Maze Solving Challenge Optional Tasks

1 Find the shortest path

The shortest path could be found by implementing breadth-first search (BFS) or the A* algorithm. BFS would not be very efficient however.

2 Find all paths

Al paths could be found via depth-first search (DFS).

3 Optimise algorithm for time

Use the A* algorithm since it visits adjacent cells is an optimal manner and hence prevents visiting the entire maze.

4 Expand to three dimensional mazes

Create a three dimensional array using `numpy` and add a z coordinate parameter to the existing code. DFS, BFS and the A* algorithm would all still work in this case.