What is WEB ACCESSIBILTY?

Web accessibility refers to the creation of tools, technologies, and websites that are usable by individuals with disabilities, including those with hearing, vision, neurological, physical, and speech disabilities. It benefits both people without disabilities, those using smartphones, smart watches, and TVs, temporary disabilities, and situational limitations. Content created for the web is based on web accessibility principles, and if any of these guidelines are broken, disabled individuals cannot access websites.

Functional accessibility is outlined in the acronym POUR.

PERCEIVABLE - OPERABLE – UNDERSTANDABLE - ROBUST

The Perceivable principle, for instance, would be satisfied by offering text replacements for non-text information, such photos, since blind users would benefit from the fact that sight is not necessary for understanding the content. Another illustration would be making sure that significant information can be communicated in ways other than just colour, which benefits people who are colourblind or have poor eyesight.

The Operable Principle ensures all users can access online functions, regardless of their ability. This includes making features accessible with just a keyboard, allowing users to disable, modify, or extend time limits on webpages, and ensuring digital content doesn't cause seizures or other harmful physical reactions, ensuring accessibility for all users.

Understandable is the third web accessibility principle. According to this idea, users must be able to understand every content. Users must also be able understand how user interfaces work. For the benefit of screen reader users, all webpages, for instance, must indicate the language of the page and any sections where the language is different from the primary language.

The Robust principle in the WCAG (WEB CONTENT ACCESSIBILITY GUIDLINES) emphasizes that assistive devices and user agents must understand digital material. It covers processing, including whether HTML elements have complete start and end tags, and requires assistive technology like screen readers to automatically identify web item names and responsibilities. Additionally, notifications must be programmatically determinable, as contemporary browsers are more "fault-tolerant" of grammar problems.

Implementing four web accessibility principles in design and development ensures equitable digital access for all users, including those with blindness, deafness, and cognitive disabilities. These user-centred principles provide a high-level understanding of website accessibility, ensuring accessibility for all.

Every component of a website is covered by the concept of web accessibility. For the website to be useful and accessible for people with disabilities, its many elements should be complementary to one another and interconnected. These elements consist of:

Content

Includes the text, images, and sounds that make up a web page or online application, as well as the code, script, or code that specifies the site's structure, presentation, and other features.

Agents for Users

Web browsers, mobile phone browsers, media players, plug-ins, assistive devices, and other software that performs tasks on behalf of a user are examples of user agents

Authoring Tools

Code editors, content management systems, blogs, and other website creation tools are made with this software.

Assessment Instruments

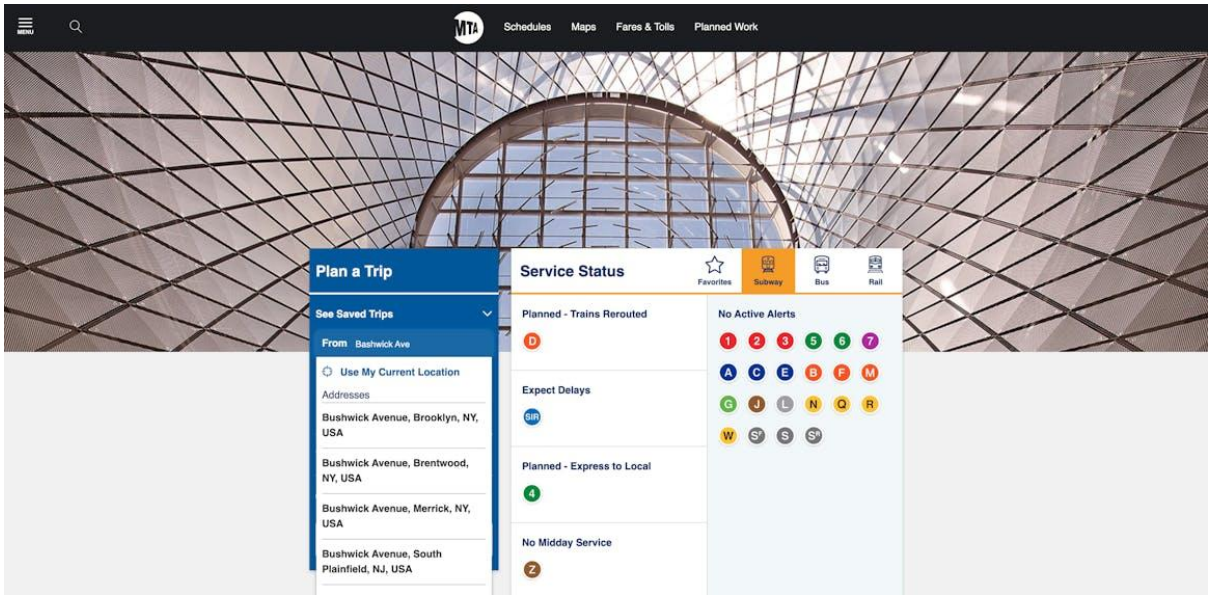
Tools to monitor your repair efforts and assess how well your accessibility features are working.

