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Website Accessibility Principles

Information Communication Technology (ICT) accessibility is about ensuring that our internet websites and systems are easy to see, hear, understand, navigate and interact with, regardless of a user's age, abilities, disabilities, or circumstances. The foundation of the Web Content Accessibility Guidelines 2.0 lies upon four guiding principles or characteristics of accessibility. To summarize, an accessible website is **P**erceivable, **O**perable, **U**nderstandable, and **R**obust (POUR). Implementing the POUR principles places customers, colleagues, and clients, and the centre of what we are creating. Accessibility is more than simply an application of technical requirements; it is very much about the human factor.

The subsequent table provides a high level overview of accessibility requirements through twelve principles and should be read first before referring to more detailed, comprehensive documents on accessibility standards found online.

Accessibility Principle	Requirements	Why this is Important
1. Perceivable non-text information	Text alternatives are provided for all non-text content such as images, charts, and graphs. Labels are associated programmatically with interface objects.	If this principle is not implemented, any user who cannot see well enough to read the text or make out graphics will not be able to perceive the information it contains.

2. Perceivable video and audio information	Captions and transcripts are provided for audio and video content	If this principle is not implemented, users who cannot hear well enough will not be able to understand that information being given. If audio output is used to alert the user to an incident, users who cannot hear the alert will not know the incident has occurred.
3. Perceivable structure and presentation	Content is adaptable and made available to assistive technologies (AT). Users have access to the operating system accessibility tools, without affecting application functionality and any page titles, headings, forms and tables are clearly communicated via AT.	If this principle is not implemented, the structure and information cannot be determined by the AT, and therefore cannot be rendered in other formats as needed by user.
4. Perceivable and distinguishable information.	Sufficient contrast is used to make things easy to see and hear and colour is not relied upon to provide meaning.	If this principle is not implemented, the information conveyed through colour differences may not be seen by users with colour vision deficiencies. For audio screen reading software can find it hard to hear the speech output if there is other audio playing at the same time.
5. Operable functionality via multiple input methods	All content can be accessed without the use of a pointing device or pointing gestures in a logical way, shortcuts are provided to allow users to skip over large amounts of navigation or to complete common tasks, and keyboard focus and text cursors are clearly visible.	If this principle is not implemented, some users will be unable to use functions in the application/website. Users with limited motor control or hand tremors may be unable to control a pointing device accurately enough to target small objects. Some users may have limitations to the point that they can only operate a computer via a single two position switch.

6. Operable timeouts	Sufficient time is allowed to accommodate the slowest users by warning users and allowing them to either adjust, extend or turn off time limits.	If this principle is not adhered to, users with disabilities such as blindness, low vision, dexterity impairments and cognitive limitations, who require more time to read content or to perform functions such as filling out online forms, may be unable to do so. If functions are time-dependent, it will be difficult for some users to perform the required action before a time limit occurs.
7. Operable without causing seizures	The type of animated content used does not cause seizures. All forms of flickering and blinking are avoided	If this principle is not implemented, items that change or move on a page can completely prevent some users from concentrating on the important information. Strobing, blinking, flashing and flickering can cause seizures in sensitive users (e.g. users with photo-sensitive epilepsy)
8. Operable navigation	Help users navigate and find content. Design and navigation is clear and consistent. Users should be able to confidently predict where interface elements can be found. Buttons form controls, touch areas and links are large enough to be selected without the possibility of selecting adjacent controls. Multiple methods of reaching content are provided.	If this principle is not implemented, many users with reduced dexterity in their hands will find it difficult to operate because they either cannot accurately target the small controls or because uncontrolled movements cause their hands to stray off them. For users with cognitive disabilities, inconsistent navigation can be confusing as they have to learn and remember a new navigation for each page or section.
9. Understandable content	Make text readable and understandable by using a clear typeface (non-serif ie: Verdana) on a plain background. Use the simplest language possible for information, instructions, prompts and outputs.	If this principle is not implemented, users who are blind, partially sighted or have colour vision deficiencies may be unable to perceive all of the information that is presented in text and graphics. Users with reading limitations will experience difficulty comprehending and interpreting written language.

10. Understandable and predictable behavior	Make content appear and operate in predictable ways. When content updates dynamically (ie without a page refresh), screen readers may not be aware. These functions can easily be made accessible. Options include ARIA roles and alerts, as well as front-end development frameworks that specifically support accessibility.	If this principle is not implemented, for any object o the screen, users may be unable to identify what it is, what it is for, what state it is currently in and how to operate it.
11. Understandable forms and instructions	Help users avoid and correct mistakes. If certain form fields are required, the field should be labelled accordingly, and configured to alert the screen reader user. After submitting the form, users will need to be alerted to submission errors and be given an easy way to navigate to those errors and correct them.	If this principle is not implemented, users with some limitations will have more difficulty creating error-free inout. In addition, it may be harder for them to detect that they have made an error. Typical error indication methods may not be obvious to them because of a limited field of view, limited colour perception, or use of AT
12. Compatibility with assistive technologies (Robust)	Maximise compatibility with current and future technologies. Descriptions and instructions for all accessibility features are provided.	If this principle is not implemented, the solution will not behave in a predictable way to users of AT. It is important that content follow conventions and be compatible with APIs so that AT can more easily work with new technologies as they evolve.