

Typlotic Specification Using Mobile Application

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ABSTRACT: This application proposes an android application, designed specifically for visually the printed information. Reading aids with the capabilities of smart phone are impaired people. This application provides a voice based book read and book search Here, the users have to use certain book names which will perform certain actions for e.g. Read, select Book etc. The Voice system can be used by a blind person to access application easily and efficiently. The visual impaired people have difficulties in reading less weight, cost effective and user friendly techniques. In the reading aid with phone the text is converted to audio file. In the reading aid with android application, the screen of android phone have button to click to touch the content which would be read to the blind. The main aim of the project is to provide user friendly mobile based application for blind people. Whenever the make a single tap in the mobile, it will be read aloud..

Keywords: help visually impaired people; audio; voice;

1 Introduction

The visual impaired people have difficulties in reading the printed information. Reading aids with the capabilities of smart phone and microcontroller are less weight, cost effective and user friendly techniques. In the reading aid with microcontroller, on the bridge of the glasses a raspberry pi camera module is attached to capture images. The captured image is stored in RPi memory later send to the AABBY cloud for OCR. The received text applied to TTS to convert the text to audio file. The audio output through the ear phone connected to AV port in raspberry pi module. In the reading aid with android application, the screen of android phone have button to capture the image and automatically upload the image to AABBY OCR cloud. The output text from the cloud is applied to TTS engine in the android phone. It converts the text to audio. These two techniques are user friendly method. Approximately 285 million people around the globe suffer from some sort of visual disability, with 39 million being

completely blind. According to the World Health Organization (WHO) [1], 1.4 million blind individuals are minors under the age of 15, and 90% of people with impairments live in low and middle income countries. Therefore, visual impairment and finding feasible solutions to reduce the burden of it is a timely issue that requires the attention of researchers in industry as well as in academia.

Furthermore, Today's technological advances provide an ideal and necessary base for finding optimal and cost effective solutions to this frustrating problem. However, despite of the entrenched research efforts in this area, the world of print information such as newspapers, books, sign boards, and menus remain mostly out of reach to visually impaired individuals. Hence, in an effort to seek an answer to this persistent problem, an assistive technology based solution, referred to in this paper as *Read2Me*, is developed and tested in the work presented here. The project aims to implement a reading aid that is small in size,

lightweight, efficient in using computational resources cost effective and of course user friendly.

PROPOSED SYSTEM:

This is an innovative System for visually impaired people .This project is an blind book reading application for blind peoples. This system is used to help the visually impaired to have access the application and the features of the phone enhancing the quality of the system making use of different custom layouts and using speech to text.. All actions performed by the user the system speaks out and helps the user.. The System helps the user to also read the contents of the book .The system also allows the user to make voice .The System speaks out the application contents.If the visually impaired people to access the whole application through voice commands.

ADVANTAGES OF PROPOSED SYSTEM:

- The System is only used for visually impaired, hence there is no Credentials to make it very easy and reliable.
- The System speaks out everything and anything the user wants to listen from the application
- In this application each and every data should be retrieved dynamically.
- This application access through the internet.

MODULE DESCRIPTION:

Server registration:

Register a server for uploading a content. Stored in database. Upload more files when needed. Storing books using mysql. It contain book,chapter and content table.

Displaying books:

Display books whatever user likes to read. Every new books can be gathered by the admin. Display books in order. Choose the chapter in the table.It will display the corresponding chapter content..

Conversion of text:

Speech code:

```
String chaptered;  
Private LinearLayout speakchapter;  
String chapterlist;
```

Text to Speech Code:

```
TextToSpeech t1;  
Static TextTOSpeech t1;  
Private SpeechRecognizer speech=null;  
Private Intent recognizerIntent;  
Private String LOG_TAG= "Chapter";  
String hint= "please select your chapter";
```

Recognition of voice:

Authenticate the user by using ASV.Speech Activity Detection to recover noise

CONCLUTION:

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

1. Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively. When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.

2.Select methods for presenting information.

3.Create document, report, or other formats that contain information produced by the system.

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