

Final Project Summary

CCABVI Website Re-Work

- Alexander Konopelski
- Aayush Sesane
- Gus Johannesen
- Kush Desai
- Tyler Geiger
- Zahir Humphries

UI/UX

- Kush Desai

UI/UX Features

- **Objective**
 - Create an intuitive, visually appealing, and accessible experience for all users, especially those with visual impairments.
- **Focus Areas:**
 - **Accessibility:** Improved screen reader compatibility and navigation flow.
 - **User Experience:** Clearer layout and improved visual hierarchy.
 - **Consistency:** Uniform design across all pages for a cohesive experience.

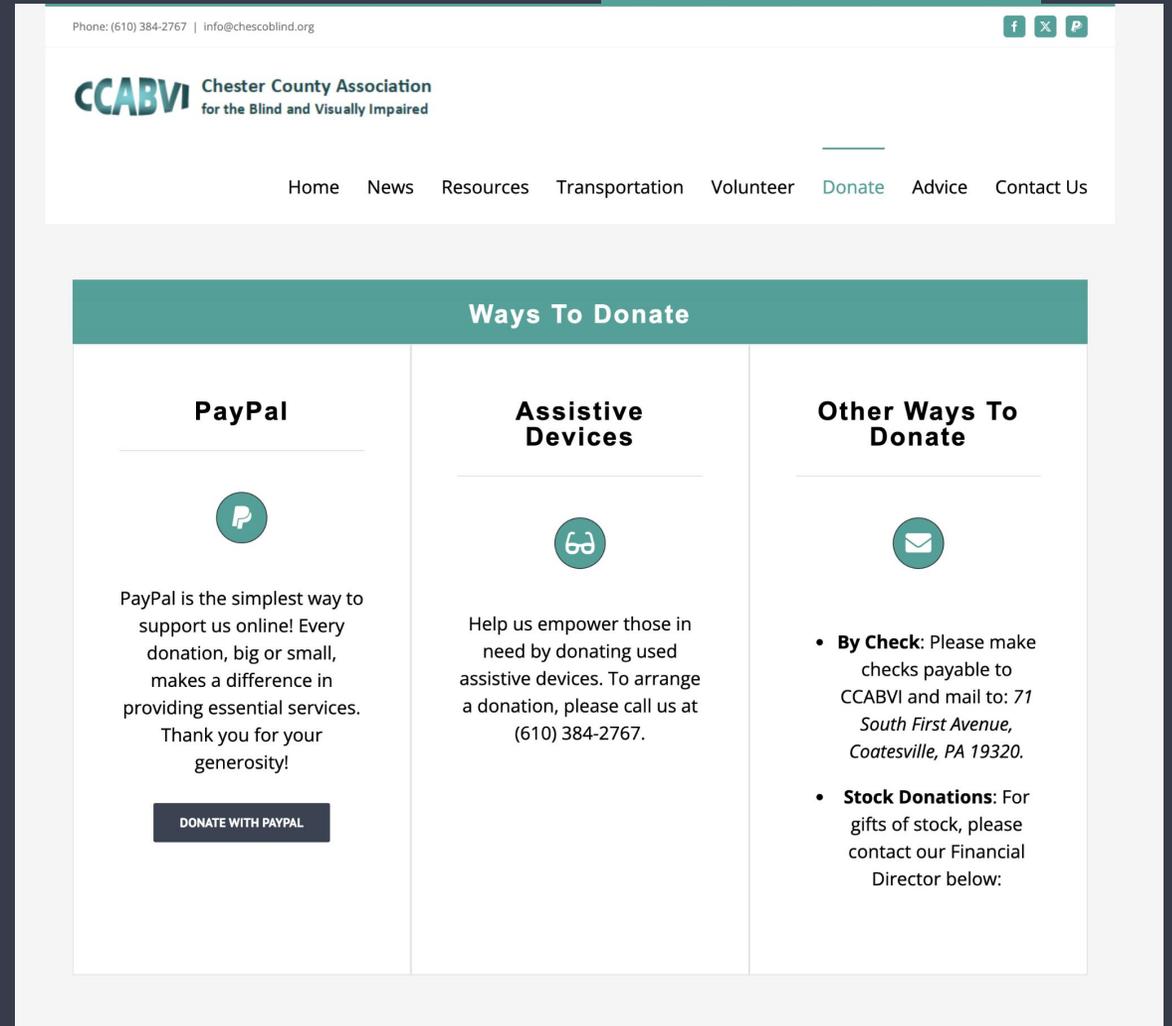
UI/UX Challenges

- **Balancing Aesthetics with Visual Accessibility**
 - Modern UI designs often use complex layouts and intricate features for visual appeal.
 - These designs can make navigation difficult for users with low vision who rely on clear, simple structures.
 - Maintaining the sites original simplicity ensures better usability for visually impaired users.

