

ABSTRACT

NAME OF INSTITUTION : De La Salle University - Dasmariñas

ADDRESS : Dasmariñas, Cavite

TITLE : Expert System : "Dr. Computer" Computerized Diagnosis
of Common Health Problems

AUTHORS/PROPOSERS : Gemma O. Berwan and Rochelle B. de Leon,
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FUNDING SOURCE : Personal Fund **COST :** ₱5,000.00

DATE STARTED : 20 Dec. 1997 **DATE COMPLETED :** 28 Feb. 1998

OBJECTIVES OF THE STUDY :

A. GENERAL : To develop an Expert System that will be used to diagnose common health problems and provide treatments in the absence of a real life doctor.

B. SPECIFIC :

Specifically, the objectives of the study were :

1. To develop an Expert System using Visual Basic.
2. To create a non-traditionalized expert system that will feature both aesthetic (through graphics, animation and sound) and expertise (knowledge of a professional doctor).

3. To come-up with a comprehensive and easy to access expert system.

SCOPE AND COVERAGE :

// Dr. Computer provides a brief but enough details about the common health problems that we usually encounter. // With regards to the diagnosis, the medicine to take (amount of dosages) , the diet that should be followed , and the treatment that should be done. / The system included the two important general divisions of the body : the head and the body, the head includes the eyes, ear, nose, throat, and teeth while the body only include those parts involve in circulation and digestion due to time constraints. For circulation, heart and blood vessels, and for digestion, stomach, appendix and intestines. 2/

METHODOLOGY :

In the study we followed the steps defined in the Systems Development Life Cycle (SDLC). The Planning phase, the Analyst phase, the Design phase, the Development phase and the Implementation phase. The proponents also used the questionnaire method, they constructed one single question : "Kindly List Top 3 Health Problems your family usually experience ? " , from these they based their choice of what health problems

they must include in their system. Interview was also implemented to gather the most important information they should acquired.

OUTPUT OF THE STUDY :

^{3/}The system generates correct diagnosis of the health problem consulted depending to the manner in which the user response to the questions given by the system.^{3/} Due to the implementation of this expert system, the workloads of Doctors was lessened , in effect they have given more time to get involved with more serious and complicated diseases. The medical students as well as the nurses and midwives were benefited also by this system as their stand-by guide to their everyday activities. And to other target users, the system truly had provided its purpose.

CONCLUSIONS :

The proponents find out that converting manual activities into computerized tasks makes a remarkable change to the ordinary scene. Breaking away from the usual method of creating an expert system was a success. The impressive features of the Windows programming language: Visual Basic Version 5, such as the graphical user interface and animation's, are not only the key factors in catching the attention of the users but also the means of making a certain system efficient.

RECOMMENDATION :

Widening the scope of this expert system as well as the addition of more necessary conditions which will add to the credibility of the diagnosis generated by this Dr. Computer is highly recommended.

