

Introduction to Web Development

Task 1 – Research Document

People with disabilities can access and use websites and web tools when they are properly designed and coded. However, many websites and applications today are built with accessibility issues that make it difficult or sometimes even impossible, for some users to navigate them. These barriers can affect people with visual, auditory, motor, or cognitive impairments, limiting their ability to interact with digital content.

Ensuring that websites are accessible benefits not only individuals with disabilities but also businesses and society. Accessible websites reach a wider audience, improve user experience for everyone, and demonstrate inclusivity. Additionally, following accessibility guidelines can enhance a company's reputation and even improve search engine rankings.

Essentially, the web is designed so that any type of hardware, software, location, language or ability will not hinder its ability to be navigated. International web standards, help this since they define the key requirements for accessibility, helping developers and designers create websites that are inclusive and usable for everyone. By prioritizing accessibility, we can build a more equitable online experience for everyone.

What is Web Accessibility:

Web Accessibility means the user is able to understand, perceive and interact with the web in question. This means that every web can overcome any disability including auditory, cognitive, physical, visual, speech and neurological.

Playing a crucial role in work, education, government, business, healthcare, entertainment, and more. To ensure equal access and

opportunities for people of all abilities, the Web must be designed with accessibility in mind. The United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) recognizes access to information and communication technologies, including the Internet, as a fundamental human right.

Beyond being a moral and legal obligation, accessibility also makes strong business sense. As highlighted in the previous section, accessible design improves the overall user experience, particularly for older adults, across different devices, and in various situations. Prioritizing accessibility can help expand your market reach, drive innovation, and strengthen your brand.

How to make a Website Accessible:

For non-text content like pictures, charts, diagrams, and drawings, text replacements offer a crucial alternative. These alternatives can be modified to suit individual needs in several ways, such as being enlarged to specific text sizes, or read aloud to those who struggle with reading.

Text transcripts and captions for audio content, audio descriptions, and sign language interpretation are examples of accessibility features that guarantee access to crucial information for those who are deaf or blind. Elements like input fields, lists, tables, and headings need to be appropriately formatted in order for material to be flexible. Users should be able to modify the layout and display settings using browsers or assistive technologies according to their preferences, and the order of the content should be independent of the visual presentation.

Content that can be distinguished, helps enhance readability and usability. This allows text to reflow in small windows, making text

images resizable, and making sure that the backdrop and text colours contrast well. Additionally, users must have control over audio playback, including the ability to pause, halt, and change volume levels. To avoid distractions and interference, background music should be tuned down or quickly switched off.

To ensure a smooth user experience, text content should be readable and understandable for the widest possible audience, including those using text-to-speech tools. Predictability in website structure is also key—consistent navigation menus, intuitive user interface components, and avoiding unexpected changes help users quickly adapt to the platform. By maintaining these principles, websites become more accessible and user-friendly for people with diverse needs and preferences.

When taking these principles in consideration, a few websites i found which follow them include Microsoft, WebAIM, and Apple. These incredibly popular and massively used websites have excellent accessibility and follow these principles.

The apple website has an incredible number of visual elements for people with difficulty reading, as well as different genres for building a well-structured and distinguishable sections for easy navigation, as well as being fully usable using just your keyboard.

Microsoft has a very simple and repetitive website. The predictability in the website structure is also key having consistent navigation menus, and it avoids unexpected changes that helps the users quickly adapt to the platform.

Websites like Domino's and B&H Photo Video, don't follow these principles and have been flagged or even faced lawsuits over these accessibility issues.

Some issues Dominos has faced include poor screen reading support, which mostly effects visually impaired people from using

the website without some sort of assistance not provided from the website itself. It also makes it incredibly hard for these types of users to order independently.

B&H Photo Video is an American website with incredibly poor accessibility. The website itself has already been flagged for screen reading support and other challenges users have faced. The material on the website is not flexible as when resized or using different displays, the website does not resize to fit the new display, leaving the incredibly crowded and difficult navigated website worse than it already was. Due to it being so crowded users have faced navigation as well.

References:

<https://www.w3.org/WAI/fundamentals/accessibility-intro/>

<https://www.microsoft.com/en-mt/>

<https://www.apple.com/>

<https://www.dominos.mt/>

<https://www.bhphotovideo.com/>