AI4Games 2020
Exercise 4
Jump Point Search

8 points
Deadline: 16.12

Your task in this exercise is to implement the JPS+ pathfinding algorithm[1].

50% Preprocessing [2p.]

Reach a 50% score on Jump Point Search – Preprocessing puzzle[2].

100% Preprocessing [2p.]

Reach a 100% score on Jump Point Search – Preprocessing puzzle.

50% Runtime [2p.]

Reach a 50% score on Jump Point Search – Runtime puzzle[3].

100% Runtime [2p.]

Reach a 100% score on Jump Point Search – Runtime puzzle.

Late days [-2p.]

You can still send your solution one week after the main deadline, but the number of received points will be reduced by 2.

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[1]Steve Rabin, Fernando Silva. "An Extreme A* Speed Optimization for Static Uniform Cost Grids",
Game AI Pro 2: Collected Wisdom of Game AI Professionals, pp. 131-143, 2015
(Note that in Listing 14.3 when checking diagonal direction conditions, there has to be additional condition `minDiff > 0`.)
[2]https://www.codingame.com/training/hard/jump-point-search—preprocessing
[3]https://www.codingame.com/training/hard/jump-point-search—runtime