Xavier Greer

CS267 – Computer Algorithms

Unit 4 Submission 1

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The purpose of this academic mini paper is to demonstrate knowledge in optimized algorithms for small range weights. For this program, I decided to use C++ because I was running into many issues trying to use C# and making the algorithm work properly. I developed a class with a constructor and methods, the methods created are for finding the shortest path and adding nodes with weight. The shortest path method essentially creates an array of ‘buckets’ that holds the temporary labels for nodes. The buckets are sequentially checked until a non-empty one is found, the nodes are labelled with minimum distance and deleted one after another and the positions of the labels are updated. I am more than happy to correct any mistakes within this assignment.

Text

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