Abstract

As a traveler, it has become a necessity to first select the most optimum analyze route that is the shortest path to travel the cities and then travel through the path. This paper is aimed to provide its users the most optimized path to travel, that will consume the minimum amount of time and distance. To achieve this, Travelling Salesman Problem algorithm through genetic algorithm has been implemented. The paper also provides with the feature of a data analyzer. This aims to analyze the data provided by the users for a particular city and generate the ratings based on the data. To provide the feature of data analyzer, Knuth-Morris-Pratt algorithm for pattern matching and TRIE data structure for efficient retrieval of data has been used. As every traveler always ensure the reviews and rating of the place before visiting it, getting a brief review and knowing the rating of the city will help them in selecting the city to visit.

References


**Index Terms**

Computer Science  
Automated Systems

**Keywords**

Route Optimization, Genetic Algorithms, Travelling Salesman Problem, Time Complexity, KMP Algorithm