**Graph Algorithms Lab 2 Breadth First Search**

**Document Id 42**

* Recursively examines all the vertices and edges
* Simplest solution for finding the shortest path ( measured by number of edges)
* Variations based on use of Stack or Queue
* The shortest path solution uses a Queue
* https://en.wikipedia.org/wiki/Breadth-first\_search

When using the shortest path solution BFS requires that nodes are removed vertices

from the other end of the list than the one you add them to, so that the list acts as a

queue (fifo storage) rather than a stack (lifo).

If a vertex has several unmarked neighbors, it would be equally correct to visit them in

any order. Probably the easiest method to implement would be simply to visit them in

the order the adjacency list for v is stored in.

**Practical Task Find Minimum Path**

Modify the BreadthFirstSearch class to find the minimum path between

a node to a target node