INFO6017 - Artificial Intelligence

Project #1

Due Date: Sunday, Feb 18th at 11:59 pm

This is assignment can be done on your own, or in pairs. No groups of three or more.

The submitted code must compile. If it does not compile, then the mark assigned will be zero.

**Pathfinding and A\* algorithm.**

For this project, you will create a program that demonstrates the the use of the A\* algorithm to find a path through a maze where there are obstacles.

Only 1 model is required for object to move through the maze

Floors and obstacles do not have to be detailed, as long as I can tell them apart, you're good.

The pathfinding should be done while running the program, no pre-compiled pathing for this project.

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|  | Item | Marks |
| 1 | The maze is loaded in from a text file. Starting point, destination, and node type. | 5 |
| 2 | floors and obstacles are easily distinguishable. | 5 |
| 3 | At least 1 rendered model | 5 |
| 4 | Used A\* to find the path | 10 |
| 5 | The camera is 3rd person, with awesome controls for zoom and pan | 5 |
| 6 | Maze of sufficient complexity. | 10 |
| 7 | Tou are always a 3rd, different color | 5 |
| 8 | STYLE: Your code is readable. You follow conventions consistently, comment appropriately, and variables have meaningful names. | 10 |
| 9 | BONUS: one of:  Awesome Rendering : texturing and/or cool lighting  "player" objects moves between nodes instead of appearing. | 5 |
|  | TOTAL: | 55 + 5 |