Donations Page

● Key Changes

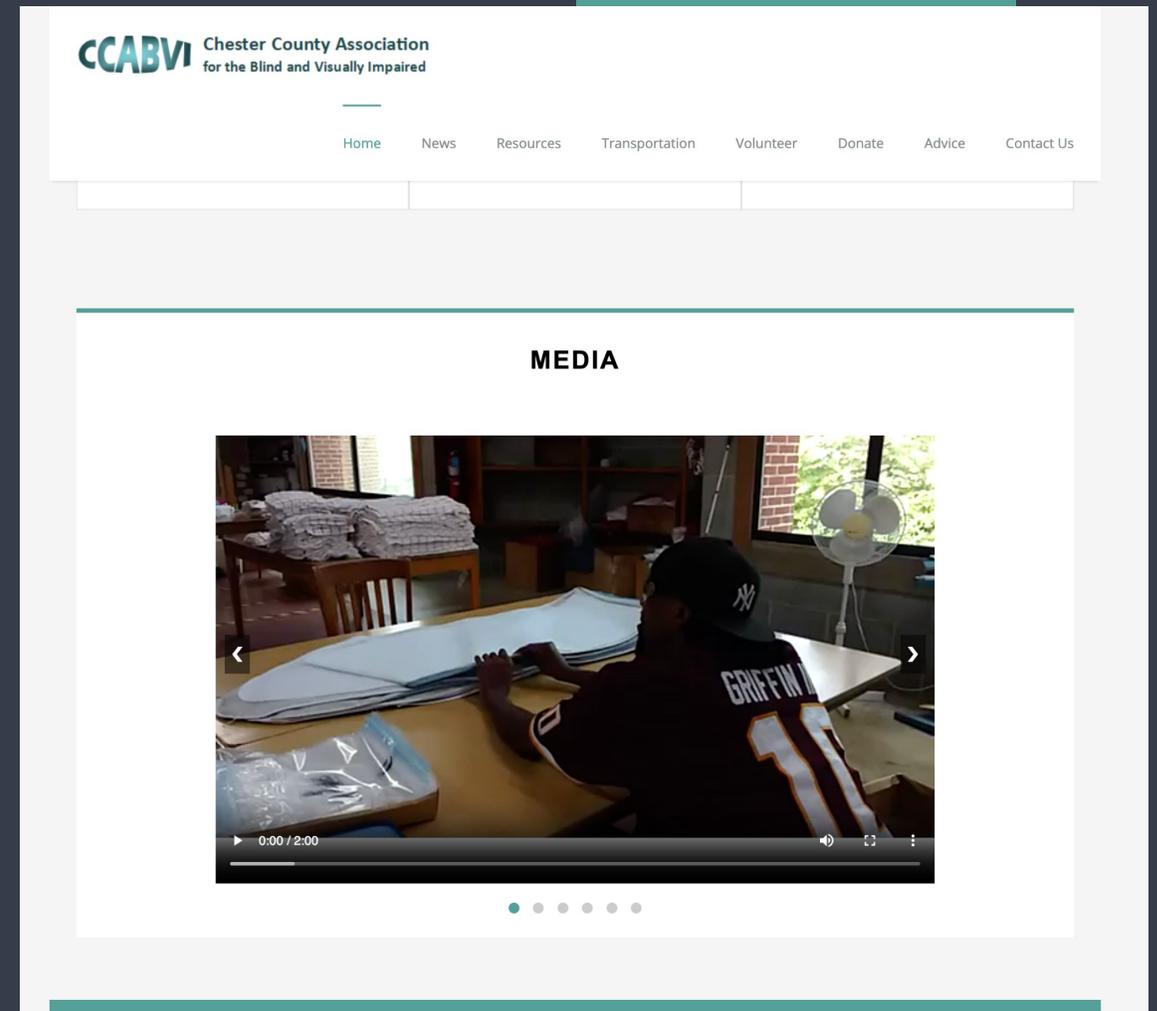
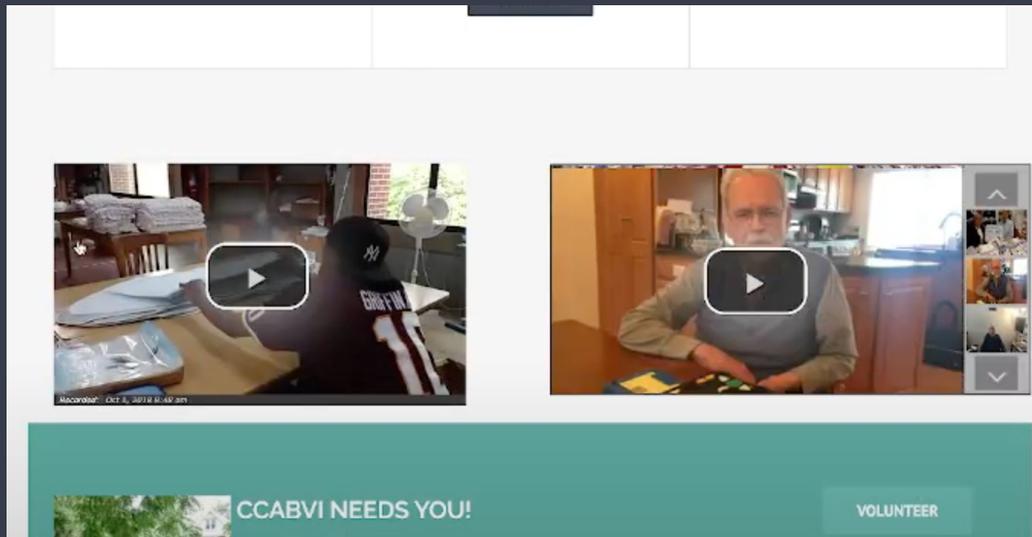
- Enlarged and repositioned PayPal button for better visibility.
- Logical tab navigation flow implemented.
- Redesigned layout with clear sections



