Web Accessibility to E-Commerce for Blind Users

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Abstract: This paper addresses the challenges faced by individuals with visual impairments when shopping online and proposes a solution to make e-commerce platforms more accessible for them. In India, most non-governmental websites are not accessible to visually impaired individuals, which limits their autonomy and requires them to seek assistance from others. To address this issue, we propose an e-commerce application that utilizes speech recognition technology to search for products. The proposed system architecture includes the use of the Web Speech API for speech recognition and a web interface that provides audio instructions for navigation. This approach offers visually impaired individuals a more convenient and flexible way to access e-commerce platforms, thereby promoting their independence and inclusivity in society. The proposed system aims to make e-commerce accessible to all individuals, regardless of their capabilities, social status, or purchasing power.

Keywords: Visually impaired, Voice recognition, Web Speech API, Accessibility

REFERENCES

[10]. Development of an E-commerce Website Accessible to Blind and Visually Impaired People” by J. de Barros and R. Almeida: https://link.springer.com/chapter/10.1007/978-3-319-20681-3
[12]. Liu, Guanhong & Ding, Xianghua & Yu, Chun & Gao, Lan & Chi, Xingyu & Shi, Yuanchun. (2019). "I Bought This for Me to Look More Ordinary": A Study of Blind People Doing On