

VET Expert System :
Diagnosis and Treatment of the Diseases of Domestic Animals
SY 1996 - 1997

008100

An Undergraduate Special Problem
Presented to
the Faculty of the Department of Mathematical Sciences and Computer
Studies

College of Arts and Sciences
De La Salle University - Dasmariñas
Dasmariñas, Cavite

In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Science in Computer Science

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March 1997

ABSTRACT

NAME OF INSTITUTION : De La Salle University - Dasmariñas
ADDRESS : Dasmariñas, Cavite
TITLE : Vet Expert System : Diagnosis & Treatment of
the Diseases of Domestic Animals
AUTHOR : Cesar M. Causaren
FUNDING SOURCE : Personal COST : 5,000.00
DATE STARTED : December 1996 DATE COMPLETED : Feb.1997
OBJECTIVE OF THE STUDY :

A. GENERAL

1. To develop an Expert System in the field of Veterinary Medicine.

B. SPECIFIC

The specific objective are :

1. to gather knowledge concerning diseases of small domestic animal and their symptoms from expert in the field of Veterinary Medicine;
2. to construct a knowledge base containing organized knowledge extracted from human expert;
3. and to provide the ground work in which future developments on Veterinary Expert System may use as a model.

SCOPE AND COVERAGE :

The scope of this research focuses only on small domestic animals. Its knowledge base will consist of 100 to 150 rules. At this stage, the system will be at its lowest level of expertise. The system is capable of suggesting treatment to domestic animal with a digestive, respiratory and infectious diseases.

METHODOLOGY :

In the development of the expert system, the author followed the five phases employed in the development of expert system.

OUTPUT OF THE STUDY :

An Expert System on the field of Veterinary Medicine was developed to assist and help the petshop and animal owner in the proper diagnosis and medications of their domestic animals (dog, cat, birds and fowls). Additionally, the system include : clinical symptoms of an animal and supporting questions during the consultation, graphics, hypertext help, and the proper medication after the system had defined the disease of an infected animals. The software was made to run in a DOS-based environment.

CONCLUSIONS :

The methodology advocated in building an expert systems is supported of various studies on the role of experience in development of expertise.

RECOMMENDATIONS :

The author recommends that the user of the system must be familiar with computers and must be able to define the symptoms of his/her domesticated animals. For further enhancement of a system, the author also recommends that a knowledge base must diagnose multiple diseases. Development in different environments (Windows , etc) may greatly improve system performance.

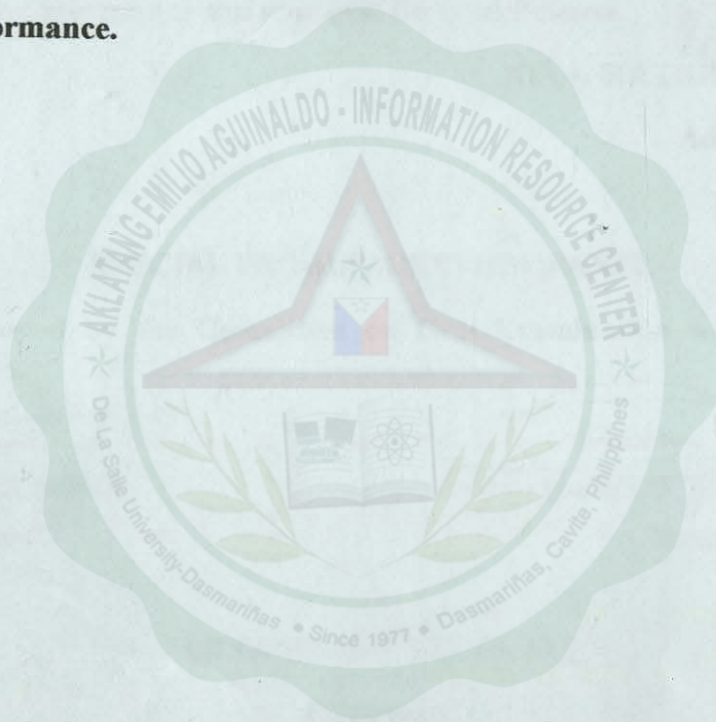


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