Home Page

- **Key Changes**

- Added aria labels for video controls [e.g., "Next Video," "Previous Video"].
- Redesigned for a cleaner, modern layout.
- Responsive design to adapt to different screen sizes.



Documentation

- Alex Konopelski

Why Documentation?

- Long-term maintenance and sustainability
- The client can easily understand and manage their website
- Reduces reliance on the development team after project completion

Structure & Content

- Project Requirements
- System Design
- Implementation
- Testing
- Hosting
- Maintenance

Accessibility Assistant

Deactivate

Akismet Anti-spam: Spam Protection

Settings | Deactivate



There is a new version of Akismet Anti-spam: S

Avada Builder

Deactivate

Avada Core

Deactivate

Easy Accept Payments via PayPal

Settings | Deactivate

Deployment Steps and Configuration

The deployment process involved:

- Finalizing the website design and functionality on the staging environment.
- Migrating the updated website to the client's hosting environment.
- Configuring any necessary settings and plugins.
- Testing the live website to ensure proper functionality and performance.

Client Training and Documentation

The team provided training to the client on managing the website, including updating content, using plugins, and basic troubleshooting. Documentation was also provided to support the client in maintaining the website effectively.

7. Project Maintenance

Maintenance Guidelines and Procedures

Guidelines and procedures for ongoing website maintenance were provided to the client, including:

- Regularly updating WordPress and plugins to ensure security and stability.
- Creating backups of the website to prevent data loss.
- Monitoring website performance and addressing any issues that may arise.

