BaseCollectionOrderPlanner

-optimisers : Collection<CollectionOrderOptimisers>

-distanceMatrix : DistanceMatrix

#planInitialRoute(startSensorIdx: int,

sensors : Sensor[],

distanceMatrix: DistanceMatrix,

formLoop: boolean

) : int[]

CollectionOrderPlanner

+ planRoute(startSensor: Sensor, Set<Sensor>, obstacles:Collection<Obstacle>) :Deque<Sensor>

BasePathPlanner

#readingRange : double

#maxMoves: int

#algorithm: PathfindingAlgorithm < DirectedSearchNode >

#pathPointsToSegmentsStrategy(

pathPoints: Deque<DirectedSearchNode>,

goalPoints: Deque<PathfindingGoal>,

sensorRoute : Deque<Sensor>,
graph : ConstrainedTreeGraph)

Deque<PathSegment>

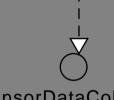


PathPlanner

BaseDataCollector

-pathPlanner:PathPlanner

-routePlanner:RoutePlanner



SensorDataCollector

+planCollection(startPosition:Coordinate, sensors:Set<Sensor>, obstacles:Collection<Obstacle>)
:Deque<PathSegment>

DistanceMatrix

#distanceMetric(a : Sensor, b : Sensor) : double

+setupDistanceMatrix(sensors : sensor[])

+distanceBetween(sensorA : int, sensorB : int): double

+totalDistance(

route : int[],
startIdx : int.

endldx: int): double



CollectionOrderOptimiser

+optimise(dm : DistanceMatrix, route: int[])