National University of Science and Technology

Think in Other Terms

FACULTY OF APPLIED SCIENCES

DEPARTMENT OF COMPUTER SCIENCE

Chat Application for the Blind and or the Mute

By

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Abstract

Many of the new technologies designed to help worldwide communication exemplified by telephones, fax machines, computers have created new problems especially among the mute and the blind. A person, who has severe hearing impairments, particularly to the extent in which deafness occurs, may experience difficulties communicating over a telephone as he or she is unable to hear the recipient's responses. Conversely, someone with visual impairments would have little inconvenience using a telephone but may not be able to communicate through a computer because of the difficulties (or, in the case of blindness, impossibility) in reading the screen. The communication between the blind and the mute is rather difficult if there is no third party included without the two disabilities. Therefore the goal of this project is to incorporate current instant messaging, speech recognition (speech-to-text) and speech synthesis (text-to-speech) technology into a chat room, thus providing a solution to communication between the mute and the blind that is free and does not require any additional equipment besides an android mobile device.