
Abstract

The number of branching roads can make it difficult for users to determine the route to be traveled. In the context of this research, there are more than 50 (fifty) tourist sites own by the city of Semarang. The problem is categorized as TSP (Travel Salesman Problem). Many researchers have successfully solved the TSP using genetic algorithm. However, these research remain another problem, which is that the algorithm does not accommodate contextual information that assists users for improving context awareness. To overcome the problem, in this research, we combine genetic algorithm with contextual information to increase users' context awareness in recommending tour planning. For evaluating the performance of propose system, we compare the context aware genetic algorithm (genetic algorithm that has been integrated with contextual information) with the basic genetic algorithm. Based on the evaluation results of contextual information, the use of such information successfully assists the genetic algorithm in recommending culinary locations at lunch and dinner hours. Without such information, the algorithm recommends culinary locations at inappropriate hours. We hope this research can produce a system that can generate travel recommendations based on effective routes and provide information that can help users to increase context awareness when making travel plans.