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Part 3A

1. The expose cells method is called using a mouselistener that is attached to the cell.

2. The two central classes are MinesweeperGUI and MineCell.

MinesweeperGUI creates the template for the MineCells to be added to. This class provides the functionality of the game, manipulating MineCells as exposed, checking if the game is won, clearing cells, etc.

The MineCell is a button that holds the value M, 0, or 1 depending on if the cell is a mine or around mines. These cells can be added to the MinesweeperGUI and manipulated by the user using clicks to expose them.

3. The MineCell class implements the mouselistener.

4. This method creates a delay in between the exposition of cells. You control the animation speed by changing the value of delay in the expose timer.

5. This method exposes the cell in the toExpose queue when an action is performed/mouse is clicked. Once the toExpose queue is empty the timer is stopped and there is a check to see if the game is won.

Part 3C

When there is a breath first search the immediate surrounding cells of the cell that was clicked are exposed. Once each of these cells are exposed, the cell that was first exposed will be checked for its surrounding cells. After these cells are checked the second exposed cell will check its surrounding cells and so on. Once each of the surrounding cells reveals its surroundings, the process will be repeated for each of the exposed cells that haven't checked their surroundings yet.

When there is a depth first search the first surrounding exposed cell will check for its next surrounding cell to be exposed until it reaches a cell that has no surrounding cells that should be exposed. Once this traverses fully it will go back and check the previously exposed cell for its next cell to be exposed and go through again, repeating the process. The cell will eventually make it back to checking the cells surrounding the original cell and go through the process again with each surrounding cell that is supposed to be exposed.