Definition document

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Game AI using the A* algorithm. Making an implementation of the algorithm in Java to traverse an arbitrary grid (the vertices in a mesh etc).

I've found this resource quite useful when working with this algorithm.

http://theory.stanford.edu/~amitp/GameProgramming/

The algorithm chooses the next nodes based on the total score of the travelled distance and the remaining distance to the goal, calculated with a heuristics method. The score is then sorted so the method gets the lowest possible scores out of the list all the time. This uses for now **Java's own *PriorityQueue*** implementation, I'll change this later on.

The speed and effectiveness of the algorithm is strongly related to the heuristic method chosen. With a better heuristic method one will get the shortest path to the goal, but this will also take up the most resources to calculate.