Hosting

- Zahir Humphries

Hosting

- **Goal:**
 - Provide an accurate description of hosting services in place
 - Provide alternatives as a possibility not an immediate need
 - Services are already paid for year over, goal to educate rather than migrate
- **Current Services**
 - Bee.net - DNS Services
 - InternetRND - Web Hosting

Hosting Challenges

- Small / Local Companies Running Current Hosting [Difficult to research services]
- Lack of documentation / client transparency
- Limited Memory Allocation Causing Crashes
 - [Didn't manifest until staging pages were added]

The screenshot shows the Bee.Net website hosting services page. It features two main sections: 'Website Hosting' and 'Email Services'. The 'Website Hosting' section is powered by MXBEE.NET and Proofpoint, offering Managed Website Hosting. The 'Email Services' section is powered by Proofpoint and offers email accounts protected by MXBEE.NET spam & virus filtering services. A 'Customer Support' section provides phone support hours from Monday to Friday, 9:00AM to 5:00PM, and a link to a 'Support Request Form'.

The screenshot shows a pricing page for Managed WordPress plans. It features three plans: 'Managed WordPress Basic' at \$5.99/mo, 'Managed WordPress Deluxe' at \$8.99/mo (marked as 'RECOMMENDED'), and 'Managed WordPress Ultimate' at \$12.99/mo. Each plan includes a list of features such as website count, storage, SSL certificates, backups, and security features. The 'Deluxe' plan is highlighted with a red border and a 'RECOMMENDED' badge.

Error establishing a database connection

This either means that the username and password information in your `wp-config.php` file is incorrect or that contact with the database server at `localhost` could not be established. This could mean your host's database server is down.

- Are you sure you have the correct username and password?
- Are you sure you have typed the correct hostname?
- Are you sure the database server is running?

If you are unsure what these terms mean you should probably contact your host. If you still need help you can always visit the [WordPress support forums](#).

Hosting Solutions

- Direct Contact with Hosting provider to clear transparency & increase memory allocation
- Removed duplicate security plugin hogging memory usage - [Fixed site crashes]
- Created site-backups in case of emergency / data loss

Accessibility

- Tyler Geiger

Accessibility

- **Goal:**
 - Ensuring the website is usable for visually impaired users aligns with CCABVI's mission.
 - Compliance with WCAG 2.1 and Section 508 standards ensuring inclusivity.
- **Key Changes:**
 - Video Carousel Accessibility
 - Donations Page Accessibility
 - Verified all site pages are 508 compliant and screen reader accessible.

Donations Page Accessibility

- Enhanced tab navigation to prioritize key actions like donating.
- Increased visibility of the PayPal button for better usability.
- Screen reader compatibility improved with clear labeling and content structure.

CCABVI is a 501(c)3 non-profit corporation registered with the [Pennsylvania Bureau of Charitable Organizations](#). You can find us on [Guidestar by Candid](#) and also on [Charity Navigator](#).

Our funding comes from sale of merchandise produced in our textile workshop, support from local Lions Clubs, foundation grants, and donations from the community.

Thank you for considering a gift. Your contribution will enable us to provide vision support services to individuals in Chester County who are blind or visually impaired.

Your donation can provide

- \$25 - A large-print keyboard.
- \$50 - A tank of gas for our outreach van.
- \$100 - Three hand-held illuminated magnifiers
- \$500 - Four 1-hour training sessions on assistive technology

Your contribution can be made as a:

- Monetary donation
 - Honorary gift
 - Memorial gift
- Planned giving in a will
- Gift of stock and securities
- Donation of a used assistive device

• **By check, please make it out to CCABVI and mail to:**
CCABVI, 71 South First Avenue, Coatesville, PA 19320

• **By PayPal DONATE HERE!** PayPal, through which you can use your credit card, provides us a special low cost way to receive funds. We choose not to accept credit card donations directly since this is much more costly for us.

• **To donate stock, please contact:**
Joe LoStracco, *Financial Advisor*
Flagship Financial
55 Sunnybrook Rd., Sanatoga, PA 19464
Office: (610) 831-2195
Email: info@flagshipfinancial.org
Website: www.flagshipfinancial.org

• **To donate an assistive device, please call us at:**
○ (610) 384-2767

THANK YOU for your support!

Ways To Donate

PayPal

PayPal is the simplest way to support us online! Every donation, big or small, makes a difference in providing essential services. Thank you for your generosity!

[DONATE WITH PAYPAL](#)

Assistive Devices

Help us empower those in need by donating used assistive devices. To arrange a donation, please call us at (610) 384-2767.

