

Assignment #2

Submission type: individual

Submission files: Zipped file (report in PDF and C codes)

Deadline: April 19, 2020 (end-of-the-day)

Write a complete C program to search a maze and write a report in PDF (free-form).

The report includes

1. Development environment (OS, IDE, etc.)
2. Explanation of the algorithm and the code

Requirements for the C program

1. Use linked list
2. Program should accept command-line arguments for path to the maze text file and then a path to the output text file.
 - ✓ Example 1: `./program example_input.txt example_output.txt`
 - ✓ Example 2: `./maze /home/DS/assignment2/maze_test.txt /home/DS/assignment2/results/DS2018010977.txt`
 - ✓ (Reference https://en.wikipedia.org/wiki/Entry_point#C_and_C++)
3. Maze text file specification:
 - ✓ First line: Entrance index (x, y index separated by a space.)
 - ✓ Second line: Exit index (x, y index separated by a space.)
 - ✓ Third line: Blank line
 - ✓ Fourth to second last line: Maze (An arbitrary sized rectangular grid with columns separated by a space, rows separated by line. 0 is open, 1 is closed.)
 - ✓ Last line: Blank line
4. Output text file specification:
 - ✓ First to second last line: Indexes of entrance to exit path (

x, y index separated by a space, each forward step separated by a line. If maze is unsolvable, write the entrance index .)

✓ Last line: Blank line

5. **Not following these requirements will reduce your score.**