

EXPERT SISTEM FOR DIAGNOSING DIABETES MELLITUS USING THE NAÏVE BAYES ALGORITHM

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ABSTRACT

Diabetes is a chronic disease that sufferers will suffer for the rest of their lives. Diabetes can trigger various complications of other dangerous diseases, if it is handled too late. Many people initially did not know that they had diabetes because they did not have basic knowledge about diabetes and limited time to consult a doctor. The purpose of this research is to build an expert system that is able to diagnose diabetes mellitus, namely diabetes mellitus type I and type II. Type I diabetes mellitus sufferers usually occur in children or adolescents under the age of 20 years, while type II diabetes mellitus sufferers occur at the age of 20 years and over. Making this expert system uses the naïve Bayes method, which is a process that starts a search in the form of entering in the form of symptoms that have been classified "yes" and "no" then calculates the values of "yes" and "no" and then compares them to get the final result. Naïve Bayes is a statistical approach to perform inductive inference on classification problems. This naïve Bayes method uses conditional probability basically. After testing 5 patient data diagnosed with diabetes, there was 1 data that did not match the results of the diagnosis using the application. It can be concluded that this expert system application is considered to have succeeded in implementing the Naïve Bayes method and is useful for assisting the public in obtaining information about diabetes and obtaining the results of a diagnosis of diabetes mellitus, both type I and type II..

Keywords : *Expert sistem, naïve bayes, Diagnosis of diabetes mellitus*