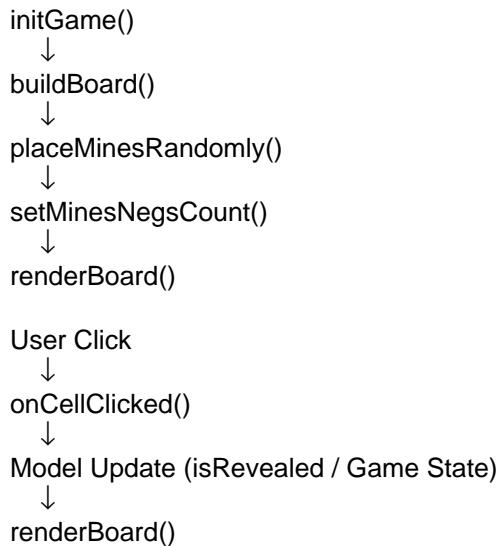


# Minesweeper – Architecture & Flow Overview

## 1. Global Architecture Flow



## 2. Function Responsibilities

`buildBoard()`

- Creates empty matrix
- Each cell gets:
  - `minesAroundCount`
  - `isRevealed`
  - `isMine`
  - `isMarked`
- Returns board

`placeMinesRandomly()`

- While `placedMines < gLevel.MINES`
- Choose random `i, j`
- If already mine → skip
- Else:
  - `gBoard[i][j].isMine = true`
  - `placedMines++`

`setMinesNegsCount()`

- Loop through all cells
- For each cell:
  - Count neighboring mines
  - Update `minesAroundCount`

`renderBoard(board)`

- Loop through all cells

- For each cell:
  - If isMarked → show flag
  - Else if isRevealed:
    - If isMine → show bomb
    - Else if minesAroundCount > 0 → show number
- Updates DOM

onCellClicked(elCell, i, j)

- If !gGame.isOn → stop
- Set cell.isRevealed = true
- Call renderBoard()

Game State (gGame)

- isOn → controls if clicks allowed
- revealedCount → for win logic (future)
- markedCount → for flags