CMSC 170 - MP 1

Results of A* Search:

Group Members: Michael Loewe L. Alivio Gamaliel E. Petralba Juan Carlos T. Roldan

- 1. On "small maze"
 - 1. Manhattan distance

2. Straight-line distance

2. On "medium maze"

1. Manhattan Distance

2. Straight-line Distance

3. On "big maze"

1. Manhattan Distance

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Path cost: 211 Expanded Nodes: 548 Frontier Size: 554

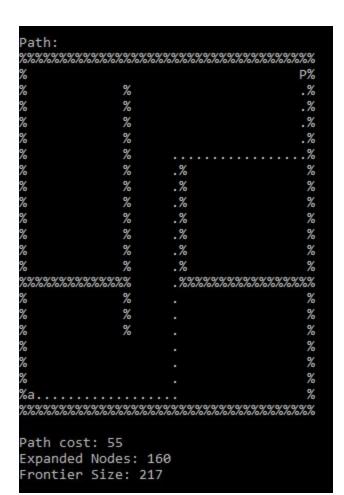
2. Straight Line Distance

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Expanded Nodes: 573 Frontier Size: 583

4. On "open maze"

1. Manhattan Distance



2. Straight Line Distance

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Path cost: 55
Expanded Nodes: 542
Frontier Size: 574
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Summary of results for Part 1:

The Manhattan Distance heuristic seems to perform better than the Straight Line Distance heuristic in part 1. The algorithm returns the goal path regardless of the heuristic used. More nodes are expanded and added to the open list when using the straight line heuristic.

5. On "small search"

1. Manhattan Distance

2. Straight Line Distance

- 6. On "tricky search"
 - 1. Manhattan Distance

2. Straight Line Distance

Summary of results in Part 2

Same as in Part 1, both heuristics deliver the goal path, however the order in which it comes is a bit different. The Manhattan outperforms the Straight Line heuristic in here, as well; more nodes are expanded for the latter heuristic, as well as the number of nodes in the frontier.

Performance and Contribution of Each Member	
Michael Loewe Alivio	
Debug * Testing - Part 1	
Debug & Testing - Part 2	
Implementation - Part 1	
Refactoring of code into modular headers	
Gamaliel Pehalba	
Implementation-Paul 1	
Implementation - Part 2	
Github Repo Maintainer	
Documentation	
Juan Carlos Roldon	
Pseudacode Dengn	
Implementation—Part 1	
Implementation-Part 2	
Documentation	
,	
Lind Sor	Juan Carlos Roldan
Michael Lyno Gamadiel Petralba	Juan Carlos Roldan