Other Ways To Donate

- **By Check:** Please make checks payable to CCABVI and mail to: 71 South First Avenue, Coatesville, PA 19320.
- **Stock Donations:** For gifts of stock, please contact our Financial Director below:

Our Accountability:

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Video Carousel Accessibility

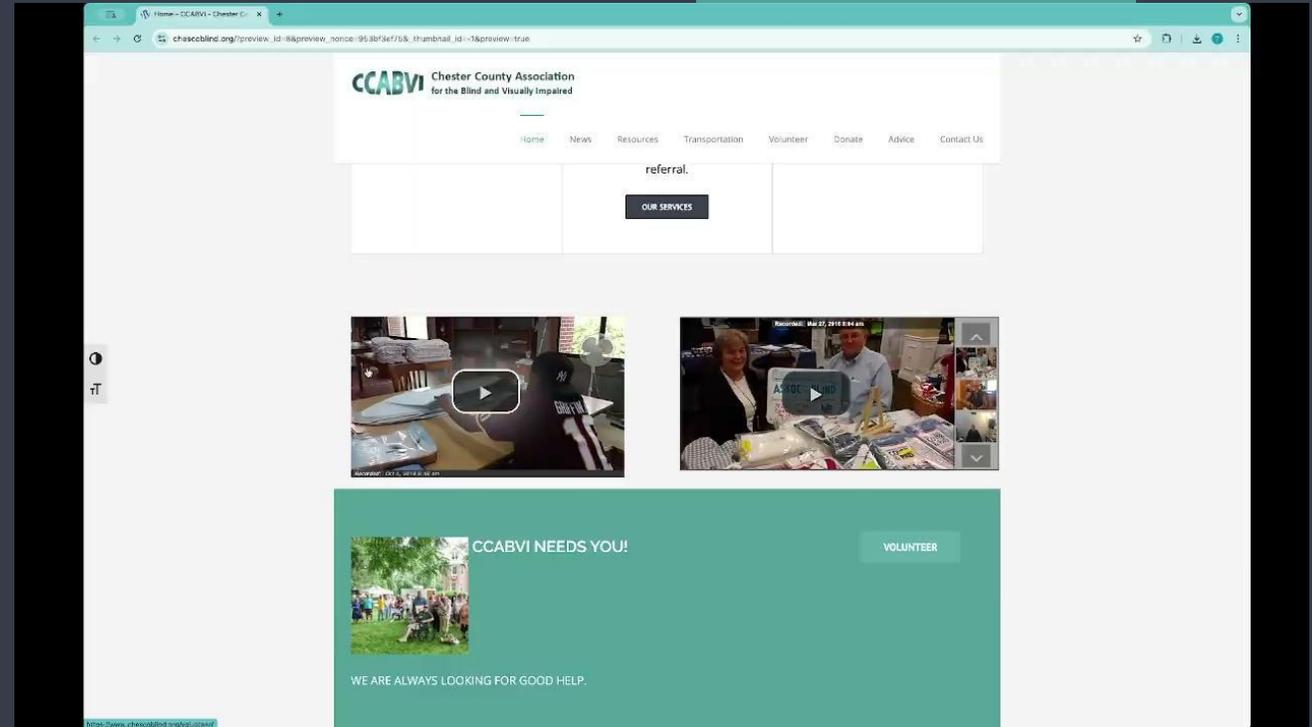
- **Findings:**

- Screen readers could not announce video controls properly.
- Keyboard navigation was inconsistent and unintuitive

- **Solution:**

- Added descriptive aria labels for actionable controls [e.g., "Next Video," "Previous Video"].
- Implemented logical tab navigation flow for seamless keyboard use.
- Redesigned the carousel to ensure it dynamically adapts to different screen sizes.

