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Improving Cognitive Web Accessibility: Can cognitive accessibility become a part of Universal Design?

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Abstract

The web has drastically changed the world in the last two decades. The internet has opened many doors for people with disabilities. United Nations have argued that equal access to the internet is a basic human right. However, the internet even when it is present remains inaccessible to many. Many people with cognitive disabilities lack the social skills, mental and physical ability to explore the world in 'regular' ways. With the help of the internet, they can interact and communicate with the world sitting behind a screen. Unfortunately, web accessibility has been lacking guidelines that specifically cater to cognitive needs. The applications of universal design are being adapted in various fields to make designs more inclusive, but can similar design principles help cognitive web accessibility too? The research paper discusses the shift in perspective for disabilities, the origins and importance of universal design and how its principles can be helpful for people with cognitive limitations.

This study attempts to answer the research question by a qualitative approach. It explores and analyzes existing research on cognitive disabilities, universal design and web accessibility. It suggests some improvements in the existing web accessibility principles and guidelines that can possibly make cognitive accessibility follow universal principles. It employs a case study to test with practical examples the proposed guidelines and new principles and comment on existing cognitive accessibility standards.