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SIT215 Computational Intelligence

Assignment 1: Search for Agent Navigation

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# Introduction

In this project, we will implement the Depth-First Search (DFS) algorithm to help a nonplayable character (NPC) navigate a maze. The maze is represented as a 2D grid, with walls represented as blocks and open paths represented as empty spaces. The NPC is represented by an ASCII character in the game, and can move in four directions (up, down, left, and right). Our task is to implement the DFS algorithm to find a path for the NPC to reach the endpoint in the maze. The NPC must navigate around walls to reach the endpoint. We will also implement a visualization of the NPC’s movement in the maze.

# Problem Description

# Results

# Analysis

# Conclusions

# Lessons Learned

# Acknowledgement of External Assistance (If Applicable)

We have used other unit material to get some information on DFS and BFS from SIT320 Advanced Algorithms (Full document included in GitHub), that was written by one of the students in this group (Daniel Matar) which is based off that unit’s material.

# References

**There are no sources in the current document.**