Voice-Based Virtual Assistant for Blind People in Email

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Abstract: *The world is undoubtedly beautiful, and advancements in technology have greatly enhanced the lives of people around the globe. However, it is essential to take into account the unique challenges faced by individuals with visual impairments, particularly the blind. These individuals encounter daily obstacles that hinder their ability to perform certain activities, such as reading emails independently. For someone who is blind or visually impaired, the inability to access and comprehend email content can be a significant barrier in both personal and professional contexts. In an increasingly digital world, where email communication is pervasive, it is crucial to develop solutions that cater to the needs of blind individuals.*

By addressing the specific challenges faced by blind people and those with visual impairments, we can empower them to navigate the digital realm with greater independence and efficiency. Developing a voice-based virtual assistant specifically designed for blind individuals offers a promising solution. This virtual assistant leverages voice recognition and synthesis technologies to enable blind users to interact with their email accounts using spoken commands. By converting email text into speech and vice versa, the virtual assistant allows blind individuals to listen to their emails and compose responses using their voices.

This research paper aims to explore the design and development of a voice-based virtual assistant for blind people in email communication. The paper will include an introduction to the problem statement, a comprehensive literature survey to examine existing technologies and approaches, a detailed description of the system design and architecture, and an evaluation of the proposed solution's effectiveness and usability.

Keywords: Email

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