User Manual

This is going to be a really basic guide on how to use the GUI of my project. The GUI for my project will be a single window. At the top there are fields called Row and Column respectively and they need to be filled with integers between 1 to 30.

Once the fields have been entered there is a button at the bottom of the window called ‘Generate Maze’ this button will take the numbers you provided and display a maze of X rows and Y columns in the graph called ‘Maze’ above the ‘Generate Maze’ button.

Once the maze has been generated there will be another button to the right of the ‘Generate Maze’ button and it will be called ‘Solve’. Once clicked this will prompt the program to solve the maze and display the solution path on the maze in magenta and show a point on the graph labeled ‘Average Number of States’. Two numbers will also appear at the bottom right of the window. The number next to the text “Number of states taken in current run:” will display how many steps the algorithm took in that specific run of the maze. The other number next to the text “Total number of dead ends found:” represent how many dead ends the maze has found (including created punished states) of every run in that maze.

If you press the ‘Solve’ button more than once you will see that the ‘Average Number of States’ graph will keep track of an average in a line graph, this shows the algorithms development over time and is proof of learning.