

Brock Butler Class Design Document
CD-MAP04 ASTAR Class
Date Created: 02/26/2013
Version: 1.1

Revision History

Date	Version	Change	Author
02/14/2013	1.0	Initial Draft	Thomas Nelson
02/26/2013	1.1	Revised Draft	Thomas Nelson

Description

The ASTAR class will calculate a navigation route from two POSITION types. This class is using the A* path finding algorithm and the database to create a route of location node between the two positions.

Class Variables

- No class variables available

Constructors

- **public Route ();**
 - creates a new instance of ASTAR

Methods

- **public Position[] pathGeneration(Position user, Position goal);**
 - is the recursive method used to generate the route between two positions
 - returns an array of POSITION types
- **private Position[] findAdjacent(Position current);**
 - finds all nodes adjacent to the current node from the database

Class Responsibility Collaboration Card

Responsibilities	Collaborators
Generates route between two POSITION types	MAPPING
Uses A* algorithm	POSITION
Searches database for nodes	

Class Design Sign-off

Name	Approval Status
Matthew Menonkariyll	
James Grisdale	
Taras Mychaskiw	