Web Based Bus Directory Service and Route Planning Using Dijkstra's Shortest Path Algorithm

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Abstract

Yangon city is a highly populated city and bus transportation is an essential portion of most of the city people. Bus transport system in Yangon is facing multiple problems to improve efficiency. One of the problems is finding the path to get the destination that the commuter has never been there before. There are a lot of bus line information books but cannot provide for the above problem. Another problem is low occupancy rate, that a commuter normally does not know the bus routes. A framework for Bus Directory Service and Route Planning using Dijkstra's shortest path algorithm is implemented in this paper. For the route planning service, Dijkstra's shortest algorithm will be used to get the best path to the destination. This thesis will provide user selects source and destination to calculate best path by using Dijkstra's shortest algorithm and display the shortest paths for user select Bus Directory. Information of bus line and bus-stops can be retrieved in this bus directory service and route planning. In this paper, Yangon Bus Directory is also provided. Bus information is collected from Bus lines and Yangon Bus Directory, 2007-08, First Edition.