

ABSTRACT

Vespa is a scooter type motor that is manufactured from Italy and began to be known in the 1990s. According to the founder of the Vespa Day Indonesian community, Om Benk, the Vespa community in Indonesia is one of the largest in the world. The reason they still have an interest in Vespa diverse, including not having to have large capital to get a motor with good quality, service costs are quite cheap, and strong brotherhood among fellow riders. In addition, Vespa motorcycles also often experience problems, namely damage to engine, piston, ignition, lights, lampshades, Vespa seats, clutches, speedo meters, shock breakers, gasoline does not go down, Vespa gas, motor body and so on. Characteristics of damage experienced on Vespa motor is almost the same, but the type of damage is different. This causes the user to make a mistake when the vespanya damaged. Therefore, we need a system that can predict Vespa damage so that it can help Vespa motor users in repairing the damage. This expert system is used as a consultation media for Vespa users who need information on Vespa motor damage at the workshop. In this study create an information system that can detect damage to Vespa and provide a solution by using a case based reasoning method with a combination of nearest neighbor algorithm. The data used are 12 training data and 65 testing data. The results of the expert system accuracy testing for the identification of Vespa damage using 65 data testing of 97%. This shows that the method can be used in an expert system to properly identify Vespa motor damage.

Keywords: Case Based Reasoning, Nearest Neighbor Algorithm, Vespa Damage Identification.