ABSTRACT

A healthy diet is one of the keys to building a healthy lifestyle, but at this time the selection of a healthy and nutritious meal menu in the society is difficult to do because of the limited nutritional information contained in a food. A healthy diet can help a person to get balanced nutrition, good nutritional intake can increase the body's immunity, and make a normal or healthy body weight so that it can increase work productivity and prevention of chronic diseases. To overcome this problem, we propose the use of ontology and Semantic Web Rule Language (SWRL) to build a healthy menu recommendation system in the form of a chatbot to make it easier for users to determine the daily meal menu. These recommendations are personalized by considering the user's needs. Ontology is used to represent the required knowledge and the reasoning process uses SWRL. From the results of system testing, the recommendations get the accuracy of the F-Score value of 0.951.