

Smartphone based Student Mark Report Processing System with Voice Narration

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Abstract: The smartphone Based student Result processing system with Voice Narration Application is a complete multi-user Application the Scorer accepts and then processes the scores of students and subsequently produces their reports in Android application. An individual mark report of each student can be viewed by students and their parents in Mobile application. It displays and knew the list of marks that are open, closed, in progress. Each time registered admin site he can make use of the username and the password that is allocated to admin. Student performance of subject including internal and external marks must be expressed. Student performance can be viewed by their parents and also voice narration feature is also available in the project. This is the balance power between the manpower availability and the magnitude of the examination work result in the declaration of results. This project will be implemented in our Android smartphones.

Index Terms- *Text Analysis and Detection, Text Normalization and Linearization, Acoustic Processing and Voice Narration*

1. INTRODUCTION

The student mark report process is used to carrying the mark for all the students. The individual student mark report, as well as the personal details, is stored in the Mobile application. This system is used to parents know their son/daughter result in our home. They need not attend the Institution for knowing their son/Daughter mark report. This study was carried out to verify all the manual process involved in generating Students Mark Result and to seek a way of automating the system for effective operations. Computer and its application have become vital tools in the economic, industrial and social development of advanced countries of the world.

The whole work is performed on the android application and entry mark list and voice conversion libraries provided by the android environment This system is designed to efficiently handle processes like inputting the personal details of the students (Name, Father's name, Phone no, as well as the each subject marks including internal marks and external marks). These inputting processes are updating by Admin. The pass percentage of mark is 50 percentages in every subject. If any changes in these reports the update option is available. Updating results are stored in the database. Each parent has individual ID and Name for opening the mark report provided by Admin. Entering into the login page the internal and external marks are in the Mobile application. It will contain the first to current Internal and external marks. The parents also view all the internal mark in each semester as well as each external mark as well as know their son/daughter is pass/fail in each subject. The usual manual process now reached a level where it is difficult for the available manual power to deal with the magnitude of examination work, in the given time spans. And the voice narration features are available in this application. Viewing the marks in the application and the voice feature are available on the corresponding page. Clicking voice button the marks are converting into speech by using the voice narration application. This application contains every internal and external mark. In the existing system, the student marks are

storing in the record book. It is the manual process to complete the particular task to take more time. Voice narration is the time-consuming process of entering the mark report. And consuming manpower and energy. Now a day, everyone in this world is computerized and digitalized. This is the balance between the manpower availability and the magnitude of the examination work in the declaration of results. The most effective measure, with can improve the efficiency of the Mark Report system, and consuming the power of the man, therefore the introduction of computerization especially with the use of Mark Report Result Processing Android Application in various activities related to the conduct of result reduces the pair required for the declaration of results by 60 percent and reduces the process by almost 50 percent.

2. RELATED WORKS:

Er. Shelly Padda, [1] Architecture and Implementation of Punjabi Text to Speech System Using Transcriptions Concept. This paper represents the conversion of text to speech using speech conversion system enables the user to enter text in Punjabi and as output it gets sound. The paper presents the steps followed for converting text to voice for Punjabi (Gurmukhi) language and the algorithm used for it. The focus of this paper is based on the tokenization process and the orthographic representation of the text that shows the mapping of a letter to sound using the description of language's phonetics and metrology.

D.Sasirekha, E.Chandra, [2] Text to Speech. It projects the conversion of a large enterprise that shows an impressive improvement in the last couple of decades. It literatures on Text to Speech (TTS), with discussing the efforts of taken It describe specific tasks concentrated during Text to Speech (TTS) conversion namely, Preprocessing & text detection, Linearization, Text normalization, prosodic phrasing, OCR, Acoustic processing, and Intonation. This system will be highly useful for an illiterate and vision impaired people to hear and

understand the content, where they face many problems in their daily life due to the differences in their script system.

Joshua Gopinath¹, Aravind, Pooja Chandran³, Saranya, [3] Text to Speech Conversion System using OCR. This paper mainly focused on disability of visually text reading. The main idea of this project is to recognize the text and characters are converting it into a speech signal. The text contained in the page is first pre-processed. The pre-processing module is converted into the text for recognition. Then the text is segmented and followed by extraction of letters and resizing into the text file. These processes are converted into speech.

Gargi Rajadhyaksha¹, Siddharth Mody², Sneha Venkateswar [4] Portable text to speech converter. In this project, Speech synthesis is the production of human speech. It can be implemented in software or hardware products. A text-to-speech (TTS) system used for normal language text and letters converted into speech. An intelligible text-to-speech program allows visual impairments peoples to listen to written works on a home computer. Our system aims to make a simple conversion from text to speech initially.

Miss. Priya A. Kawada [5], Student Attendance Tracker System in Android. Student Information Tracking System is an Android application to manage student attendance on the mobile application. In colleges staff use to take attendance manually. The main objective of this project is to add mobility and automation in the existing attendance processing technique. This The system allows teachers to take attendance, edit attendance, view students attendance, send important documents in pdf format such as exam time table, question bank etc. and also helps teachers to inform students about the events that college is going to organize.

