IPathPlanner Class Reference `abstract`

Inheritance diagram for IPathPlanner:

```
    ┌──────────────┐
    │ IPathPlanner │
    └──────────────┘
           ▲
           │
    ┌────────────────┐
    │ StraightLinePath │
    └────────────────┘
```
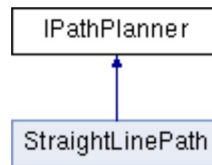
Public Member Functions

virtual std::vector< **Coordinate** >	**computePath** (const **Coordinate** &aStart, const **Coordinate** &aEnd, const double &aIncrement)=0
	Method to Compute the 3 Dimensional path from start point to end point by desired increments (or less). More...

Protected Member Functions

virtual **Coordinate**	**determineDirection** (const **Coordinate** &aStart, const **Coordinate** &aEnd, const double &aIncrement)=0
	Method to Determine the direction the next point should be in. More...

Member Function Documentation

◆ computePath()

virtual std::vector<**Coordinate**> IPathPlanner::computePath (const **Coordinate** & aStart,

const **Coordinate** & aEnd,

const double &   aIncrement

)   `pure virtual`

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.
>
> **aIncrement** double. The max distance between path points.

Returns

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

Implemented in **StraightLinePath**.

◆ determineDirection()

virtual **Coordinate** IPathPlanner::determineDirection (const **Coordinate** & aStart,

const **Coordinate** & aEnd,

const double &   aIncrement

)   `protected` `pure virtual`

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

Parameters

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

Returns

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

Implemented in **StraightLinePath**.

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

- C:/Users/ethan/source/repos/ENPM808X_Midterm-master/include/**IPathPlanner.hpp**

Generated by doxygen 1.8.16