Dijkstra's Algorithm

Description

Dijkstra's algorithm is an algorithm for finding the shortest paths between nodes in a graph, which may represent, for example, road networks. It was conceived by computer scientist Edsger W. Dijkstra in 1956 and published three years later.

The algorithm exists in many variants;
1. Dijkstra's original variant found the shortest path between two nodes.
2. A fixed a single node as the "source" node and finds shortest paths from the source to all other nodes in the graph, producing a shortest-path tree (implemented in the project).

Instructions For Running The Project

1. Place the desired number of nodes.
2. Start to link the nodes by clicking on one node, drag the mouse to the other desired node.
3. After finishing making the links, Double click on each node to set the weight of each link (note that link from NodeX to NodeY equals the link from NodeY to NodeX).
4. Click on Get Path button to determine the source node number.
5. A text will appear with the results, Click on Next Node button to display the next shortest path .