CoordinateConverter - gridSquareWidth : float - originOffset : Point2D<float> + CoordinateConverter() + CoordinateConverter(other : const CoordinateConverter&) + CoordinateConverter(other : CoordinateConverter&&) + operator= (other: const CoordinateConverter&): CoordinateConverter& + operator= (other: CoordinateConverter&&): CoordinateConverter& + CoordinateConverter(widthOfGridSquares : float, offsetOfOrigin : Point2D<float>) + ~CoordinateConverter() + convertCoordToWindow(navGridCoord : const Point2D<int>&) : sf::Vector2<float> + convertCoordToNavGrid(windowCoord : const sf::Vector2<float>&) : Point2D<int> + convertPathToWindow(navGridPath: const NavGridCoordinatePath&): WindowCoordinatePath + convertPathToNavGrid(windowPath : const WindowCoordinatePath&) : NavGridCoordinatePath 1...1 0..n Point2D 0..m 2..2 **PathRequest** start : Point2D<int> end: Point2D<int> minimumFreeSpace : double aStarHeuristicNumber: int Uses **PathFinder**

- navigationGrid : NavigationGrid*

- + Pathfinder()
- + Pathfinder(navigationGrid : NavigationGrid*)
- + ~Pathfinder();
- + setNavigationGrid(navigationGrid : NavigationGrid*) : void
- + getNavigationGrid(): NavigationGrid*
- + pathFind(pathRequests : const std::vector<PathRequest>&, returnedPaths : std::vector<std::list<Point2D<int>>>* const) : void
- chooseNextGridSquare(pathRequest : const PathRequest&, availableGridSquares : const std::set<Point2D<int>>* const) : Point2D<int>
- getNeighbors(gridCoordinate : const Point2D<int>&) : std::vector<Point2D<int>>
- reconstructPath(endPoint : const Point2D<int>&, cameFrom : std::map<Point2D<int>, Point2D<int>> const * const * const) : std::list<Point2D<int>>

