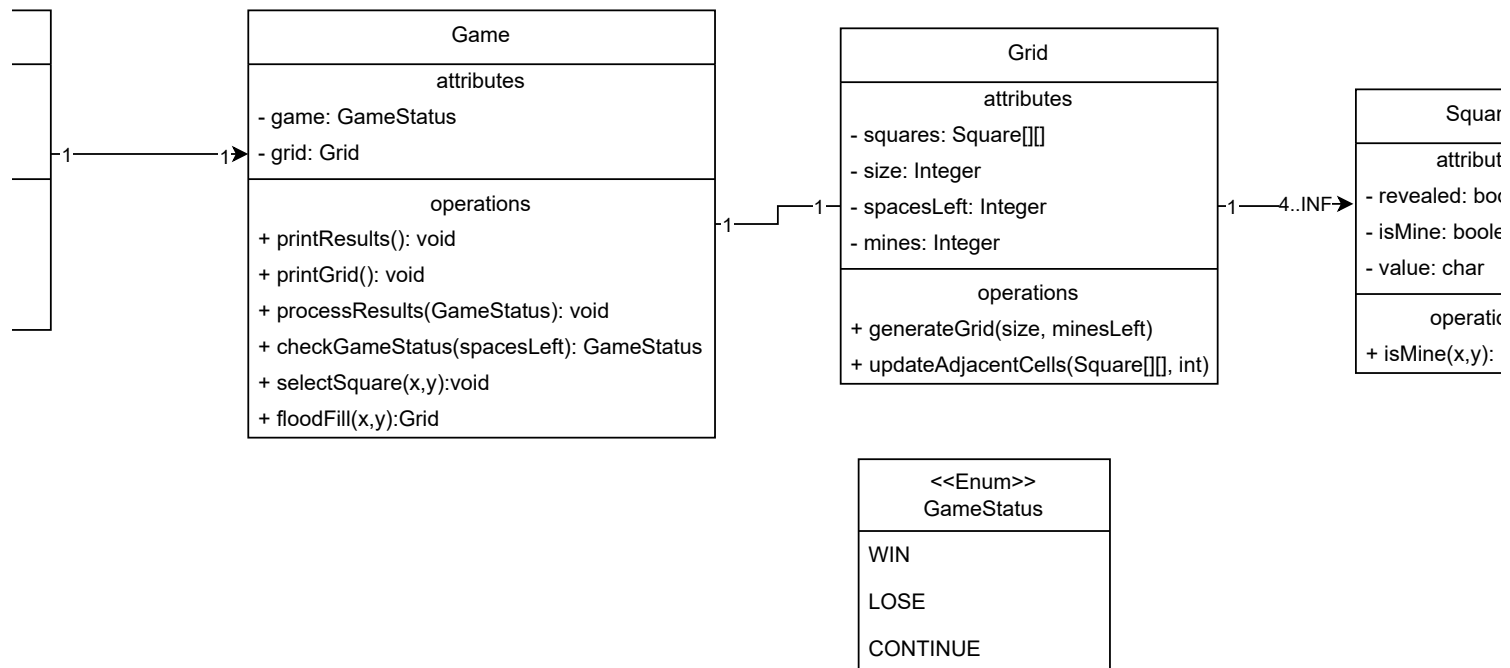


CommandProcessor
<div>attributes</div> <div>- game: Game</div> <div>- scanner: Scanner</div>
<div>operations</div> <div>processInputs(): void</div> <div>validateInitialInput(): void</div> <div>validateSquareSelection(): void</div>



re
tes olean ean
ons boolean

Problem statement: Minesweeper App

Write a program that simulates a Minesweeper game on a square grid.

- The game should begin by prompting the user for the grid size and the number of mines to be randomly placed on the grid.
- The program should then generate the grid and randomly place the specified number of mines on the grid.
- The user should then be prompted to select a square on the grid to uncover.
 - If the selected square contains a mine, the game is over and the user loses.
 - Otherwise, the selected square is uncovered and reveals a number indicating how many of its adjacent squares contain mines.
 - If an uncovered square has no adjacent mines, the program should automatically uncover all adjacent squares until it reaches squares that do have adjacent mines.
- The game is won when all non-mine squares have been uncovered.
- The program should display the game grid and allow the user to input their choices through a command line interface.
- Additionally, the program should track the user's progress throughout the game, displaying the minefield after each user input.

Game play

Success example

```

Welcome to Minesweeper!

Enter the size of the grid (e.g. 4 for a 4x4 grid):

4

Enter the number of mines to place on the grid (maximum is 35% of the total squares):

3

Here is your minefield:

1 2 3 4

A - - - -

B - - - -

C - - - -

D - - - -

Select a square to reveal (e.g. A1): D4  
This square contains 0 adjacent mines.

Here is your updated minefield:

|   | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| A | _ | _ | 2 | 0 |
| B | _ | _ | 2 | 0 |
| C | _ | 2 | 1 | 0 |
| D | _ | 1 | 0 | 0 |

Select a square to reveal (e.g. A1): B1  
This square contains 3 adjacent mines.

Here is your updated minefield:

|   | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| A | _ | _ | 2 | 0 |
| B | 3 | _ | 2 | 0 |
| C | _ | 2 | 1 | 0 |

#Requirements rewritten

- 1.Application is a minesweep
- 2.Application should be able
- 3.The user will be freely ab
- 4.The application should gen
- 5.The user will be able to i
6. The field will be filled
7. When the user selected a
8. When the user selected al
9. When the user selected a
10. Display the minefield af
11. Display only the reveale

er game.  
to be read user inputs.  
le to input grid sizes and mines count  
erate a 2d mine field.  
nput a X and a Y dimension to specify a location on the field  
with mines and numbers.  
mine on the field, the game is lost  
l the grids, the game is won  
'0' the surrounding 0 will be revealed + 1 in the border (Flood fill algo)?  
ter every selection.  
d fields.