Maria-Pilar Perea,[6] the Application of Speech Synthesis and Speech Recognition Techniques. Speech analysis techniques open new perspectives in the processing of dialectal oral data processing technique. Speech synthesis can be useful to create or recreate voices of speakers for extinct languages or text, to re-edit dialectal material using new technologies or to reconstruct utterances of informants that only were registered in notebooks. Speech recognition, applied to sound Dialectal sequences, can make the easier automatic transcription of oral texts. In this paper, the possibilities of speech analysis techniques in their application to the dialectal studies are described. The presentation is illustrated with the results obtained in different projects.

Ph.D. Thesis [7] Voice Conversion applied to Text-to-Speech systems. The goal of this thesis is to develop a VC system to work as a post-processing block for a TTS for converting voice. VC systems applied to a TTS mainly focused two particular characteristics: source data is unlimited, as voice can be generated by the TTS, and the phonetic information is available in this technique.

Both characteristics will be explored in order to improve the performance of the system of the art VC state. Speaker voice individuality is the result of many acoustic and linguistic cues and generates the corresponding voice. In the current work, speaker individuality will be described only by segmental

acoustic characteristics and divide the corresponding segment. In particular, vocal tract parameters and LP residual signal, as speech model parameters, will be converted into two different strategies. Conversion of prosodic features is out of the scope of the thesis.

Devika Sharma, Manju Kanwar[8] Text to Speech Conversion with Language Translator under Android application. The fast development of the android application is the attraction of a number of users toward the android devices. Text to speech conversion with language translator is one of major processing for translating language application. The work is defined in various main aspects. The first aspect is to convert the English text to English speech. Second work is the regional language to speech conversion. Third work is to translate the text from one national language to another while maintaining the original data format. The another significant aspect is the integration of the presented system on the android environment. The android platform used in various mobile devices so this application can be attached to a mobile phone/ tablets or the system so that reliable communication will be performed between two parties. In this work the input text is the spot to the individual words and classification of the work is done. After that identify the phonetic equivalent of the individual words and connect it with the lookup library to identify the voice representation of that specific word. Moreover, the text from one regional language is translated to another regional language text with voice representation.

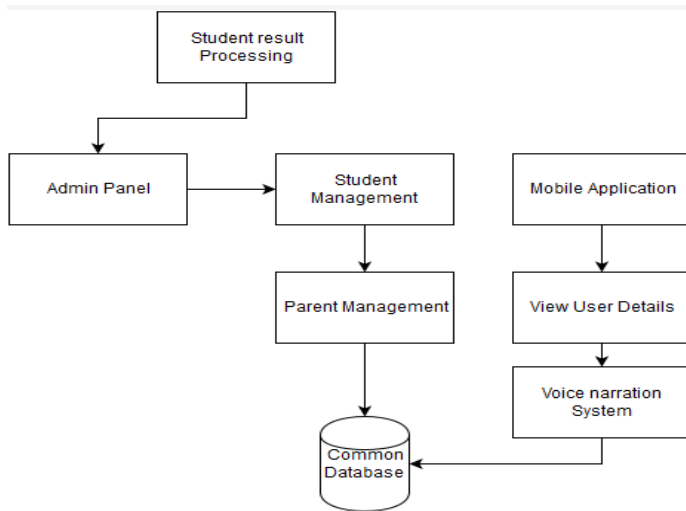
A student can use a student's Mark Result as a means of monitoring their class attendance and grades and to make sure the information is accurate. When a student is applying to another college or university, the enrolling institution will require for an official students examination Result so that credits can obtain by the enrolling institution. An enrolling institution conducts a student's Mark result evaluation to place a student at his or her appropriate academic levels.

- 1.It is manual process takes user timing.
- 2.It does not contain Voice narration.
- 3.Manual work.
- 4.Take More Time.
- 5.Slow process.
- 6.Search the item very difficult.
7. Occurs some Error Missing the data.

3.PROPOSED SYSTEM:

The mark report using voice narration is the User friendly interface. And storing the student details and retrieving the data from the database is fast access so it is fast access to the database. Admin will enter the marks into this application so minimizing the error.

4.BLOCK DIAGRAM AND ITS MODULE



4.1 ADMIN PANEL

In Admin Login panel, admin (user) can log in to their account with type Username and Password are shown in Figure 1. The admin control panel has the full permission to access all the content related to that user and modifies it. The admin user can log in to the Application then enter the overall details about the students and update their Marks. This student personal information (like Father's name, Phone no, Email id) and related content information are stored in the common database can access and by the admin. And parents can log in to their account with type student name and their ID. Then view their son/daughter Report Details.

