Rafaela Rossi | INM313: Inclusive Design Coursework | Speech and Reference List

Speech

“Hello everyone! Today I will be presenting my accessibility audit of the Four Paws UK website, focusing on both the homepage and the webpage for leaving a gift in your will, which took place between November 25th and December 1st, 2024. This audit is based on the website accessibility conformance evaluation methodology which abides by the The Web Content Accessibility Guidelines (w3.org, 2024) - abbreviated as W-C-A-G (wee-cag). - WCAG is the globally accepted benchmark for making web content more accessible to people with disabilities. Each guideline focuses on the success criterion Level A and AA. and is organized under four principles of accessibility: Perceivable, Operable, Understandable, and Robust. I used two auditing tools in addition to a manual evaluation as described in the slide. The main user profiles I drew on were those with visual, hearing, and motor impairments, cognitive and learning disabilities, and anyone with a need for assistive technologies. Each issue is rated with a severity of violation score from high to critical based on the amount of users impacted, and the level of difficulty of completing a task or consuming information. Issues of high severity still allow the user to engage with the webpage but with greater difficulty, and those of critical severity completely block the user from engaging as intended.

For our first issue, there were many cases of low contrast as pictured in the slide, which pertain to WCAG Violation is 1.4.3. Contrast (minimum).This is rated with high severity because this affects users with visual impairments which include low vision, age-related macular degeneration, or color blindness from viewing certain functionalities of the site properly. Accessing the Sponsorship button, for example, is challenging and potentially unusable if these users wanted to complete this particular task but could not see it properly. I rated this as high instead of critical, because the user may eventually be able to access this button by keyboard functionality, if used. This guideline falls under the “Perceivable” principle, which requires that “information and user interface components be presentable to users in ways they can perceive” (w3.org, 2024). To help solve this, you can refer to the contrast ratios and link provided in the slide which directs you to a contrast checker you can use to audit your color scheme.

The second issue detected is the empty heading between the “Bear Sanctuaries” and the “Find out more” button, which violates WCAG 2.4.6 Headings and Labels, under the Understandable principle. This principle requires that the operation of the interface be understandable to all users, and this empty heading creates a misleading structure. This issue is of high severity because the empty heading disrupts navigation, causing confusion and frustration to those with cognitive impairments, screen reader users, or keyboard navigators. These types of users can include people with motor impairments and cannot use a mouse, users with temporary disabilities such as a broken arm, people with visual impairments, older adults who may suffer

from age related vision loss or users with dyslexia or aphasia. To avoid this, it is recommended that you plan heading structure early so that content and design fits into a logical heading structure (Webaim.org., 2013).

The next issue detected violates WCAG 2.4.4. Link Purpose (In Context) where the social media icon buttons are empty links containing no text and therefore no clear purpose. Links with no text will not have a clear function and this is of high severity because it confuses users who rely on keyboard navigation and screen readers to engage with these links, not allowing them to discern where the link leads before clicking. This violation falls under the “Operable” principle, which states that “user interface components and navigation must be operable”, and the issue excludes users from confidently interacting with the links. To solve this, provide the empty links with alternative text that describes the target of the link within the HTML code (www.w3.org. (2024).

Issue number four, the empty form label, is of critical severity as the lack of labeling under the search icon may make accessing the search function challenging for users of older age or with aphasia, for example. Aphasia is a cognitive impairment which affects the users ability to produce and consume information, (Galliers, J., Wilson, S.R., Roper, A., Cocks, N., Marshall, J., Muscroft, S. and Pring, T., 2012) and according to the Stroke Association in the UK, more than 350,000 people in the UK have aphasia, which could be a large part of your audience. This should be solved by labeling the search icon and adhering to WCAG 3.3.2, which states that labels or instructions are provided when content requires user input. This also falls under the robust principle, which states that web content must be interpreted reliably by a wide range of user agents - and those who rely on assistive technologies may not be able to interpret the function of the search icon without a proper label.

