

E-LEARNING TOOL FOR BLIND (ELTB)

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ABSTRACT

As there is a high demand in acquiring a well scoped E-learning tool for blind, a standardized as well as computerized system is preferred. This document describes the development of a standalone "E-learning tool for blind" (ELTB). This will be helpful for the students who are blind. Though it can be used by all the educational institution, my target is to implement this system at " Nuffield School for Deaf and Blind in Kaithady, Jaffna" as a trial. Therefore it focuses the need of blind school in such an E-learning tool. The system can be expanded for better performances in coming years with the help of the feedback I get while the system is being used. The document will further analyze the present situation and the changes that will be encountered when the system is installed and will also deal with the impact of this system on the targeted groups of users and the processes followed.

The entire system is created using the Microsoft.Net and Sql server technologies. The tool is done using the Visual studio 2010 with C# language. This application will be developed using C#. This system is a standalone application so I created that system using latest technology called WPF. The text formats (Exam Questions, Subject Notes, Tutorials) which were used by the application stored using XML format. In database I used stored procedures for the better performance of the system.

This E-learning tool contains five major components. Those are Subject Notes, Tutorials, Exams, Events and Reports. There I had three privilege levels those are super admin, admin and user. Super admin can be a principal of the school and admin can be a teacher.

Here we used Google API called Google TTS for the conversion of text into speech. This needs high speed internet to connect with the API and to translate the text into speech. For the Speech to Text mechanism I created grammar file and got some help from the Microsoft Speech to Text API. For the creation of reports we used crystal reports. Those reports are very helpful for the teachers to filter the marks of the students and get to know the performance of them very easily.