



Fedora Accessibility Working Group

Why do we need it?

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Who am I?

- Joined RedHat in July 2021 as intern
- Associate software engineer @ RedHat CPE since March 2022
- Participate in Community Design Team and the Web & Apps Team
- Launched Fedora Accessibility Working Group in August 2022



What will be discussed?

- What is the Fedora Accessibility Working Group?
- Why should accessibility be considered?
- Types of diverse abilities
- Solutions to consider
- Accessibility as a Council Objective
- Road-map for the Fedora Accessibility Working Group



What is the Fedora Accessibility Working Group?

A team of Fedora contributors who care about accessibility and digital inclusion for both Fedora Linux and the Fedora Community, with support and guidance by the Diversity, Equity, & Inclusion Team.

We want Fedora to become the all accessible Linux provider and community that empowers EVERYONE to thrive.



Why should accessibility be considered?

- The World Health Organization has stated that 15% of the world population is experiencing some sort of disability – 1 billion people worldwide.
- Significant chunk of human population should not be left facing barriers in accessing software.



Types of Diverse Abilities

- Visual
- Auditory
- Physical
- Cognitive



Visual



■ Blindness

- Screen readers are software programs that are regularly used by people with vision problems.
- Screen readers can come with drawbacks that can overwhelm the users.

■ Colour Blindness

- Colour blindness comes in a variety of forms.
- Colour should never be used as the primary signal for information in good design.
- The colours on every computer monitor are going to be a bit different.



Visual



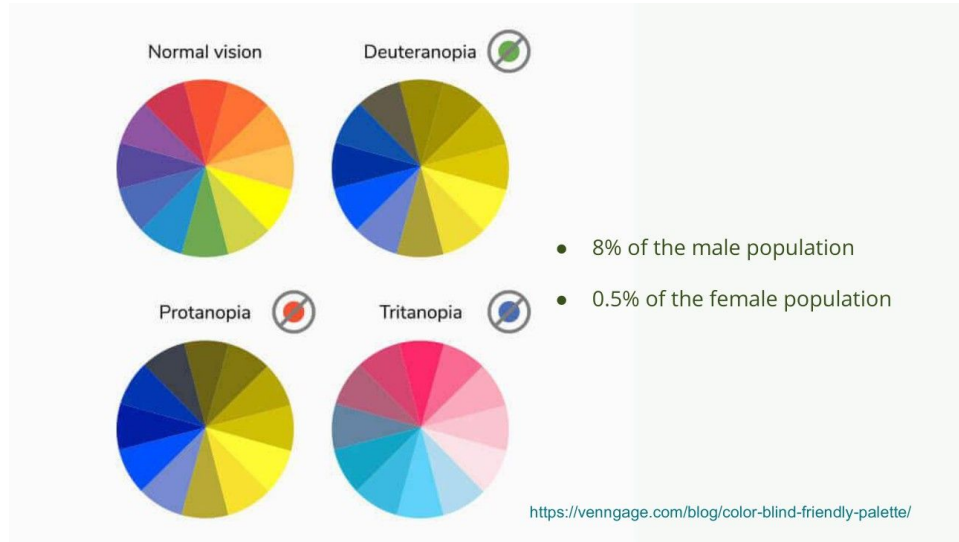
Braille BI 20X braille display



Mantis Q40 braille display



Visual



Colour blind types



Visual

- Low Vision
 - Different degrees of sight loss.
 - Some users with low vision use Braille, others use larger fonts, and there are those who read normal size print with an optical device.



Visual - Solutions



■ Blindness

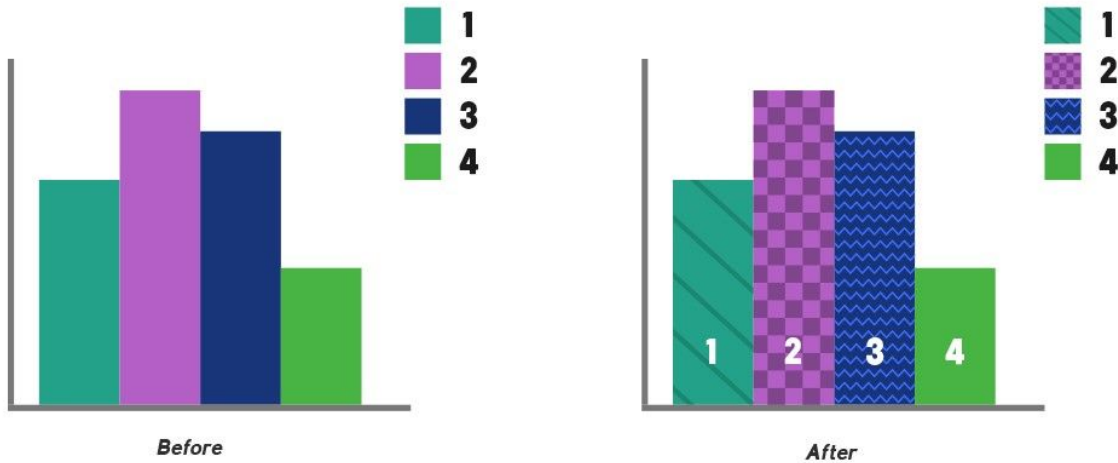
- Reduce clutter.
- Be aware of a screen reader's lack of understanding of the semantics of web material.
- Use text alternatives for non-textual content.
- Provide text-based PDFs over image-based.

■ Colour Blindness

- Use a monochromatic colour scheme.
- High contrast improves readability.
- Make use of existing colour schemes.
- Avoid colour coding for infographics..



