

ABSTRACT

Motorcycles are still the mainstay and the most affordable for the majority of Indonesian people, these two-wheeled vehicles are chosen as a means of transportation. It is practical and efficient making motorcycles a favorite of the people. The use of motorbikes for daily mobility needs is very effective compared to the use of other vehicles. One of the problems is the maintenance of automatic motorcycles. Many automatic motorcycle users ignore the maintenance of automatic motorcycles because they do not know what damage has occurred and the costs required for automatic motorcycle maintenance. By ignoring the maintenance of a motorbike, the risk is very large, it can even cause traffic accidents. Based on this, a website is needed that can diagnose damage to automatic motorcycles and can provide information regarding the costs required to carry out these repairs. In designing this system, it was formed using the Waterfall method as a stage in conducting system analysis and the Forward Chaining method as a path tracing in finding the type of disease. Testing was carried out using the Blackbox method to test functionality and Confusion Matrix to test accuracy. The accuracy results obtained were 87% and the results per damage were 88%.

Keywords : *Forward Chaining, Expert system, Waterfall, Automatic Motorcycle Damage, Blackbo*