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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 ecommerce 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 ecommerce 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 ecommerce platforms, thereby promoting their independence and inclusivity in society. The proposed system aims to make ecommerce accessible to all individuals, regardless of their capabilities, social status, or purchasing power.

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

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