Accessibility in Web Design: Designing for Users with Disabilities

Outline

أكاديمية البرمجة
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Accessibility in Web Design: What is it?

Persons with disabilities in Jordan constitute 11% of the total population, as the number of persons with disabilities has reached 1,200,000.

Overview

- **Accessibility in web design: refers to the practice of designing websites and digital content in a way that makes it accessible to people with disabilities.**

- **This means ensuring that website content is designed in a way that is easily readable, perceivable, operable, and understandable by people with a wide range of abilities.**
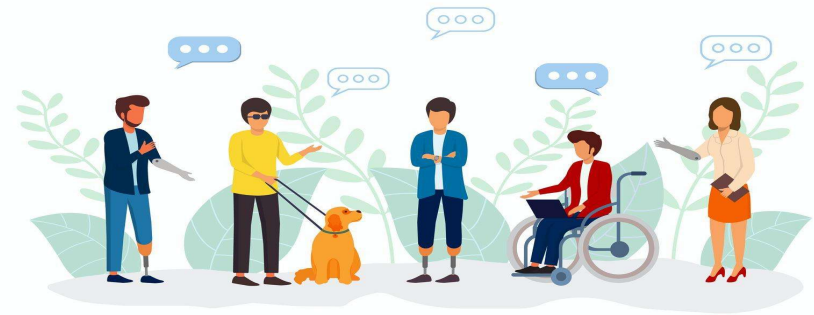
Importance

- **Web accessibility is crucial for people with disabilities who use the internet as a means of accessing information, goods, and services.**

- **According to the World Health Organization, over 1 billion people live with some form of disability, and this number is expected to rise in the coming years.**

- **This means that creating accessible web content is not only important for people with disabilities, but it is also a legal requirement in many countries.**

Types of Disabilities

- There are many different types of disabilities that can affect a person's ability to access and use the internet.

- Some common types of disabilities include:

1. Visual impairments: can include partial or total blindness, color blindness, and low vision.

2. Hearing impairments: can include partial or total deafness.

3. Cognitive impairments: can include difficulty with memory, concentration, and reading comprehension.

4. Motor impairments: can include limited mobility, dexterity, and coordination.

Guidelines for Accessibility

- Designers and developers can achieve this by following accessibility guidelines and best practices, such as those set out in the Web Content Accessibility Guidelines (WCAG).

- The Web Content Accessibility Guidelines (WCAG), which outlines four principles of accessibility:

1. perceivable,
2. operable,
3. understandable,
4. and robust.

- This means that web content should be designed in a way that is easily perceivable by people with different abilities, operable with a range of input devices, understandable with clear and concise language, and robust enough to work with different technologies and assistive devices.

Designing for Accessibility
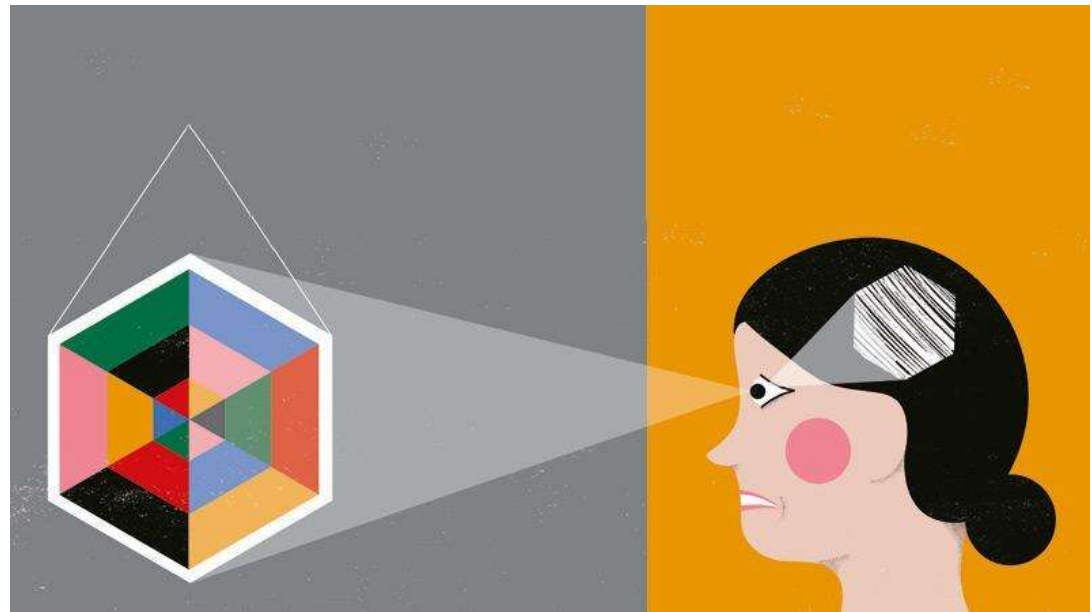
1. **Creating accessible content**

means designing web content that can be accessed and understood by people with a wide range of abilities. To achieve this, designers and developers can follow accessibility guidelines, such as the Web Content Accessibility Guidelines (WCAG).

2. **Choosing accessible color schemes and fonts:**

can greatly enhance the readability and usability of web content for people with visual impairments or other disabilities.