Issue number five was discovered as I was doing a search for the word “sanctuary” but purposely misspelled it to see if the results page would produce suggested corrections, in which case it yielded no results as pictured, violating WCAG 3.3.3: Error Prevention. This is a high severity issue for users with learning disabilities such as dyslexia, who may have a harder time spelling words correctly and therefore be excluded from completing the search task. Although there were suggestions auto populating in the search field dropdown as I was typing in, this still is not enough to make this feature accessible. This is highlighted through a few studies, one of which focused on eye tracking, where it was found that users with dyslexia did not use the autocomplete function as much as those without dyslexia because their eyes were focused on the keyboard during the query input (Berget and MacFarlane, 2020). Another compared search behavior, and found that those with dyslexia were much less effective when using drop down keyword suggestions than those without (Cole, MacFarlane and Buchanan, 2016). To solve for this, you should ensure that the search feature has a higher tolerance for spelling errors when producing the results page.

For this issue, I did a manual evaluation by activating the voice over feature in the accessibility settings and found that none of the content information was accessible via voice over. This violates WCAG 1.3.1 Info and Relationships, falling under the perceivable principle. This

presents a problem of critical severity for the same users I have mentioned before: keyboard users and screen reader users, who would have no way to access any of the essential information needed to understand the purpose of your page. To resolve this, please ensure that all text content is properly and programmatically determined as content text, not just the links as appears to be the case on this page.

Issue number seven is of critical severity as it completely blocks keyboard-only users from completing the functions such as the search function or reading through the FAQ section, violating WCAG 2.1.1 Keyboard. This guideline requires that all content and functionality be operable through a keyboard interface. As mentioned earlier, these are users who typically have visual impairments or motor impairments who rely on assistive technology. Both the FAQ section and the search function are a vital form of engagement of the site and excluding these users presents a critical problem and unnecessary frustration when seeking information. To solve for this, you should ensure that you use standard HTML form controls and link elements throughout your page to provide keyboard operation (W3.org, 2023).

The next issue I detected from manual evaluation was from the youtube video displayed on your page. I discovered that there was no option to activate captions, violating WCAG 1.2.2 Captions (Pre-recorded), also under perceivable principle. This is critical because it excludes any user with hearing impairments, whether they be fully deaf or hard of hearing, non-native speakers, or even users who are just in noise-sensitive environments who will now not be able to understand your video. According to the British Academy of Audiology (2023), 1 in 6 of the UK adult population is affected by hearing loss, which is a large segment of your target audience, emphasizing the severity of this issue. To fix this issue, ensure that any pre-recorded video with audio has captions which allow users to toggle them on and off as needed.

Issue number nine is of high severity and was discovered when zooming in on your page and discovering that your content was not resized to fit the dimensions of the screen. This violates the perceivable principle and the reflow guideline, which states that content should be enlarged without increasing the line length. What this means is, users who need to read bigger text should be able to do so without having to scroll to read through long lines, as pictured in the example here. This impacts users with visual impairments, and forcing these users to scroll back and forth to read a small bit of text significantly increases the effort needed, which can lead to frustration and ultimately abandoning your page. You can address this by ensuring your HTML code enables reformatting of web content for different viewport widths as noted in the slide.

The last critical issue presented was found when navigating through the page with my keyboard, I could tab through the dropdown menu pictured here, but I had no ability to see the actual dropdown menu options, which should be available for all users to decide whether they want to navigate through your page. This is critical because this affects keyboard users (such as those with visual or motor impairments) who should have the same access to the options as any other user. This violates WCAG 3.2.2: On input, which ensures that entering data or selecting a form control has predictable effects, and in this case, selecting the dropdown menu top options leads

them to another page instead of revealing the options. Again, this is critical because it is blocking keyboard users from accessing a part of your page, violating the “Understandable” and “Operable” principle.

In summary, we have covered various violations that go against web content accessibility guidelines and the various users most impacted. Following this presentation I suggest that you follow the steps outlined here or even take it a step further and consider hiring an accessibility specialist full-time who will have a good technical understanding of guidelines, know how to implement testing and understand the user needs (Service.gov.uk, 2024). It’s important to note that navigating any website is a form of information seeking, which requires a large cognitive load regardless of whether an impairment is present- therefore a demanding task for all types of users (Gwizdka, 2009). While it is not possible for every single design decision to include all users, addressing these issues will help improve accessibility and user experience for an even broader range of users (University of Cambridge, 2017). Thank you for your time.”

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