Abstract

The number of domestic and foreign tourists in Indonesia is always increased year by year, unfortunately it is not compensated with the availability of enough attraction information. The tourists most likely does not know the attraction which they may interested. The tourists usually finds it hard to select the available attraction because the huge quantity of it. Another problem that faced tourism domain is the small amount of the available historical data.

The Recommender System is a system that give the product recommendation to the user which the user maybe interested. Knowledge based recommender system is a recommender system that cannot have a cold-start problem, cold-start problem is a situation when the initial data is too small to make a recommendation of it. Ontology is used as a knowledge representation in certain domain. Recommendation can be made by using spreading activation algorithm to propagate the ontology (traverse and update value in each traversed node in ontology). Conversational Recommender System (CRS) is a knowledge (ontology) based recommender system that includes query refinement. Query refinement is a mechanism to interact with user iteratively, at the same time it refining user requirement. This final task will be focused on the development of CRS by using spreading activation algorithm that can give the recommendation about tourist attraction by considering user requirements.

Keywords: *conversational recommender system*, *knowledge based*, *ontology*, *query refinement*, *propagation*