Designing for Accessibility

– Some tips for choosing accessible color schemes include using high-contrast color combinations, avoiding using color alone to convey important information, and ensuring that text is readable against any background color.

– Additionally, designers should choose fonts that are easy to read and available in a range of sizes, such as sans-serif fonts like Arial or Verdana.

Designing for Accessibility

3. **Adding alt text and captions for multimedia content:**

– Adding alternative text (alt text) and captions to multimedia content, such as images and videos, is important for people with visual or hearing impairments.

– Alt text should provide a brief description of the image or video content, while captions should provide a transcript of any spoken content. This allows users with disabilities to access and understand the content without relying on visual or audio cues.

– Additionally, designers can provide audio descriptions for videos, which provide a description of the visual content for users who are blind or visually impaired.

– Also, ensuring that navigation is accessible for people who use keyboard-only input, and providing captions and transcripts for multimedia content
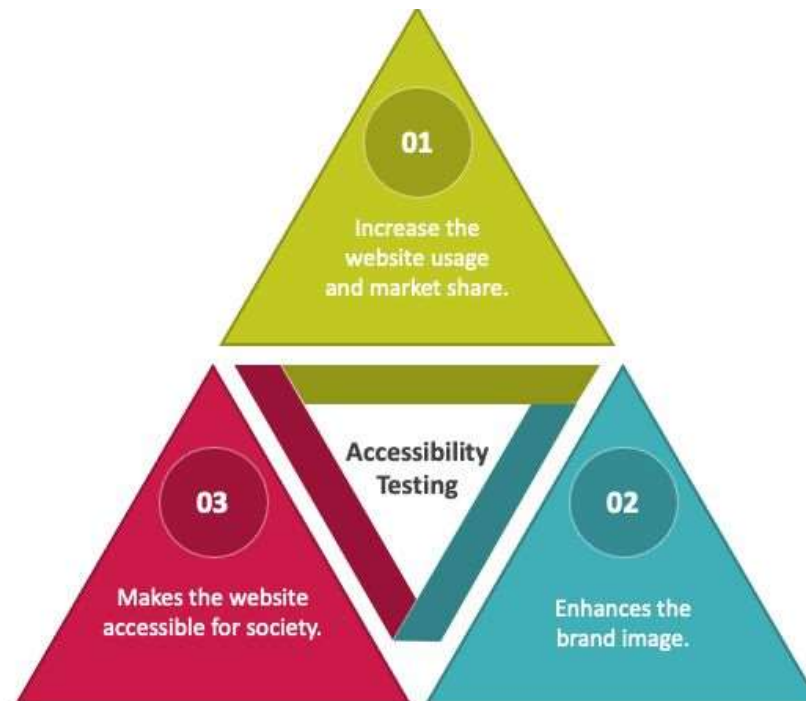
Tips for Improving Accessibility on Your Own Website

- To improve accessibility on your own website, there are several tips and best practices that you can follow, Some of these include:

- using descriptive and meaningful link text, ensuring that all images have alt text descriptions, providing transcripts and captions for multimedia content, using clear and concise language, and ensuring that your website can be navigated using only a keyboard.

- Additionally, you can use accessibility tools and plugins to test your website's accessibility and identify any areas that need improvement.

Accessibility Testing

Web Accessibility Testing

ACCESSIBILITY TESTING
Web Accessibility Testing

Speech Recognition

WCAG 2.1
Design Principles

Colour Blinding
Simulators

Keyboard Only Access

Screen Readers

Zoom Text

Colour Contrast

Automation Testing

Web Accessibility Testing

Accessibility Testing Tools

- There are several tools available for testing the accessibility of web content.

- These include automated testing tools, which can identify potential accessibility issues, and manual testing, which involves testing web content with assistive technologies or with people with disabilities.

- Some popular automated testing tools include WebAIM's WAVE tool, the Access Monitor browser extension, and the Axe browser extension.

- For manual testing, designers can work with people with disabilities to test the accessibility of their content and identify any issues.

Accessibility Testing Tools

01 Automated Accessibility Testing Tool (AATT)
02 Web Accessibility
03 Apple's Accessibility API
04 Google's Accessibility Test Framework for Android (GATF)
05 Color Contrast Analyzer
06 DOM Inspector
07 Checker
08 Pa11y
09 Dyno mapper
10 Tenon

Examples of Accessible Websites

- Some examples of accessible websites include the BBC, which provides captions and transcripts for all video content, and the A11y Project, which provides resources and tools for designers and developers to create accessible web content. Other examples include the National Federation of the Blind, which provides accessible web content for people who are blind or visually impaired, and the Inclusive Design Group, which provides resources and tools for creating inclusive web content.

Conclusion

- **Recap of the Importance of Accessibility in Web Design**

Accessibility is a critical consideration for web designers and developers, as it ensures that web content is accessible to people with disabilities. By creating accessible web content, designers and developers can help ensure that everyone can access and use their content, regardless of their abilities.

- **Call to Action to Prioritize Accessibility in Your Own Design Work**

As a designer or developer, it's important to prioritize accessibility in your own design work. This can involve following accessibility guidelines and best practices, testing the accessibility of your content, and continuously improving the accessibility of your web content over time. By prioritizing accessibility in your own design work, you can help create a more inclusive web for everyone.

Thanks for listening

Any questions!

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