Homework 1

Due: Sunday 08/03/2026 23:00h
Nộp theo nhóm

Submission: L0X_HW1_YOURNAME.zip
X = 1, 2

MINESWEEPER

Minesweeper is a logic puzzle where the goal is to clear a grid of hidden mines without detonating any. It is one of the most popular singleplayer logic video games. The game features a grid of clickable tiles, with hidden "mines" dispersed throughout the board. The objective is to clear the board without detonating any mines, with help from clues about the number of neighboring mines in each field.

Rules:

- **Opening Cells:** Left-click on a square to reveal it. If it's a number, that's how many mines are in the **8** surrounding cells (horizontal, vertical, and diagonal). while blank tiles reveal nothing nearby. Use these numbers to deduce mine locations, right-clicking to place flags.
- **Winning:** The game is won when all safe, non-mine cells are uncovered.
- **Losing:** The game ends immediately if you click on a mine.

Use **Depth-First Search (DFS),** design a **GUI** to play this game (5x5, 9x9, …). ***You must document your design and algorithm step by step in a pdf file.***

Language: Python, C#, C/C++, …

Submit your source code + documentation (pdf) in a zip file.

Your documentation must include the **names** of all the members and their **contributions**.