

Game development assignment

Build a Minesweeper game in Html5 using the Phaser engine

From wikipedia:

The player is initially presented with a grid of undifferentiated squares. Some randomly selected squares, unknown to the player, are designated to contain mines. Typically, the size of the grid and the number of mines are set in advance by the user, either by entering the numbers or selecting from defined skill levels, depending on the implementation. The number of mines, is equivalent to $\frac{1}{3}$ the number of squares, or less.

The game is played by revealing squares of the grid by clicking or otherwise indicating each square. If a square containing a mine is revealed, the player loses the game. If no mine is revealed, a digit is instead displayed in the square, indicating how many adjacent squares contain mines; if no mines are adjacent, the square becomes blank, and all adjacent squares will be recursively revealed. The player uses this information to deduce the contents of other squares, and may either safely reveal each square or mark the square as containing a mine.

The core gameplay as described above is needed for this assignment with the following requirements:

- Playable on both Desktop & Mobile browsers
- 9x9 grid
- 10 mines
- Left click to clear a tile
- Right click to flag a tile as a bomb
- When there are no tiles left that are not bombs, tell the player they won

- When the player clears a tile that is a bomb, tell the player they lost

You will be judged on:

- Technical correctness (does the game work as described here)
- Code quality
- User Experience and gameplay feedback (does the game feel fun?)
Note that this isn't related to the quality of visual assets, but more user interaction.

Bonus points will be awarded for the following:

- Different grid sizes (either user selectable, or some premade choices)
- Different mine counts, with a max of number of tiles/3. Play the game to determine what feels best here.
- Stretch Goal: Build a simple "bot" that auto plays the game

If you have any questions, please don't hesitate to contact us.

Good luck!