[DEMO](#)



Testing

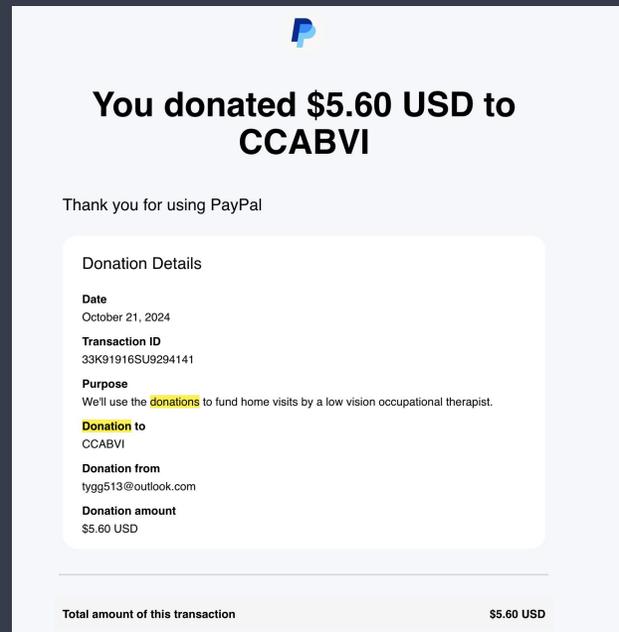
- Tyler Geiger

Testing Scope

- Functionality Testing
- Accessibility Testing
- Responsiveness Testing
- Cross-Browser Testing
- User Testing

Functionality Testing

- Verified key workflows like PayPal integration, donations, and content navigation.
- Ensured features [e.g., donation buttons, News page] perform as intended.
- \$5 test donation to ensure paypal functionality.



Accessibility Testing

- Screen Readers: JAWS, NVDA, and MacOS VoiceOver confirmed improved navigation.
- Aria Labels: Video controls are properly announced by screen readers.
- Logical Navigation: Tab flow successfully guides users through content.

Responsive + Cross-Browser Testing

- **Findings:**

- **Playback Compatibility:**

- The video player was unsupported on iOS devices, limiting usability for mobile users.

- **Device Resolution Issue:**

- The video element would overflow on small device widths such as mobile devices

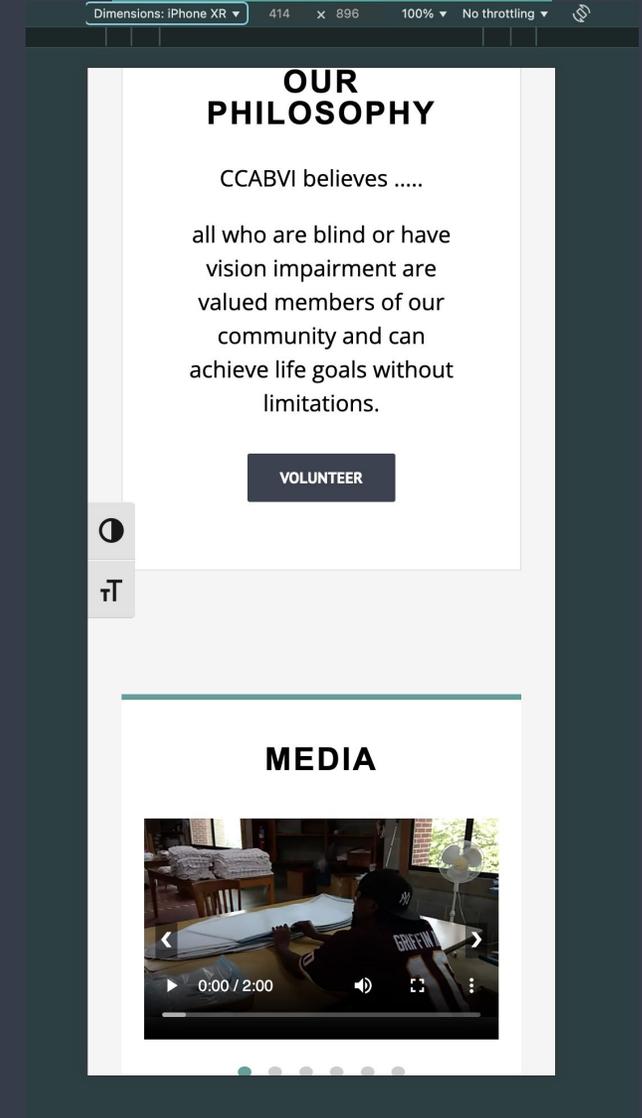
- **Solutions:**

- **Responsive Design:**

- Locked the video element aspect ratio to ensure videos scale proportionally.
- Adjusted video width dynamically to match the display width, preventing overflow on smaller screens.

