CIS 365 Uninformed Search Assignment

Dr. Denton Bobeldyk

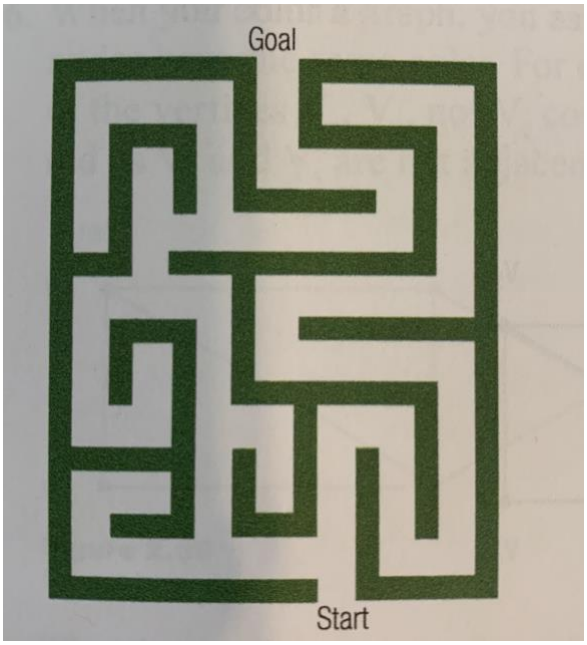

Image from AI in the 21st Century Lucci/Kopec

Programmatically create a data structure that represents the above maze along with the start and goal nodes. Create a program that implements both Breadth First Search (BFS) and Depth First Search (DFS) to navigates its way through the maze. Create a drawing that clearly illustrates how the data structure you've selected represents the maze and the output the 'path' used for both the DFS and BFS implementation.

Hand-in:

1. A word document exported into PDF format that includes the following:
    a. Labeled maze diagram (graphically illustrated)
    b. Output of your BFS program on the attached maze
    c. Output of your DFS program on the attached maze
2. Source code used to generate the output for the BFS and DFS program

Grading Rubric:

	0	50%	100%
Depth First Search Implementation (30%)	Algorithm not correctly implemented	Algorithm contains a single error in the DFS implementation	Algorithm successfully implements DFS
Breadth First Search Implementation (30%)	Algorithm not correctly implemented	Algorithm contains a single error in the BFS implementation	Algorithm successfully implements BFS
Maze Diagram (20%)	Is not correctly labeled	Is partially correct	Is correctly labeled
Display/Output (20%)	Incorrect output and/or not easy to read	Correct output, but not easy to read	Output is easy to understand and clearly communicates the correct output.