners-Lee

Creator of the World Wide Web



01

Barriers

Disabilities \neq Barriers

People have
disabilities

intrinsic

VS

Society creates
barriers

extrinsic

Disabilities

Physical disability

- Mobility
- Dexterity
- Chronic illness

Sensory disability

- Blindness or visual disability
- Deafness or hard of hearing

Speech disorder

- Language learning
- Speech sound
- Aphasia and muteness

Mental disorder

- Attention deficit
- Thought disorder
- Personality disorder

Developmental disability

- Dyslexia
- Dyscalculia
- Dyspraxia

Intellectual disability

- Emotional and behavioral disorder
- Cognitive impairment
- Dementia

Barriers



High curb without tactile paving



Curb cut with tactile paving

Digital barriers

For example:

Missing
audio transcript

Interactive elements
without name

Unstructured
text

Low
color contrast

Missing
alternative text

Videos without
captions

Long
loading times

Complex
language



02

The need for accessibility

EU-wide statistics

101 million

People with disabilities



1 in 4

people

“













We're all just
temporarily abled.



Cindy Li

UX and accessibility expert

Persona spectrum

	Touch	See	Hear	Speak
Permanent	 One arm	 Blind	 Deaf	 Non-verbal
Temporary	 Arm injury	 Cataract	 Infection	 Laryngitis
Situational	 Parent	 Distracted	 Bartender	 Accent



03

Assistive Technology

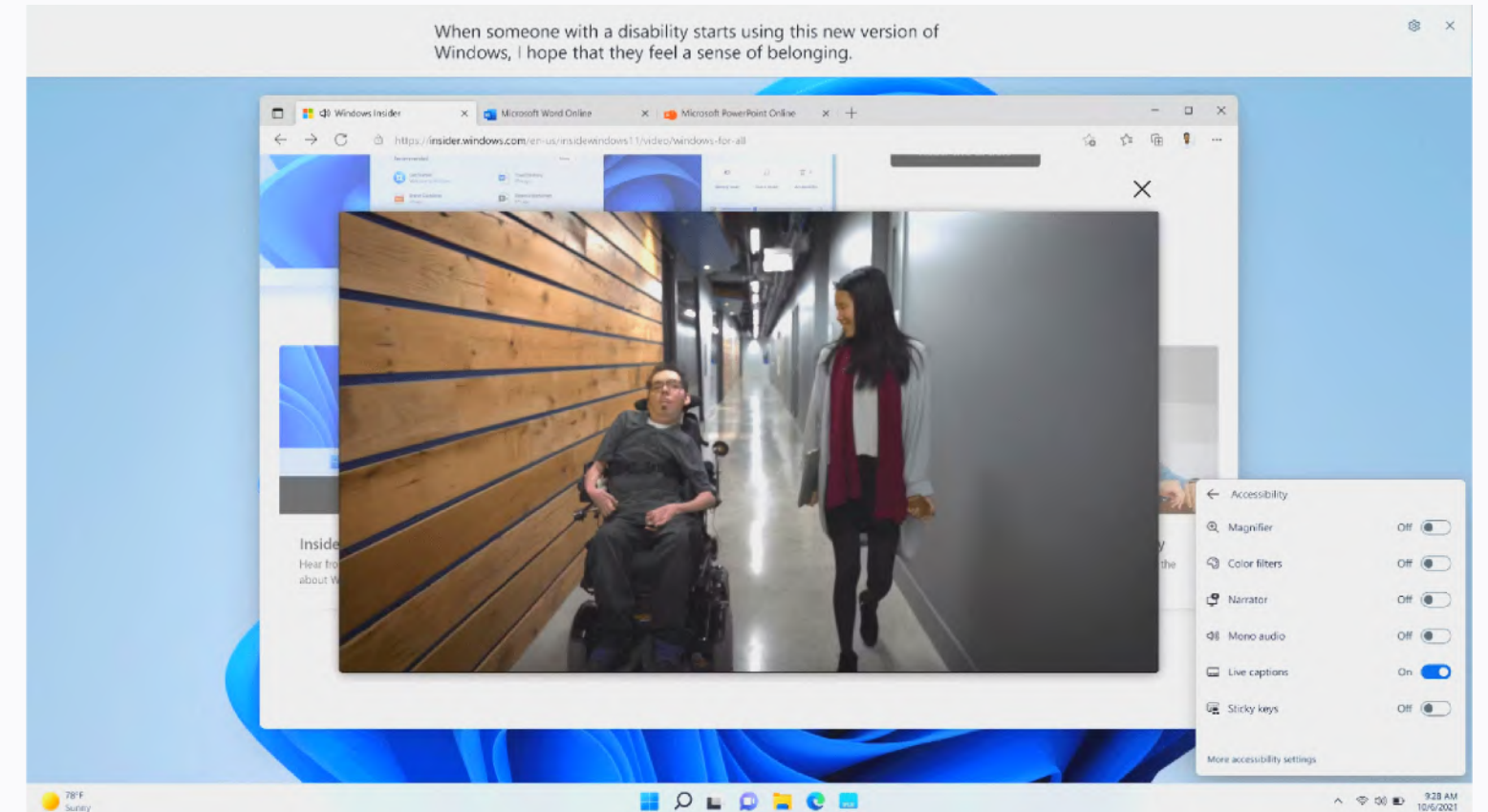
Sensory disability

Sight

- Screen reader
- Braille display
- Screen magnification
- Browser zoom
- Windows Contrast theme

Hearing

- Volume control
- Hearing aid
- Captions



Physical disability

Software

- Voice control
- Keyboard shortcuts
- Keyboard mouse
- Virtual keyboard

Hardware

- Switch
- Trackball
- Eye tracking
- Smart home devices



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Web Content Accessibility Guidelines (WCAG) 2.2

W3C Recommendation 05 October 2023



▼ More details about this document

This version:

<https://www.w3.org/TR/2023/REC-WCAG22-20231005/>

Latest published version:

<https://www.w3.org/TR/WCAG22/>

04

Web Content Accessibility Guidelines

What is WCAG?

