Implementation of Shortest Path Finding System by Using Kruskal Algorithm

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Abstract

Graphs have been used in a wide variety of application. Some of these applications are analysis of electrical circuits, finding shortest routes, project planning, and identification of chemical compounds, statistical mechanics, genetics, and social sciences and so on. Indeed, it might be well said that of all mathematical structures, graphs are the most widely used. This paper is intended to study how a graph theory applied to find shortest path by using a minimum spanning tree. In this study, it is implemented popular locations of the Mandalay City as the vertices of an undirected graph. In this system, the associated distances between each location are presented as weights of the edges of the graph. There are three different algorithms to obtain a minimum –cost spanning of a connected, undirected graph. Our shortest path finding system is focused on Kruskal Algorithm.