ABSTRACT

NOVEN HIMAN HUIJ. Development Web Based Diagnosis Expert System of Chicken Disease. Under the direction of SRI NURDIATI and TOTO HARYANTO.

Disease is one of many obstacles that could reduce the productivity of poultry. Recognizing early symptoms of the disease, knowing the source of the cause and performing a variety of efforts for prevention are very important to increase the productivity of the poultry. This study is a continuation of previous study done by Haryanto (2006). The system developed by Haryanto still has some limitations: such as desktop-based systems, could not be found division of users to access system, and it’s not using the database so there is no facility for editing disease symptoms. The present availability of computer technology and an easiness of obtaining it has provided great possibility to apply an information system for overcoming the problems mentioned above. For this purpose, Diagnosis Expert System of Chicken Disease was developed in the form of a web based application. Moreover, this study evaluates the effect of changing the membership functions of input variables on the defuzzification results. This system is designed and built using System Development Life Cycle (SDLC) method which consists of 5 stages, investigation systems, system analysis, system design, system implementation, and maintenance system. The results of this research is a chicken disease diagnosis expert system, a web based application. In the system, the decision making is based on two aspects, which are non fuzzy symptoms is using decision table and for symptoms fuzzy is using Fuzzy Inference System.

Keywords : expert system, membership function, defuzzification, system development life cycle.