ABSTRACT

Diabetes mellitus is a metabolic disorder characterized by an increase in blood sugar to decreased insulin secretion by pancreatic beta cells. Diabetes can be known by the emergence of symptoms that exist in the body, but with the presence or absence of diabetes is checked by a specialist about diabetes directly. Early treatment of diabetes mellitus is done by a specialist in diabetes mellitus. Disease management by a doctor requires several process and waits for results from the laboratory for quite a long time. This will provide sufficient time and financial stability so that the disease can be checked. Backward Chaining is a reason that is contrary to the hypothesis, as well as the potential for conclusions that will allow it to be proven due to the fact that can support the hypothesis.

Given these problems, this thesis will be designed through a system that can find out the conclusions on the detection of diabetes mellitus. This system is designed using the Backward Chaining expert system method which will go through conclusions (inference engine) then lead to several facts (initial state) on the application. Therefore, with a system designed by the user is expected to feel helped and facilitated by this application. The other hope of the application is to provide knowledge and insight about the examination of diabetes mellitus.

Keyword : Diabetes Mellitus Disease, Backward Chaining, Expert System