- **Playback Support :**

- Added a WebM alternative for videos, ensuring compatibility with iOS devices.



User Testing - Expert Consultation

- **Expert:** *Jule Ann Lieberman*
 - Assistive Technology Program Coordinator - Temple University
 - Over 15 years of experience providing AT instruction to individuals with vision loss.
 - Personally uses a screen reader, making her an ideal representative of the target audience.
- **Key Findings:**
 - **Accessibility Confirmation:**
 - Confirmed that the site's features were accessible and met usability standards for individuals with visual impairments.
 - Validated functionality and user-friendliness for screen reader users.

Jule Ann Lieberman		
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT Institute on Disabilities		
Assistive Technology Program Coordinator		
EMAIL jule.ann.lieberman@temple.edu	OFFICE LOCATION Ritter Annex 4, Room RA 430	
DIRECT 215-204-2933	DIRECT 215-204-1356	

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Recommendations and Insights

○ Tab Indexes for Headers

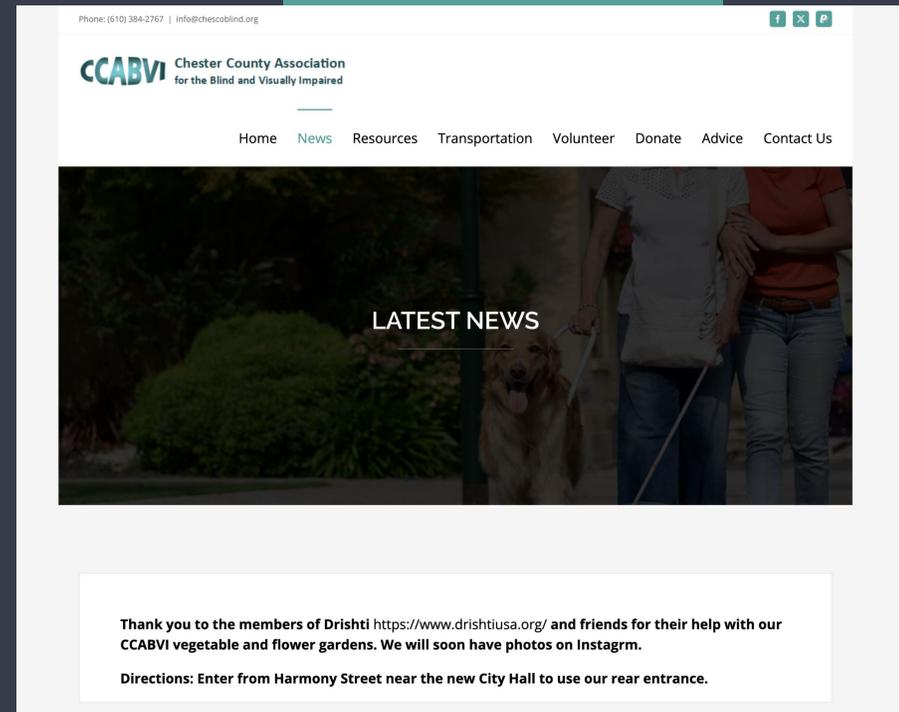
- Confirmed the effectiveness of added tab indexes on the Donations page, making it easier for novice screen reader users to navigate.
- Validated pre-implemented features as beneficial for accessibility.

○ Video Carousel:

- Praised as a major improvement in navigation and accessibility.
- Simplified interaction for visually impaired users.

○ Alt Descriptions for Images and Videos:

- Recommended focusing on intended visual implications in alt text rather than decorative elements.
- Guided the team to remove screen reader focus from purely decorative content, streamlining the user experience.



