

ABSTRACT

PROJECT NAME: OPTICAL CHARACTER RECOGNITION

LANGUAGES: ANDROID AND PHP

DATABASE: SQLITE

Mobile Based Optical Character Recognition and Text-to-Speech System. In the modern era when computers play a vital role in people's day today activities, visually impaired people face numerous problems when accessing printed text using existing technologies. This will rise to the need for the improvement of devices that could bring relief to this tasks that the blind people have to go beginning to end. Due to digitization of books there are many excellent attempts at building a vigorous document analysis system in industries and research labs, but this is only for those who are able to visible aided. "OCR" is an android based mobile application contains OCR and TTS for Sinhala, Tamil and English languages as single product by resolving problems in existing systems. In order to make the proposed system, user needs to acquire printed document as optical image using a camera of the mobile phone. The image skew will reduce the OCR accuracy drastically due to the angle view of the document. Therefore after doing the image skew detection optical image is passing to the OCR engine to convert the image to character streams representing letters of recognized words. Finally, the converted text output is access by TTS system to convert the textual content into a voice output. Additionally, it consists audio assist system to navigate through the pages in the diligence for differently abled users. This is easier, portable and faster solution comparing to the existing systems which are made for visually impaired.

This project has 2 modules,

- Admin
- User