## EXPERT SYSTEM DESIGN OF HUMAN DISEASE DIAGNOSIS SYSTEM USING DEMPSTER SHAFER METHOD IN WEBSITE-BASED

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## **ABSTRACT**

Health is the most important thing in life. Therefore, the quality of health services is the main focus of the community. With the development of technological advances in the era of industrial revolution 4.0, the disease can be diagnosed using expert system methods. This research developed an expert system and uses software development with a prototype method with 5 stages. It can help diagnose joint disease in humans based on the existing symptoms. The data used in this expert system consisted of 5 joint disease data and 36 joint disease symptom data. The expert system was able to help in providing information about the symptoms or health information. This system was also able to help medical personnel. One of the used methods was the Dempster-Shafer uncertainty method and forward tracking namely Forward Chaininag. Using the Dempster-Shafer method was to diagnose and determine the degree of accuracy of the diagnosis results. The result of this study stated that this system was able to handle the process of joint disease and help in improving the quality of health services. Furthermore, it was able to be used by the wider community as a medium of information, especially joint disease.

Keywords: Health, Expert system, Dempster-Shafer