Leading Accessibility Initiatives
In Open Source Library Software

Learn how Equinox is developing accessible open source software to support the specific needs of library workers and library patrons.

equinox
OPEN LIBRARY INITIATIVE

Equinox is a 501(c)(3) nonprofit dedicated to providing outstanding technology services for libraries. Equinox offers consulting, support, training, and development for open source products including Evergreen ILS, Koha ILS, Aspen Discovery, and VuFind®.

EVERGREEN

Equinox recently completed extensive accessibility development for Evergreen. Projects included end-user improvements and behind-the-scenes work which will facilitate future accessibility enhancements. Additional major accessibility projects are currently in progress.

vuFind®
Search. Discover. Share.

Equinox produced a fully redesigned and accessible theme for VuFind® (available at github.com/EquinoxOpenLibraryInitiative/equinox-theme-vufind). VuFind® is a comprehensive discovery layer suitable for academic, public, and special libraries.

King County Library System

King County Library System (KCLS) serves 1.3 million residents in King County, Washington, USA. KCLS partnered with Equinox to fund technical audits and accessibility development with a focus on the Evergreen staff client.

Visual
- Blindness
- Low vision
- Color blindness
- Visual triggers: seizures, migraines, vertigo

Hearing
- Deaf
- Hard of hearing
- Auditory processing disorder

Mobility
- Paralysis
- Tremors
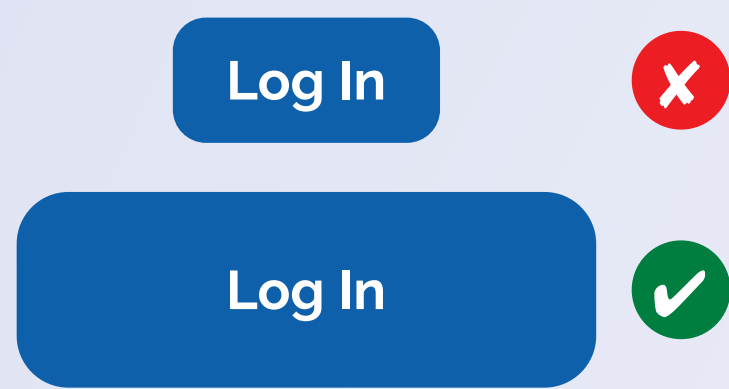- Neuropathy
- Physical injury
- Chronic pain

Cognitive
- Memory
- Language
- Learning
- Attention
- Sensory processing

Button Size
- Larger buttons are **easier to see** for people with low vision.
- People with mobility issues struggle to press small buttons. A **larger hit target** helps people whose mouse movements are imprecise.
- Large buttons stand out from the surrounding text. For people with cognitive disabilities, it's easier to **decide what to press** if the buttons are larger.
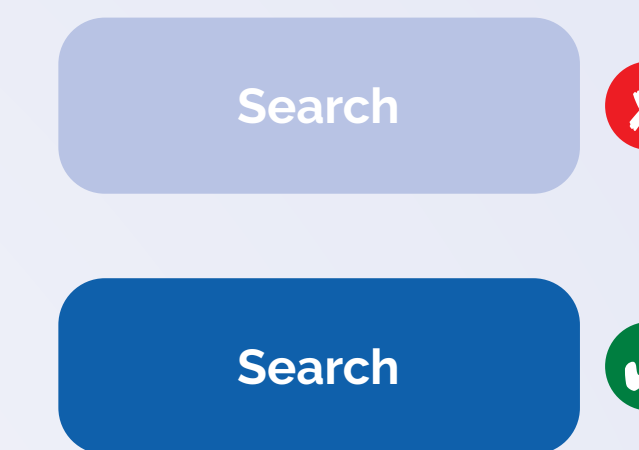
Log In

