STUDENT PROJECT

MINESWEEPER V1

I want to make a visual c++ version of the game minesweeper. I want to make a 2 dimensional array, size 16 x 30. 16x30 is an expert level version of minesweeper, so it will contain 99 randomly placed throughout the board. When creating the board, I will need to also be able to check around the mine to place information for numbers. Will have to manually check in a function for all the cells around the mine. When filling out the board, I might do a recursive function to fill out when you click an empty no number no mine spot on the board. Will need a UI 2 dimensional board for the user input. I will also need to figure out how to indicate that the user won or lost

- BOARD FUNCTIONS
    - CREATE 2 DIMENSIONAL BOARD WITH MINES RANDOMLY SCATTERED
    - 2 DIMENSIONAL BOARD WILL FILL IN SPACES NEAR MINES WITH INFORMATION OF NUMBER OF MINES SURROUNDED IN IT'S 3x3 SURROUNDINGS
- GAME FUNCTIONS
    - UPDATE THE UI BOARD WHENEVER THERE IS AN INPUT FROM THE USER
    - PRINT THE USER BOARD
    - TAKE USER INPUT, AND COMPARE INPUT TO PLACE ON BOARD
    - ASK THE USER FOR

The problem is that filling up the board has a big O of n^2 and the recursion has a pretty big O notation.

One of the problems is figuring out how the 2 dimensional array is being laid out and read over. I think I meant to make a 30 long and 16 wide array, but made the opposite. This might be what's throwing off my other functions, as I might need to switch the coordinates. I also wanted to add a save and load function which can possibly be done with exportation of all files in a csv file since it's an array containing cells. Currently the code compiles and runs, just not as intended or as well as I want it to.

Had to use the ascii table to reference to try to figure out how to convert integers and characters between each other.
https://cs.smu.ca/~porter/csc/ref/ascii.html