Algorithms and Data Structures

Graph Searches in a Route Planner

Assignment-5 ADDITIONAL INFORMATION

Version: January 16th, 2022

This document provides some corrections and additional information in response to questions asked by several students. These do not change the basic requirements of the assignment but may help you to overcome possible issues with your implementation of the solution.

1. The specifications of addEdge(fromVertex, toVertex, newEdge) addEdge(fromId, toId, newEdge) in the assignment description were not accurate and not consistent with the starter project. The correct descriptions are:
   boolean addEdge(fromVertex, toVertex, newEdge) adds newEdge to the map of edges in between fromVertex and toVertex in the graph and returns true if successful. If fromVertex or toVertex are not part of the graph yet, these shall first be added as well so that the newEdge also can be added still. But, if the graph already holds an edge between fromVertex and toVertex, nothing shall be added or replaced and false shall be returned.
   boolean addEdge(fromId, toId, newEdge) adds newEdge to the map of edges in between the vertex identified by fromId and the vertex identified by toId. If fromId or toId do not reference an existing vertex in the graph, nothing shall be added. Otherwise, the same conditions as above do apply (so this method should reuse addEdge(fromVertex, toVertex, newEdge)).

   Comments and code of the starter project were correct.
2. …