

ABSTRACT

A computer is an electronic device capable of performing the task of receiving input (input), processing input and storing processing orders and providing output (output) in the form of information. Hardware is a physical part of a computer that can be seen directly. Due to the lack of knowledge to solve the problem of damage to the computer, novice users cannot identify the location of the damage that occurs. Not all users can fix problems with hardware so that users have to pay for repairs that are not necessarily complicated and can be repaired by themselves. Based on this, it is necessary to have a system that can identify damage to hardware computers in the form of an expert system as an alternative information and consultation media that is more practical. The expert system was developed using PHP. The dataset in this study contained 44 symptoms. In designing this system, it was formed using the method Waterfall as a stage of system analysis and the method Certainty Factor as a path tracing in finding the type of damage. Tests carried out using Whitebox and Blackbox testing the results of these tests show that the tested components produce the expected results, as well as the Confusion Matrix to test accuracy. The accuracy results obtained for the damage identification system are hardware computers 75%.

Keywords: Expert System, Certainty Factor, Damage Hardware Computer, Waterfall, Confusion Matrix