PathPlanner

- start : pair <double, double>
- goal : pair <double, double>
- pathFound : bool

+ map : std::vector< std::vector< int>>
+ costGo : std <vector <double>>
+ costCome : std <vector <double>>
+ totalCost : std <vector <double>>
+ visitStatus : std<vector<bool>>
+ parentNode : std<vector<size_t>>
+ parentIndexList : std::vector<std::pair<std::size_t, std::size_t>>
+ actionSequence : std<vector<size_t>>
+ actionNumber : int
+ thetaSequence : std<vector<double>>
+ stack : std::vector <size_t>
+ goalThreshold : float
+ mapSize : pair<size_t. size_t>
+ startIndex : size_t
+ goalIndex : size_t
+ currentIndex : size_t
+ goalFlag : int
+ localGoal : pair <double, double>
+ PathPlanner() : void
+ euclideanDist(std::pair<double, double>,std::pair<double, double>) : double
+ plannerMain() : std::vector<std::pair<double, double>>
+ getGoal () : pair <double, double>
+ setGoal (pair <double, double>) : void
+ getStart () : pair <double, double>
+ setStart (pair <double, double>) : void
+ getPathFound () : bool
+ setPathFound (bool) : void
+ hashIndex (pair<double, double) : size_t
+ hashCoordinates(size_t) : pair<double, double>
+ boundaryCheck (pair<double, double>) : bool
+ shortestPath (size_t) : vector<pair<double, double>>
+ updateCost (size_t, size_t, double) : bool
+ differential (idouble, double, double, double, double, double, size_t, double) : size_t
+ allActions (size_t) : void
+ goalCheck(pair<double, double>) : bool
+ showMap : std::vector< std::vector< int>>