ACCESSIBILITY REPORT FOR PRO DBA

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Executive Summary

This report provides an analytical approach focusing accessibility of the website developed for the Creating Web Application course. The analysis is done against the principles of the Web Content Accessibility Guidelines (WCAG) 2.1, focusing on the four main principles: Perceivable, Operable, Understandable, and Robust. Key findings highlight areas of compliance and areas requiring improvement to enhance accessibility for all users, including those using assistive technologies.

Introduction

The website analysed in this report serves as a job portal designed to provide information about job listings, application processes, and company details. The objective of this report is to assess the accessibility of the website to ensure it meets WCAG 2.1 standards. This evaluation aims to identify potential accessibility issues and recommend improvements to make the site more inclusive.

This report is structured as follows: It begins with an Introduction, providing an overview of the website and the objective of the report. The main body consists of the Accessibility Analysis, which is divided into several sections: Method of Analysis, Tools Used, and Findings and Discussion. The report concludes with a Conclusion summarising the key findings and recommendations for improvement. Additionally, a References section lists all the sources and materials used during the analysis, and an Appendix includes supporting information and detailed reports.

Method of Analysis

The accessibility analysis was conducted using a combination of automated tools and manual testing. The automated tools provided initial insights into potential issues, while manual testing ensured a thorough evaluation of user experience aspects that automated tools might miss.

Tools Used for Analysis

We analyzed our website's accessibility using several online tools and manual checks. The tools and their purposes are listed below:

- WAVE (Web Accessibility Evaluation Tool): For automated detection of accessibility issues.
- axe Accessibility Checker: A Chrome and Firefox extension that identifies WCAG violations.
- WCAG Contrast Checker: Evaluates color contrast ratios for text readability.
- Manual Testing: Involved navigating the website using only a keyboard and screen readers.

Findings of the Analysis:

1. Perceivable

To assess the accessibility of our website, we employed a combination of online tools and manual methods. The tools utilized included WAVE (Web Accessibility Evaluation Tool), which automatically detects accessibility issues, axe Accessibility Checker, an extension for Chrome and Firefox identifying WCAG violations, and WCAG Contrast Checker, which evaluates color contrast ratios to ensure text legibility. Additionally, we conducted manual testing, navigating the website solely using a keyboard and screen readers. This comprehensive approach allowed us to thoroughly analyze the accessibility of our website.

2. Operable

The website was largely accessible via keyboard, though focus indicators could be improved. No time constraints were found in the content. The absence of flashing content mitigated seizure risks. While the website's navigation was logical, the addition of skip navigation links would greatly enhance accessibility for screen reader users.

3. Understandable

The website's content was generally clear and easy to understand, making it accessible to a wide range of users. However, job descriptions contained some technical terms that might be difficult for those outside the specific field to comprehend. Providing simpler explanations or a glossary of terms could enhance the overall readability and ensure that all users can fully understand the job requirements.

In terms of user experience, the website's behavior was consistently predictable, with no unexpected changes or surprises triggered by user interactions. This contributed to a smooth and intuitive browsing experience.

Form fields were well-labeled and included clear instructions, guiding users through the input process. However, the error messages displayed when users made mistakes lacked sufficient detail. More specific guidance on how to correct errors would be beneficial, making the form-filling process more efficient and user-friendly.

4. Robust

The website demonstrated strong compatibility, functioning well on multiple browsers like Chrome and Firefox, as well as with assistive technologies such as the NVDA screen reader. This broad compatibility was likely due to the use of standard HTML and ARIA roles, ensuring that most elements were accessible to assistive technologies.

Areas for Improvement

The website underwent multiple accessibility tests, including automated scans using WAVE and axe, as well as manual checks. WAVE identified 15 errors, 20 contrast errors, and instances of missing alternative text. Axe confirmed these findings and provided further information on ARIA issues. Manual testing revealed problems with keyboard focus indicators and missing skip links. These tests highlighted areas needing improvement to make the website more accessible.

Findings of the Analysis

The website demonstrates a good level of accessibility but has several areas requiring improvement. Key issues include inadequate color contrast, missing alt text for decorative images, lack of skip navigation links, and insufficient detail in error messages.

Discussion of Findings

The findings indicate that while the website is on the right track, addressing the identified issues will significantly enhance its accessibility. Improving color contrast, ensuring all

images have appropriate alt text, adding skip links, and providing detailed error messages will make the site more inclusive and user-friendly.

Recommendations for Improvement

- Enhance Color Contrast: Adjust text and background colors to meet WCAG contrast requirements.
- **Provide Alt Text for All Images:** Ensure all images, including decorative ones, have appropriate alt attributes.
- Add Skip Navigation Links: Facilitate easier navigation for screen reader users.
- **Improve Error Messages:** Provide detailed and clear instructions for correcting form errors.
- **Ensure Focus Indicators:** Make focus indicators more visible to aid keyboard navigation.

Conclusion

The analysis concludes that the website partially meets WCAG 2.1 standards. Implementing the recommended improvements will enhance compliance, making the website more accessible to all users, including those relying on assistive technologies.

References

- 1. World Wide Web Consortium (W3C). (2018). Web Content Accessibility Guidelines (WCAG) 2.1. Retrieved from http://www.w3.org/TR/WCAG/
- 2. WebAIM. (n.d.). Introduction to Web Accessibility. Retrieved from http://webaim.org/articles/
- 3. University of Michigan. (n.d.). Web Accessibility. Retrieved from http://hr.umich.edu/webaccess/