Feasibility of Accessibility Improvements: Mayo Clinic Alix School of Medicine

Executive Summary

This feasibility report offers solutions to improving accessibility on *Mayo Clinic Alix School of Medicine—Academic Enrichments* webpage. The proposed solutions address three Web Content Accessibility Guidelines (WCAG) 2.1 nonconformance issues identified by Dustin Smith and Rebecca Littlefield's accessibility evaluation performed in February (Smith & Littlefield, 2024). Addressing these issues requires minimal resources while enhancing public perception. The cost-benefit analysis suggests that the following recommended solutions are feasible:

1. Enhance Navigation using a unique ID attribute by modifying HTML.
2. Increase the contrast ratio for one nonconforming icon by adjusting CSS.
3. Improve keyboard navigation by analyzing and modifying both CSS and HTML.

Introduction

The creation of this report arises from the need to enhance various areas of web accessibility for the *Academic Enrichment* webpage. The report navigates through the context, cost, and intrinsic value of implementing various strategies that address previously identified accessibility issues, reinforcing Mayo Clinic Alix School of Medicine (MCASOM) commitment to inclusivity and excellence. By addressing these issues, MCASOM can facilitate better engagement with its diverse user base, fostering an inclusive digital environment and enriching the academic journey of all students.

Background and Context

The webpage is for students and prospects at Mayo Clinic Alix School of Medicine (MCASOM). It describes the opportunities available to customize a student's academic experience. This includes dual degrees, global health, research, electives, certificates, and distinction track programs. WCAG nonconformance creates barriers that may prevent access to digital content for users with various disabilities, including auditory, cognitive, motor, and visual impairments. Accessibility of Mayo *Clinic Alix School of Medicine M.D. Program – Academic Enrichment* webpage guarantees equal access to educational opportunities and resources for all students, regardless of their cognitive or physical abilities, as well as providing information to prospective students.

Evaluation Criteria

The following criteria will be used to evaluate accessibility solutions for Mayo Clinic Alix School of Medicine M.D. Program's Academic Enrichment webpage.

- ***Financial Cost***: The cost of integrating accessibility features like assigning unique ID attributes, improving focus indicators, and icon contrast ratios involves contracting a short-term web developer for an average cost of $50 per hour (ZipRecruiter, 2024).
- ***Public Perception***: Enhancing accessibility aspects will demonstrate a commitment to accessibility and inclusivity, potentially influencing prospective students as well as alignment with core Mayo Clinic values of RICH TIES (Respect, Integrity, Compassion, Healing, Teamwork, Innovation, Excellence, Stewardship).

- ***Resources Needed***: Web developers and staff will need access to Mayo *Clinic Alix School of Medicine—Academic Enrichments* website HTML (Hypertext Markup Language) and CSS (Cascading Style Sheet). Human resources will also be needed for various forms of testing.

Evaluation of Solutions

1. **Enhance Navigation with a unique ID attribute.**
    - *Financial Cost:* Low to moderate. Modifying the webpage's HTML code to include a unique ID attribute to the "Back to Top" focusable element. The financial cost would include labor hours for a web developer to implement and test the change. Estimate cost of outsourcing labor: $150 @ $50/hr.
    - *Public Perception:* Positive. Improving the unique ID attribute will enhance user experience, especially for individuals with disabilities. Implementing this change can positively affect the public perception of the organization, leading to a positive reputation among prospective students and the general public.
    - *Resources Needed:* Minimal. This solution requires access to the website's content management system and the expertise of the web developer. Given the technical simplicity of the task to those familiar with web accessibility standards, existing staff with web development skills may be able to implement the change, negating the need for additional resources.
2. **Increase the contrast ratio for one nonconforming icon.**
    - *Financial Cost*: Low. Enhancing the contrast of a single icon will involve adjusting its color properties in the CSS. A web developer can execute this task quickly. Incurring minimal financial cost. Estimated cost of outsourcing labor: $50 @ $50/hr.
    - *Public Perception:* Positive. Addressing this issue underscores the organization's dedication to accessibility and its commitment to providing an inclusive user experience. Enhancing the contrast ratio aligns with both legal and ethical standards and will improve the usability of the webpage leading to a positive public perception.
    - *Resources Needed:* Minimal. Necessary resources include access to the website's CSS and the expertise of a web developer proficient in design and accessibility. Given the limited scope of this task, extensive resources and specialized tools are not needed.
3. **Improve Keyboard Navigation.**
    - *Financial Cost:* Moderate. Resolving the keyboard navigation issues requires a thorough analysis of the webpage's HTML and CSS to modify the tab order and ensure consistent visibility of focus indicators. This can involve complex coding and testing to ensure the changes are effective across various browsers and devices. Estimated cost of outsourcing labor: $400 @ $50/hr.

- *Public Perception:* Very Positive. Enhancing keyboard navigation significantly improves usability for individuals who rely on keyboard navigation. Making these changes demonstrates a strong commitment to accessibility and demonstrates a commitment to equitable access.
- *Resources Needed:* Moderate. This solution will require a web developer with front-end development expertise to modify the navigation and focus mechanisms.

Conclusion

Improving the accessibility of *Mayo Clinic Alix School of Medicine M.D. Program – Academic Enrichment* webpage is feasible. The solutions provided address previously identified WCAG nonconformance issues. The proposed solutions offer cost-effective and impactful alterations that greatly improve public perception with minimal financial and resource investment. This report offers practical solutions that will significantly benefit all users, especially those with disabilities, solidifying the organization as an inclusive and forward-thinking educational body.

Final Recommendation

We recommend that Mayo Clinic Alix School of Medicine proceed with implementing the following accessibility improvements on the *Academic Enrichment* webpage:

1. *Enhance Navigation*: This modification in the HTML structure will facilitate easier access for users with disabilities and requires minimal resources.
2. *Increase Contrast Ratio*: Adjust the CSS to ensure the contrast ratio complies with WCAG 2.1 standards, improving access for visually impaired users.
3. *Improve Keyboard Navigation*: Make the webpage more accessible to users who rely on keyboard navigation by refining both CSS and HTML.

These changes should be implemented before the next Academic Year (August 2024), providing immediate benefits to both current and prospective students. Authorizing and implementing these low-cost changes demonstrates the school's commitment to equitable access while strengthening the core values of Respect, Integrity, Compassion, Healing, Teamwork, Innovation, Excellence, and Stewardship.

References

Smith, D., & Littlefield, R. (2024). Webpage Accessibility Evaluation: Mayo Clinic Alix School of Medicine. Minnesota State University, Mankato.

ZipRecruiter. (2024, March 30). Freelance Front End Web Developer Salary. Retrieved from https://www.ziprecruiter.com/Salaries/Freelance-Front-End-Web-Developer-Salary