Captions & Transcripts
- **Audio and video content must have captions or transcripts** for those who are Deaf or hard of hearing.
- Captions are also helpful for people with auditory processing issues, ADHD, and other sensory input disorders that make it **difficult to focus** on two modes of communication at once.
- Captions make it possible for everyone to **watch videos in noisy environments** like airports, bars, and buses.
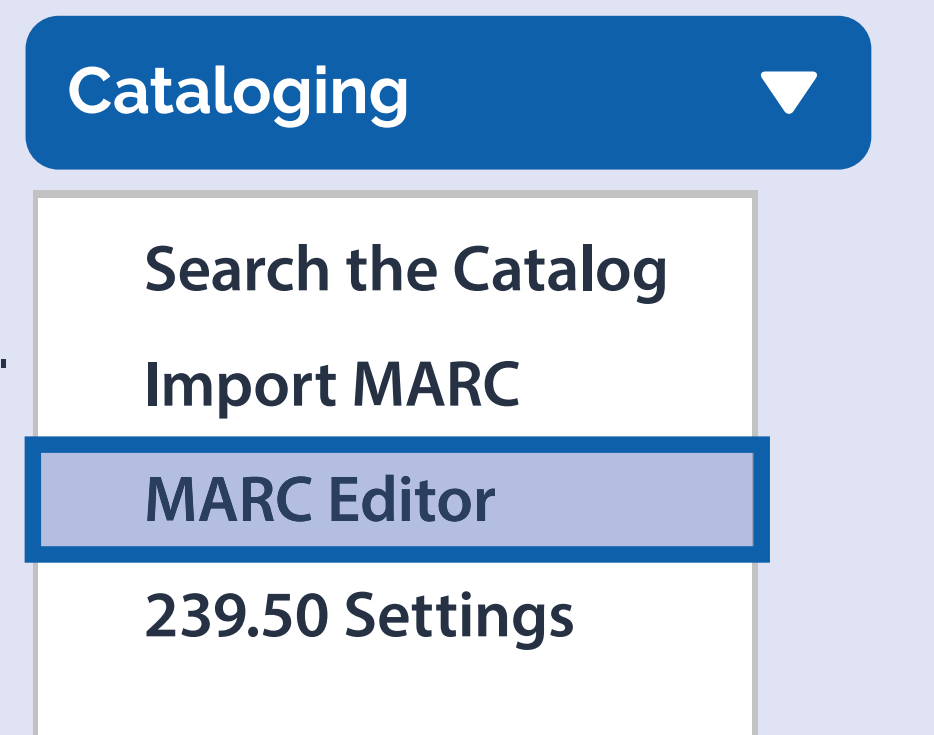
Color Contrast
- Good color contrast helps people with low vision, who often struggle to **read text** with subtle colors.
- Strong contrast helps people **distinguish links and buttons** from the surrounding text.
- Too much contrast may create a **visually loud design** for people with some sensory disorders.
- Forced colors and Windows High Contrast modes may require fine-tuning **images and borders.**

Search

Focus Outlines
- Focused elements should have a bold outline to help **keyboard and switch button** users stay oriented.
- **Outlines can be different** depending whether the element was focused using a keyboard or mouse.
- **People who are interrupted** can pick up where they left off more easily when focused form fields have bold outlines.

Cataloging
Search the Catalog
Import MARC
MARC Editor
239.50 Settings

Form Labels
- Screen reader users need **labels associated with every form field** so they know what to enter.
- Labels provide a larger hit target for people with mobility issues. Clicking anywhere in the label area will place **keyboard focus** on the associated form field.
- Using persistent, visible labels helps people **remember what to enter** into each field.

