

Finding Shortest Path Using Floyd Warshall's Algorithm

Hnin Pwint Thu, Khin Sanda Aung

University of Computer Studies, Yangon, Myanmar
zml.hninpwintthu@gmail.com,sandaraungthu@gmail.com

Abstract

Nowadays, the transportation becomes a vital role in developing countries so people need to know the shortest ways. Therefore, this system will be developed intending to reduce the transportation time by applying one of the shortest path finding algorithm in six townships of the Yangon Map. They are Kamaryut, Hlaing, Sanchaung, Mayangone, Dagon and Mingalardon townships. There are many shortest path finding algorithms such as Dijkstra's Algorithm, Floyd-Warshall's Algorithm, Bellman Ford Algorithm, A Algorithm, Johnson's Algorithm etc. This paper is intended to use Floyd-Warshall's Algorithm and applied to find shortest ways in six townships of the Yangon map. In this paper, 158 nodes and 182 edges are defined and the vertex will be represented as well-known places such as (Hospitals, Hotel, Parks, Pagodas, Airport, Markets, Shopping Mall, City Mart, Junctions, Private Hospitals, Private Clinics, Embassies, Museums, Theatres, Churches, Cinema Halls, Golf Clubs, Cemetery, Restaurants, Coffee Shops and Universities) so user have already familiar with these places. This system will intend to support the users such as car drivers, taxi drivers, visitors from other states and divisions of Myanmar and also foreigners. It is also support for the ambulance and fire truck for saving human lives.*