ABSTRACT

The development of the automotive industry in Indonesia is increasing, especially in automobiles. Due to the increasing number of car brands in Indonesia, it is difficult for users to decide which car suits their functional requirements. Therefore, to overcome this problem, we propose a ontology-based Conversational Recommender System (CRS) using Collaborative Filtering. CRS as a framework aims to have users interact with the system so that the system obtains information related to users functional requirements, ontology-based aims to organize domain knowledge with specific concepts, and Collaborative Filtering improve the accuracy of recommender products in developing recommender systems. The evaluation results include system performance with 85.39% accuracy and user satisfaction getting positive feedback from various factors. This shows that the car recommender system is effective and efficient in providing recommendations according to the functional requirements of users.

Keywords: Recommender System, Ontology, Conversational Recommender System, Collaborative Filtering, Knowledge-based Recommender System