Abstract

With the increasing number of mobile phone users, mobile phones have become important means of communication and information sharing. Mobile phone users consist of sighted users and visually impaired users. Touchscreen mobile phones are inaccessible for visually impaired users due to the absence of any physical keys and insufficient accessibility features. An effective assistive technique for interacting with mobile phones may solve inaccessibility problem. This study describes various assistive applications currently available for different functionalities in mobile phones. These assistive applications provided accessibility for detecting surrounding and helping with direction. The study helps in understanding various techniques used. These techniques include Speech to Text converter, Text to Speech converter and various image recognition algorithms. The study and comparison of all these currently available applications and techniques is very important for proposing new application.

References


Index Terms

Computer Science

Information Systems

Keywords

Mobile Phone, Visually Impaired, Touchscreen Mobile Phone, Assistive Technology.