An Audible Search Engine for Visually Impaired Users: A Prototype Developed using Assistive Technology

Abstract

The objective of the research work was to create an Audible Search Engine for Visually Impaired Users, in order to improve their accessibility to find their desired results. In order to fulfill the desired objective, the preliminary study was performed, based on the observation conducted with the blinds that used assistive technology to navigate the Web. For better Speech Recognition, Web Crawler and Speech Synthesizer technologies have been adopted. The designed system detects user's speech and then converts speech into text. Moreover, Web Crawler makes relevant links and titles available in a short span. Hence, the Speech Synthesizer read, enable the results converted into an audio format which are understandable by visually impaired users. The research work focuses on easier, efficient and less frustrating access for sightless individuals.


Index Terms

Computer Science

Applied Sciences
Keywords

Visually Impaired; Assistive technology; Speech Recognition; Web Crawler; Speech Synthesizer, Audible Search Engine