

E1 221

An intelligent medical information system for the general public and the experts

The use of Information Technology for the purpose of educating the general public in context of health is very limited in Sri Lanka, especially in the rural areas. This can easily be achieved by using modern Information Technology together with the Internet.

This project addresses the above problem by developing a Medical Information System which can be used by the General Public and can be updated by the Medical Experts. The system will be developed as a web server making it possible for the Experts to update information over the Internet from any part of the world. Since not that many people, especially in rural areas in Sri Lanka have access to computers and the Internet, the system allows them to get connected to the system using any telephone connection, be it land or mobile. They can simply dial in to the system and are vocally guided to select any of the diseases that are available, which they need information on. They are provided with information on current diseases, contact information on. They are provided with information on current diseases, contact information of specialists and contact information of medical institutions according to their requirements.

The expert system consists of modules such as the DTMF converter, Text-to voice converter, Heuristic module, Control module and an Authentication module. The telephone interface has been implemented using Visual Basic version 6 together with TAPI version 4 and using a TAPI supported voice modem that provides hardware support to obtain the DTMF tones. The vocal menus and the text to voice converter used have been implemented using Microsoft SAPI version 4. The Web interface was developed using Active Server Pages (ASP) for server side scripting. The system has been tested incrementally including evaluations from medical personnel and is ready for actual use.