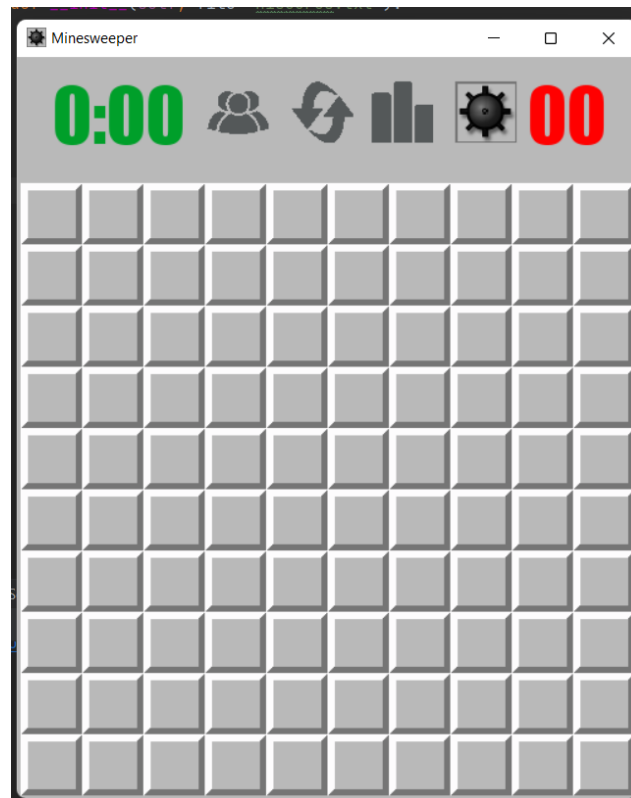


User Manual Minesweeper

This program is a game of **Minesweeper**, a game where you have a board of hidden tiles and must clear the board without clicking and setting off a mine, which would make you lose the game. You must accurately mark all mines with flags to win the game.

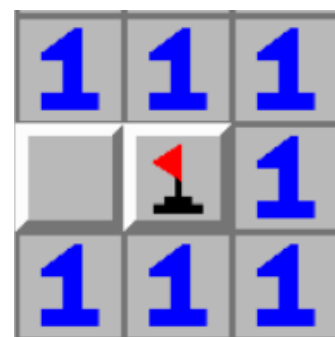


To **begin** the game and clear an area, you must first click on a random spot on the grid and from there try to figure out where the mines are. Don't worry, you won't accidentally hit a mine on your first try and immediately lose the game! You are given hints when you are close to a mine when a *tile has a number* on it. That *number* tells you how many mines there are in a *1 square radius* to the tile, including the corner tiles. These numbers are your most important resource to winning the game, as you can figure out where to click next when you know how many mines are in the vicinity.



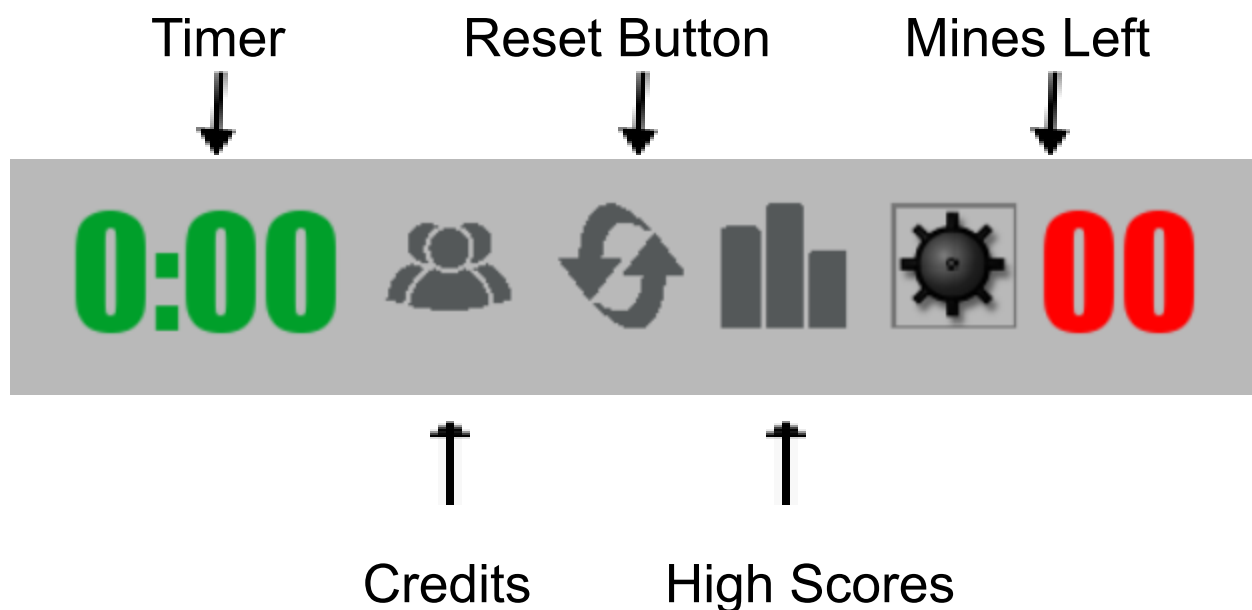
To **win** the game, you must *accurately* mark all mines with flags. You will know there is a mine based on the tile's number as discussed above. Once you place down a flag, you will notice that the **mine counter** will go down by one in the top right. This is to help you keep track of how many mines

you have left. But be careful! This number can be misleading as it does not check if your flag actually does have a mine under it, so you can trick yourself by placing down a flag on the wrong spot. The tile numbers are very important to how you play the game, so pay careful attention to them. Often a game of minesweeper can be solved by thinking through it logically, and it can be a fun game to challenge yourself with!



There is also a user interface available to you, with useful visuals. Generally speaking, there is a **timer** that records time elapsed, a **credits** page, a **reset button** in the middle of the screen in the case that you feel like you would want to reset the game, a **high scores** page that records your highest scores (lowest times), and an **amount of mines left counter** will be shown at the top right of the screen.

The **UI** is shown below, with each component labeled for your convenience.



- The **Timer** will keep track of your time once you start the game. This is essential as you want to aim for a lower time to complete your game of Minesweeper, as this is the scoring system of the game. Can you beat your friend's times?
- **Credits** is a simple credits page that reveals once pressed. This is an ode to the developers of the game, who created this game for you to enjoy. :)
- The **Reset Button** is one of the most important functionalities of the game. If at any time you want to give up, restart the game, and start a new blank one, it is

one click of a button away. Resetting allows a user to completely reset the game back to its original starting point.

- **High Scores**, when clicked, will display to the user their top 5 highest scores.

Remember, the aim of the game is to get the fastest time possible, so lower times will be near the top of this ranking! By default, the High Scores button will display “No Scores Yet” when the user has not won any games.

- **Mines Left** is a vital part of Minesweeper as it tells the user how many mines are left on the board. This will go down with every flag that is placed, but be careful, as it could show the wrong number depending on how accurate your flags are! Your job is to figure out where the mines are and mark them correctly to make this counter go down. Once this counter hits zero, and your board is correctly marked in all the mine positions with flags, you win the game!