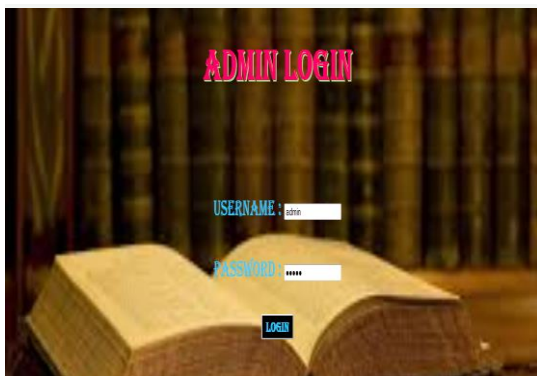


Figure 1: Admin Login

4.2 STUDENT'S DETAIL ENTRY

In student's Entry module the admin can insert the student name and their personal details about the students are shown in Figure 2 and the data are stored in student database are shown in Figure 3.

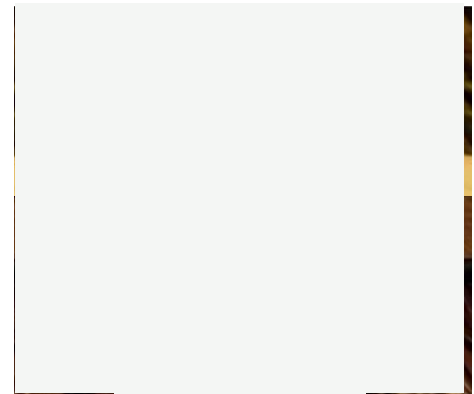


Figure 2: Student Entry

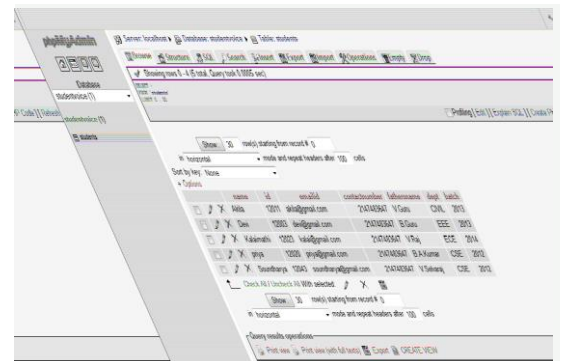


Figure 3: Database

4.3 MARK'S ENTRY

Admin can enter the student Mark details from his admin panel. Student mark details are entered with respect to the internal, External and academic information are shown in figure 4. Personal information is stored on the common database for accessing the value by students and admin. After inserting marks information then it will be retrieved by the Parents. Parents can view the academic information of the students by Accessing database with the Android application.



Figure 5: Update Marks

4.4 PARENT'S APPLICATION

Parents application is the smartphone-based application. Parents login ID is provided by the admin. The parents enter their Son/Daughter Name and Corresponding student's ID and enter into the page are shown in figure 6. After login to the application, parents can view the information about their son or daughter. The student information is retrieved from the common database and retrieves the internal and external information. Also, we provide the voice narration process for corresponding information and produce as speak voice narration.

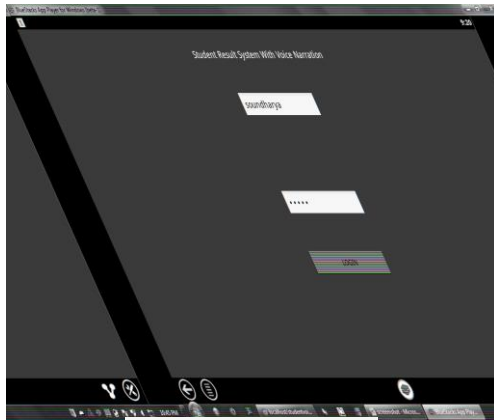


Figure 6: Parents Login

4.5 VOICE NARRATION

Voice narration is the process of producing text information as voice. Here we use voice narration process for speaking students mark details. Parents can listen to their student information by pressing voice Narration button. The speaking function can be enabled by default android voice narration. Android allows you convert your text into voice are shown in figure 7. Not only you can convert it but it also allows you to speak text in a variety of "Portable text to speech converter" different languages. Android provides Text To Speech class for this purpose.



Figure 7: Voice Message

4.6 SPEECH SYNTHESIS

Speech synthesis is the computer-generated simulation of speech. It is used to translate written information into voice information where it is more convenient, especially for mobile applications such as voice-enabled e-mail and unified messaging. For example, the contents of a display screen can be automatically read loudly to a blind user.

4.7 TEXT NORMALIZATION

Text normalization is useful for comparing two sequences of characters which represented differently but mean the same. "Don T" vs. "Do not", "I m" vs. "I am", "Can't" vs. "cannot". It normalizes the differences between the words in the particular sentences.

4.8 ACOUSTIC PROCESSING

Acoustic Encoding is the process of remembering and comprehension of words. Repetition of words or putting information into a speech that uses acoustic encoding. Learning the multiplication table, and for instance, can be an acoustic process. It is the mechanism for reading the word and producing the corresponding sounds. And it also produces the voice for corresponding numbers, for example, mark 34, Thirty-four- the voice will be generated.

5.CONCLUSION

This Application provides a computerized version of Mark Report Analysis system which will benefit the Parents as well as the staffs. Because the parents not necessary to attend parents meeting for knowing their son/daughter academic levels. It makes entire process online where Student can search Exams; staff can generate reports. It also has a facility for student login where a student can log in and can see the status of Exam Result.

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