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Task 1: Web Design Accessibility Research:

Starting with 'What is Web Accessibility?', this ensures that a website has the right tools/digital technologies that are well designed for individuals with disabilities. Therefore, it has a better understanding, navigation and interaction with online content effectively, an example is the World Wide Web Consortium (W3C) which emphasizes on the accessibility of a fundamental, allowing individuals to contribute to the digital world.

Disabilities can have a lot of impact on how people can engage with web, such as **visual impairments** {blindness, low vision or colour blindness, high contrast modes, and adaptable text sizes}. **Hearing impairments** {deafness, require captions or transcripts for audio or video}, **motor disabilities** {limited movement/tremors, highlighting the need for keyboard navigation than mouse. **Cognitive and Neurological** conditions could be ADHD or dyslexia, and **speech disabilities** when it is required an alternative text-based input options for individuals who can't communicate well. Users with mobile devices face challenges with smaller screens and limited outputs, while older people experience a changing in cognitive and physical abilities over time. On the other hand, temporary disabilities {ex: broken arm}, can make that individual challenging to use a mouse, while situational limitations {reading a screen in a bright sunlight} can be demonstrated as a necessity of adaptable design.
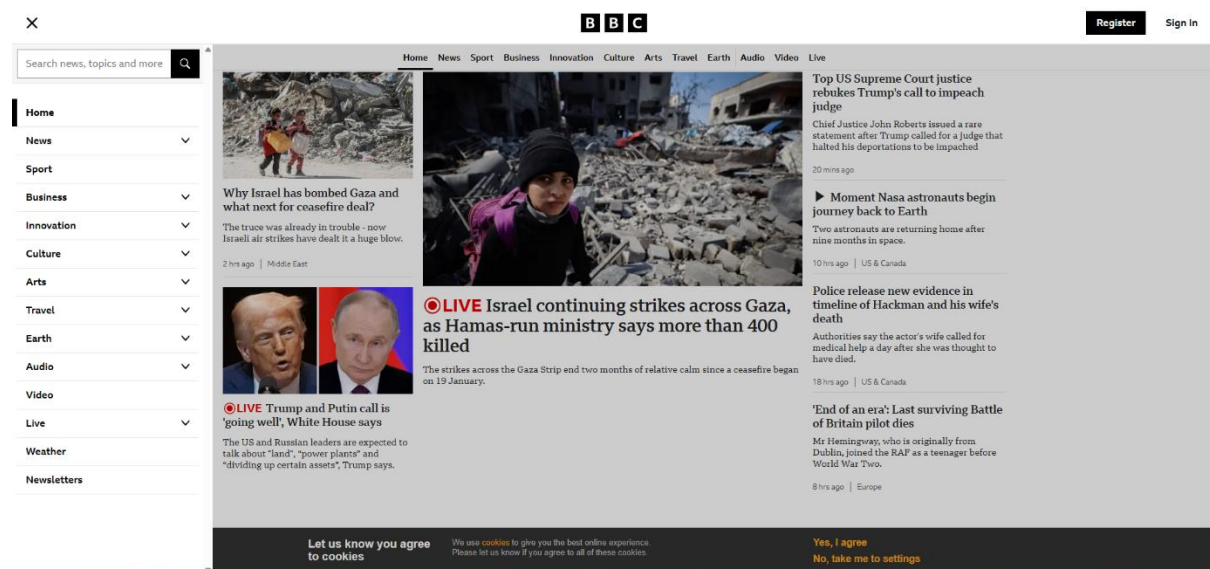
Moving on the Principles of Web Accessibilities: **POUR** in short, these are the Web Content Accessibility guidelines (WCAG 2.1) and stands **for Perceivable, Operable, Understandable and Robust**. **Perceivable** is the content which needs to be available to the users, regardless of sensory limitations, which involves providing multiple ways when accessing information {alternative text for images and font sizes}. **Operable** is when websites allow users to navigate and interact with a keyboard shortcut for those who can't use a mouse for certain reason. **Understandable** when a website/content needs to be clear and readable which includes simple language, error messages and a well-made layout to improve user experience. Finally, **Robust** can be websites that must be compatible with various devices, browsers and well-structed HTML.

