StraightLinePath Class Reference

Inheritance diagram for StraightLinePath:



Public Member Functions

StraightLinePath ()

Constructor for the Straight Line Path Class. More...

virtual ~StraightLinePath ()

Destructor for the Straight Line Path Class. More...

std::vector< Coordinate > computePath (const Coordinate &aStart, const Coordinate &aEnd, const double &aIncrement)

Method to Compute the 3 Dimensional path from start point to end point by desired increments (or less). More...

Protected Member Functions

Coordinate determineDirection (const Coordinate &aStart, const Coordinate &aEnd, const double &aIncrement)

Method to Determine the direction the next point should be in. More...

Constructor & Destructor Documentation

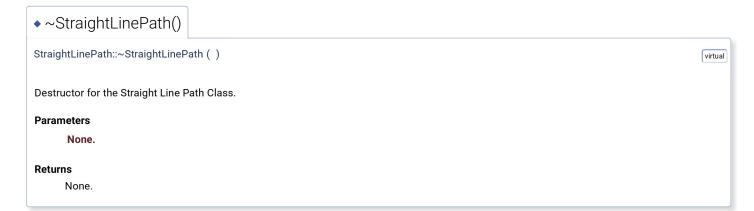
◆ StraightLinePath()

StraightLinePath::StraightLinePath()

Constructor for the Straight Line Path Class.

Parameters
None.

Returns
None.



Member Function Documentation

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```
• computePath()
```

```
std::vector< Coordinate > StraightLinePath::computePath ( const Coordinate & aStart, const Coordinate & aEnd, const double & alncrement )

Method to Compute the 3 Dimensional path from start point to end point by desired increments (or less).

Parameters

aStart Coordinate of the Starting Point.
aEnd Coordinate of the Ending Point.
alncrement double. The max distance between path points.

Returns

std::vector<Coordinate> The points corresponding to the path from start to end.

Implements IPathPlanner.
```

determineDirection()

Method to Determine the direction the next point should be in.

Parameters

aStart Coordinate of the Starting Point.

aEnd Coordinate of the Ending Point.

alncrement double. The max distance between path points.

Returns

Coordinate The unit vector representing the direction of the next point along the path.

Implements IPathPlanner.

The documentation for this class was generated from the following files:

- $\bullet \ C:/Users/ethan/source/repos/ENPM808X_Midterm-master/include/{\bf StraightLinePath.hpp}$
- $\bullet \ C:/Users/ethan/source/repos/ENPM808X_Midterm-master/app/StraightLinePath.cpp$

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