Some Examples of already existing websites:

1. BBC NEWS WEBSITE:

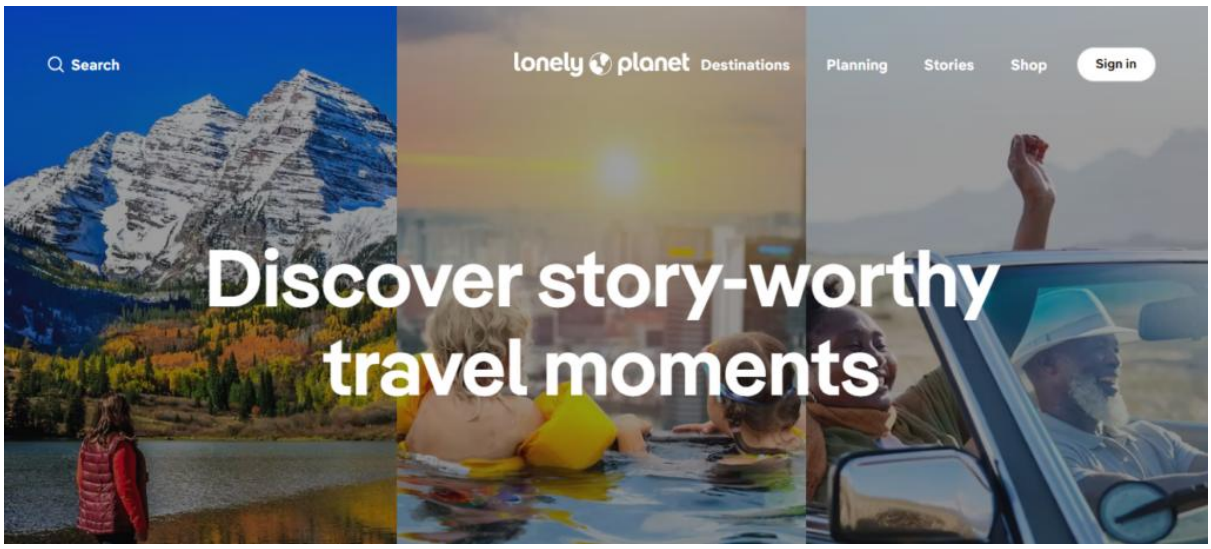
The BBC News website meets WCAG Success Criterion 2.1.1, which permits keyboard operation on all websites. Users with restricted mobility or impaired balance can utilize it because of its obvious focus element and convenient 'Tab' button. Those who utilize on-screen keyboards, sip-and-puff software, or speech input software will find this feature especially helpful.

2. METROPOLITAN TRANSPORTATION AUTHORITY WEBSITE:



New York's Metropolitan Transportation Authority has created a responsive search interface that guarantees users will locate relevant data, even if it is formatted wrongly or has misspelled words. By using this function, users can make sure they can go to their intended location by finding suggested addresses beneath the search box.

3. LONELY PLANET WEBSITE:



Lonely Planet is a website with an accessibility panel that allows users to customize its visual elements and functionality. It features an ADHD-friendly profile, removing distractions and enabling easier focus on key page components. The site's easy navigation is another key feature, making it one of the most accessible.

In the upcoming web development project, I will be including web accessibility in the following ways:

- Incorporating high quality images to improve the website's aesthetic appeal and user experience, as well as incorporating alternate text.

- To guarantee that individuals with visual disabilities can view the entire information, maintain consistency by using a light backdrop colour and large, dark text that may also be bold. Every page of the website will use the same typefaces and colour design.

- The visual hierarchy helps in the arrangement of the design components. For Instance, Headings.

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