Web Accessibilities can be seen in various websites, the top 4 that will be mentioned are: BBC, UK Government (GOV.UK), Apple and Microsoft. The **BBC implements** WCAG 2.1 guidelines through high-contrast visuals, which is also reader-friendly content, and keyboard navigation {high contrast and readability, keyboard navigations, screen reader, alternative texts for images etc}. The **UK Government (GOV.UK)** prioritizes on ensuring a simple, structured layout with a clear navigation and compatible assistive technologies, which aligns with the Public Sector Bodies

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accessibility regulations 2018 {adhere a level AA to WCAG 2.1 compliance guidelines, user-centric design for a simple layout, keyboard accessibility, scalable text and responsive design is when to adjust text/designs and accessible forms with a clear label and instructions}. *Apple* is another platform where it offers a Voice Over adapter font size and high contrasting settings {ARIA landmarks and Semantic HTML – clear navigation screen reader, alternative text for images, high contrast and dynamic text for contrast settings and text sizes and screen reader compatibility}. **Microsoft** provides an extensive accessibility options such as a text-to-speech feature, MSAA – Microsoft active accessibility which is a COM-based application programming interface (API) designed for improving accessibility to windows. This allows for technologies to interact more with standard and custom user interface elements {MSAA represents} and expose properties and methods to UI elements.
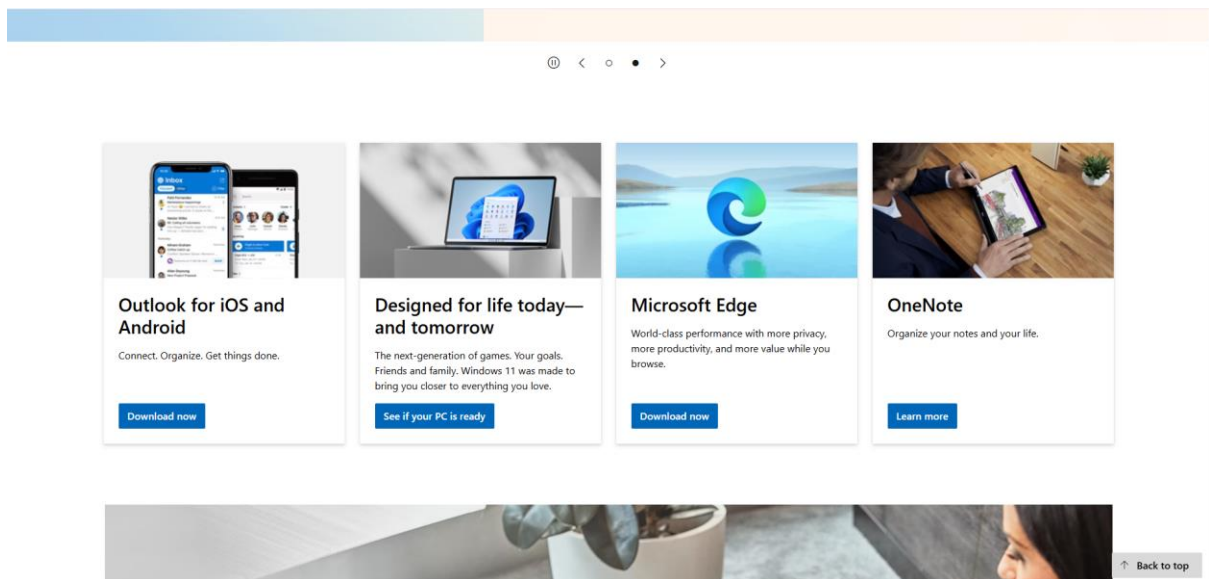

https://www.bbc.co.uk/accessibility/forproducts/guides/mobile/principles/

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https://www.gov.uk/

https://www.apple.com/mt/

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

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For a better understanding to every individual who needs to access my future website, it is better to include the basics, such as: Keyboard navigation, screen reader compatibility, alternative text for images, contrast and colour accessibility, adjustable font size, accessible forms, captions and transcripts, ARIA, Responsive design and avoid audio auto-playing media. These will help everyone who wants to access this website/platform and to a better user experience.

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