ABSTRACT

Cholesterol is a type of molecule in the bloodstream and body cells. Cholesterol is produced by the liver and is used for the formation of new bodies and hormones. Cholesterol is not dissolved in the blood so it needs to bind to the carrier, namely lipoprotein, therefore cholesterol is also divided into 2 namely Low-Density Lipopprotein (LDL) and High-Density Lipopprotein (HDL). Collestsrol lizards that exceed 240mg / dl are dangerous phases, to determine high cholesterol levels, a blood test is needed. But with high cholesterol levels the body experiences several symptoms that refer to the complications of the disease from high cholesterol. With this problem, it is designed an android based application that can detect the risk of high cholesterol levels based on symptoms early with the expert system method C4.5 Decision tree Algorithm. From the results of tests performed, C4.5 algorithm has the best performance on partition data 70%: 30% with an accuracy value of 81,39%.

Keyword : Cholesterol, Expert System, Decision tree Algotithm C4.5.