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Advanced Programming Project Reprot

• Project Name:

Minesweeper with SVG

• Game Logic:

Minesweeper can be played as a game of logic or as a game of probability.

Contains a 2D grid of tiles: Easy (9x9), Medium (16x16), Hard (20x25) and custom.

Mines are distributed randomly over the grid and the player must avoid passing on a mine! Then it will explode with all others.

When a non-mine-tile is revealed it shows the number of the neighbor mines number(1 to 8); when there are no mines it starts revealing its neighbors until there is a near mine.

- Drawing the game :
 - SVG : svg is used to draw the grid:
 - Can be drown dynamically by JavaScript as x, y tiles are entered by user, or defined by easy, medium, hard buttons.
 - x, y coordinates ,isMine, isRevealed, hasFlage and mouse click event are added as attributes to every created svg element (tile).
 - Add every tile to the 2D array in the proper i,j location to use it later in the other functions.
 - automaticReveal() reveals all tiles.



automaticReveal()

- Game End :
 - Game Lost: Pressed on a mine.
 - Win: There is x mines and x flags, and all other tiles are revealed.
 - -Update! : To be suitable for mobile devices (no right button click): When all tiles except mines are revealed.