Overview

- Guidelines for accessible web content
- Published by W3C
- Testable success criteria
- Covers a large percentage of all disabilities

Current version (WCAG 2.2)

- [w3.org/TR/WCAG22/](https://www.w3.org/TR/WCAG22/)
- [w3.org/WAI/WCAG22/Understanding/](https://www.w3.org/WAI/WCAG22/Understanding/)

POUR principles

01

Perceivable

Content has to be accessible with at least one sense

02

Operable

Interface and content have to be operable

03

Understandable

Information and operation have to be understandable

04

Robust

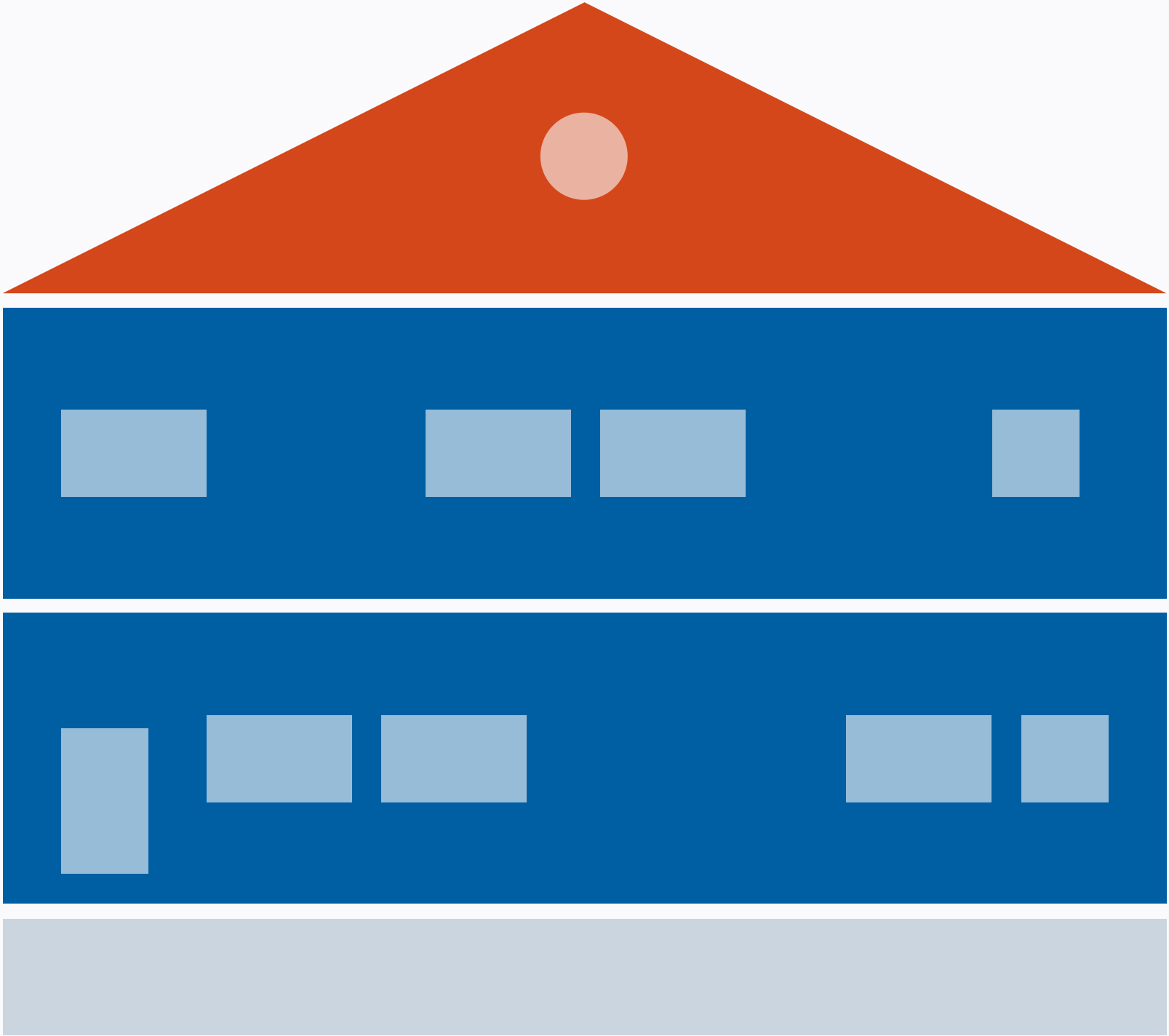
Content has to be compatible with assistive technology

Levels of conformance

Level AAA

Level AA

Level A





05

EU legislation

Web Accessibility Directive

- Digital accessibility for the public sector
- Requirements according to EN 301 549 (WCAG 2.1 AA)

Timeline

2016 : Resolution

2018 : Transposition into national law

2019 : Deadline for new websites

2020 : Deadline for existing websites

2021 : Deadline for mobile apps

European Accessibility Act

- Accessibility for products and services in the private sector
- Among others digital accessibility
- Requirements according to EN 301 549 (WCAG 2.1 AA)

Timeline

2019 : Resolution

2022 : Transposition into national law

2025 : Deadline for implementation

“

Many of our problems are social, structural, and practical problems that stem from the idea that disabled people are fundamentally flawed, unworthy of inclusion, broken, or inadequate. This is ableist thinking.



Ashley Shew

Author of *Against Technoableism*

Thank you!


Fynn Ellie

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Slides

fynn.be/talks/introduction-digital-accessibility