Visual - Solutions



Colour blind safe bar chart
([source](#))



Visual - Solutions

■ Low Vision

- Text magnification is a standard method to support reading for people with limited vision, but magnification comes at the cost of a reduced overview of the body of the text.
- Increased letter spacing and greater letter width improves clarity in low vision users.



Auditory

- More than 5% of the population has a hearing impairment
- The deaf population has societal issues resulting in isolation, low self-esteem, and discrimination.
- Captions or transcripts are required for deaf users.

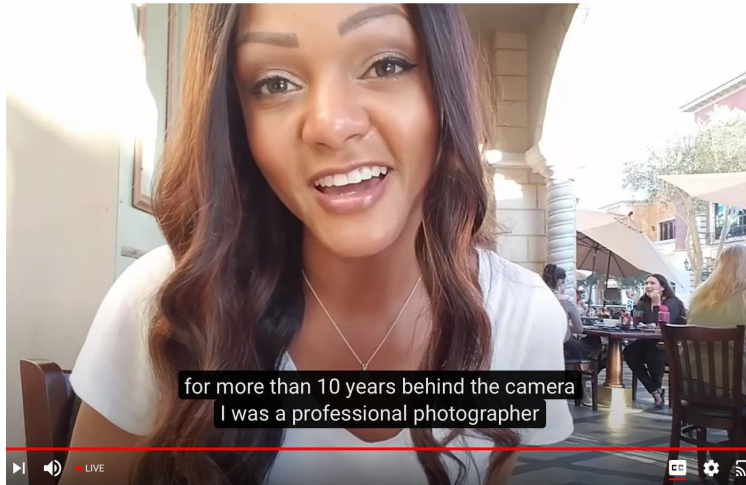


Auditory - Solutions

- Captions can be added to videos either manually or automatically.
- Provide transcripts where required.



Auditory - Solutions



- Automatic captioning on YouTube live

healthy Digital Nomad Life

ching now

👍 50K 🗨️ 5K ➦ SHARE ⋮

ROCKY NASH LIVE

Started streaming 10 minutes ago

SUBSCRIBE

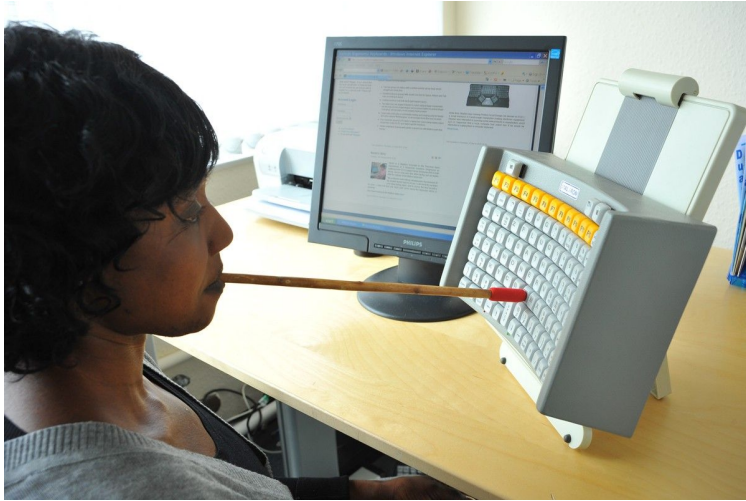
Rocky Nash is a Livestream Travel Host who creates interactive lifestyle broadcasts where you can participate as a real-time viewer. Turn on notifications to catch her 360 video tours!

Physical

- Examples include weakness and limitations of muscular control, limitations of sensation, joint disorders, pain that impedes movement, and missing limbs.
- They may require more time to type, mouse, or engage in other interactions.



Physical



- User With Mouth/Head Stick Keyboard ([source](#))



Physical - Solutions

- Keyboard alternatives for all mouse functionalities.
- Ensuring font size can be increased.
- Skip to the main contents link.
- Large click-able elements.
- Confirmation of information before submission



Cognitive



- The majority of the WAI principles are geared toward people with visual and movement disabilities.
- The COGA, W3C's Cognitive and Learning Disability Task Force, has published recommendations for user group research on eight specific cognitive disabilities: dyslexia, aphasia, non-verbal, Down syndrome, autism, dyscalculia, ageing-related cognitive decline, and attention deficit disorder (ADD/ADHD)



Cognitive - Solutions

- Not a lot of research is provided for this area.
- Because of the diversity of intellectual disabilities, different accessibility measures have different impacts on non-disabled web users.
- Hold user-testing sessions.



Accessibility as a Council Objective

- <https://discussion.fedoraproject.org/t/fedora-2025-strategy-accessiblity-improvements-in-support-of-our-vision/38192>
- Improving Accessibility is part of Fedora's long term strategy
- "The Fedora Project envisions a world where everyone benefits from free and open source software built by inclusive, welcoming, and open-minded communities."



Road-map for Fedora Accessibility

Rough outline

1. Launch a survey about accessibility tools and assistive technologies in the Linux ecosystem (non-Fedora specific).
 - Collect and organize submission data from anonymous respondents.
 - Identify key recommendations and priorities for improved Linux accessibility that Fedora Linux could improve on from results.
2. Work with SIGs to achieve the recommendations from the accessibility survey for different fedora platforms.
3. Work on accessibility guidelines specifics to the Fedora Project.



Want to join?

If you are interested in contributing you can join us in the below channels!

Discourse forum - <https://discussion.fedoraproject.org/tag/dei>

IRC Web chat - #fedora-diversity

Element/Matrix - <https://app.element.io/#/room/#fedora-diversity:matrix.org>

Telegram group - @fedoradiversity

Meetings on Fedocal: <https://calendar.fedoraproject.org/diversity-team/>



Thank you!

