
Abstract

When a person wants to build a personal computer, this person needs to browse many kinds of computer components. Beside that, this person needs to consider the compatibility between hardware and an affordable price. This will be a problem for people who are still unfamiliar with the computer, due to their lack of understanding of how compatibility between computer components works and the time-consuming nature of market research. To deal with this problem, the recommender system will assist in finding and matching compatibility efficiently based on the functional requirements of the user. The recommender system will issue various products based on the preferences and interests of the user, but some recommendations still need to be checked for compatibility.

With the help of developing a Conversational Recommender System by utilizing the Knowledge Graph, it will be easier to construct the relationship between component compatibility. This research will involve the user to prove whether the recommendations from this system meet the needs and accuracy of the recommendations requested. The main results of this study will issue a recommendation for the development of personal computers by considering compatibility using the Conversational Recommender System using the Knowledge Graph approach.

Keywords: knowledge-based graph, graph database, conversational recommender system, compatibility, computer
