Notes for AI Assignment

Neighbouring

For each node, go through all 8 possible locations for a neighbour by checking the x and y of the potential neighbour. If the x and y values are valid, add a neighbour and try the next position. Once all possible neighbours are added for a node, go to the next node until all nodes have their respective neighbours with positions from 1 to 8.

Algorithm

Check each nodes neighbours by cycling through 1 to 8 and check that neighbours’ potential for being the next step in the path for the node.

Setting Node Image

The node needs to know what type it is (tile, player, or enemy) by using its position in the grid. The players’ start position will be set upon initialisation and can then be adjusted when the user inputs a key press. To find out where the player/enemy is on the map, this must be done after all the nodes are created. The x and y positions will be compared and if they match, the node that it is supposed to be on will be changed to a closed type and the players node information will be updated/copied from the node.

Initialisation

The vector of nodes needs to be created and the player/enemy positions set before the loop starts. The loop must only contain drawing information and updating information.

NEIGHBOURING NOTES

Instead of going through every x and y position, surely it should just check the values of x and y at that position and if they comply with the if statements, add a neighbour at that position.