Updating Braille Resources

Findings:

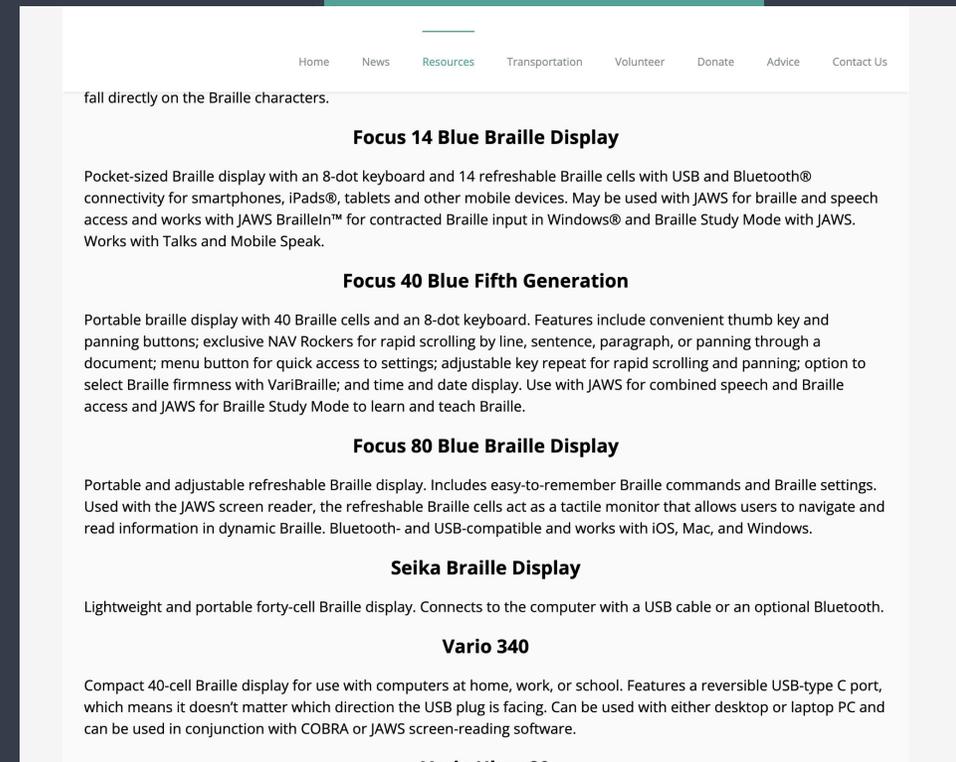
- Ms. Lieberman identified outdated resources in the list of Braille materials on the site.

Actions Taken

- Used the outdated resources as a teaching opportunity:
 - Collaborated with Tracey to demonstrate how to update content directly in the editor
 - Instructed her on content management best practices to ensure long-term maintainability.

Outcome

- Empowered Tracey to independently manage the site without relying on technical expertise.
- Prepared the client for future updates ensuring site maintainability.



Summary of Deliverables

- Gus Johannesen

Summary of Deliverables

Accessibility Improvements:

- **Redesigned Donations Page:**
 - Tab indexes added for easier navigation.
 - Screen reader-friendly layout with improved structure and focus.
- **Enhanced Video Carousel:**
 - Logical tab navigation and aria labels for controls.
 - Responsive design that adapts to all device sizes.
- **Streamlined Alt Descriptions:**
 - Focused alt text on meaningful content, removing unnecessary redundancy.
 - Simplified experience for screen reader users.
- **Functional Enhancements:**
 - Fixed PayPal Integration:
 - Confirmed seamless and secure donation processing.
 - Improved visibility and usability of the donation button.

Content Updates:

- **Updated Braille Resource List:**
 - Removed outdated resources with guidance from Ms. Lieberman.
 - Trained Tracey to manage updates independently.
- **New Feature: Occupational Referral Form Download:**
 - Implemented a PDF download for the Home Visitation Program.
 - Ensured it aligns with the accessibility standards applied to the rest of the site.

Home Visitation

Home visitations for all of Chester County residents who are not able to come to our facility.

If you are interested in home visitation, please have your doctor complete the referral form and email it back to us at info@chescoblind.org

[DOWNLOAD REFERRAL FORM](#)



Conclusion

Summary

- **Accessibility Achieved:**
 - The site now meets WCAG 2.1 and Section 508 accessibility standards, making it usable and inclusive for visually impaired readers.
- **Client Satisfaction:**
 - Our client, Tracey, is pleased with the changes and improvements.
 - She feels confident in her ability to maintain and update the site independently in the future.
- **Closing Thought:**
 - "Through collaboration, testing, and thoughtful design, we delivered a fully accessible, functional, and maintainable website that empowers both users and our client, supporting CCABVI's mission for years to come. This project was also a great learning experience, giving our team a deeper understanding of accessible design principles and their real-world impact."