☑ The Design of Everyday Things
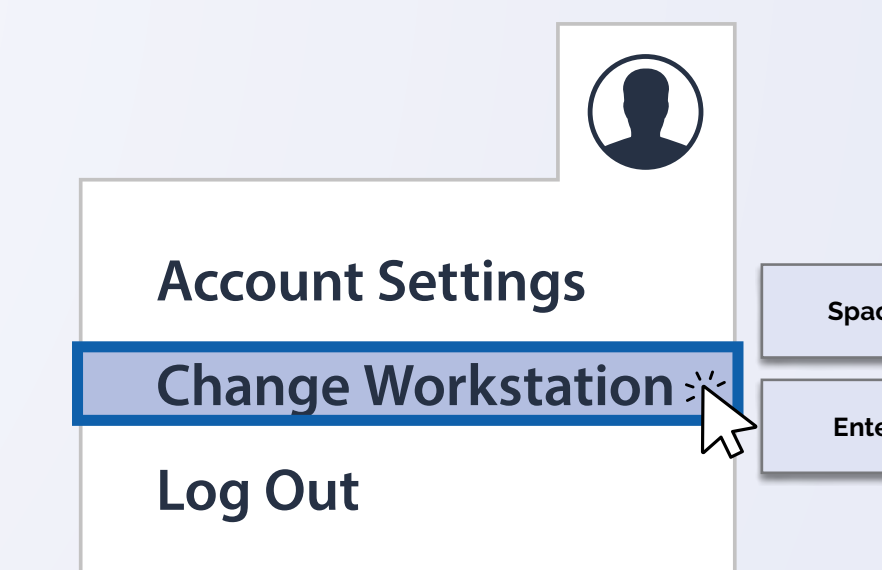
Email address
info@example.com

Headings & Landmarks
- Screen readers give users a **menu of landmarks and headings** that can be used to skim the page.
- Multiple landmarks with the same role, like navigation, should have **distinct names** via ARIA labels.
- **Visually distinctive headings** prevent confusion and help people stay oriented.

`<header>` `<nav>`
`<h1> Title </h1>`
`<aside>` `<main>`
`<h2> Article Title </h2>`
`<footer>`

Keyboard Controls
- Screen reader users do not use mouse pointers. **Every interactive element has to be operable** using the keyboard.
- People whose mouse movements are imprecise may also find it **easier to navigate forms and menus** using the keyboard.
- Buttons can be pressed using **Space or Enter keys.**

Account Settings
Change Workstation
Log Out
Space
Enter

Link & Button Names
- Multiple links or buttons with the same accessible name can be distinguished from one another with **ARIA descriptions.**
- **Icon buttons** should have tooltips to help clarify the icons' meaning.
- Accessible names should **match the visible text or tooltip** so speech recognition users can dictate their choices accurately.

☑ The Design of Everyday Things
VIEW | EDIT | DELETE
☑ Don't Make Me Think
VIEW | EDIT | DELETE
☑ Accessibility For All
VIEW | EDIT | DELETE

Don't Make Me Think

Plain Language
- Screen reader users listen at very high speeds —unless they have to **slow down** when they encounter **unfamiliar words.**
- Using jargon can also add challenges. For example, it can be difficult for **sign language interpreters** to convey.
- Plain language helps make labels and instructions clear to **early career professionals and language learners** as well as those with cognitive disabilities.

Semantic HTML
- Different tags have **implicit roles** that are announced to screen readers.
- The role tells the user which **keyboard or switch button actions** they can use. Incorrect roles can prevent users from accomplishing their tasks.
- Users with memory or attention deficit issues may **forget how custom widgets work** if they differ from standard HTML controls.

Text Alternatives
- Images and icons should have text equivalents for screen reader users using **alt attributes or visually hidden text.**
- **Decorative images should be hidden** from screen readers.

Summer Reading

About WCAG
- The Web Content Accessibility Guidelines are the basis of **all web accessibility laws around the world.**
- While laws may specify a version, it's best to **use the most recent version** of WCAG.
- Level AA compliance is **required for public institutions** in the US and Canada.
- WCAG 3, the next major version, will **introduce guidelines for cognitive accessibility.**

Lisa Carlucci
Executive Director
Equinox Open Library Initiative
lisa.carlucci@equinoxOLI.org

Angela Kilsdonk
Product & Education Manager
Equinox Open Library Initiative
angela.kilsdonk@equinoxOLI.org

Stephanie Leary
Front End Developer
Equinox Open Library Initiative
stephanie.leary@equinoxOLI.org

Andrea Buntz Neiman
Project Manager for Software Development
Equinox Open Library Initiative
andrea.neiman@equinoxOLI.org

For Audio Presentation & More Information

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