Game of Life

Game Mechanics

Initially, there is a grid with some cells which may be alive or dead. Our task is to generate the next generation of cells based on the following rules:

1. Any alive cell with fewer than two alive neighbors dies.
2. Any alive cell with two or three alive neighbors lives on to the next generation.
3. Any alive cell with more than three alive neighbors dies.
4. Any dead cell with exactly three alive neighbors becomes a alive cell.

Examples:
The ' * ' represent an alive cell and the ' . ' represent a dead cell.

```
Input :  ..........
         ...**.....
         ....*.....
         ..........
         ..........
Output:  ..........
         ...**.....
         ...**.....
         ..........
         ..........
         ..........


Input :  ..........
         ...**.....
         ....*.....
         ..........
         ..........
         ...**.....
         ..**......
         .....*....
         ....*.....
         ..........

Output:  ..........
         ...**.....
         ...**.....
         ..........
         ..........
         ..***.....
```

```
. . ** . . . . . . .
. . . ** . . . . .
. . . . . . . . .
. . . . . . . . .
```
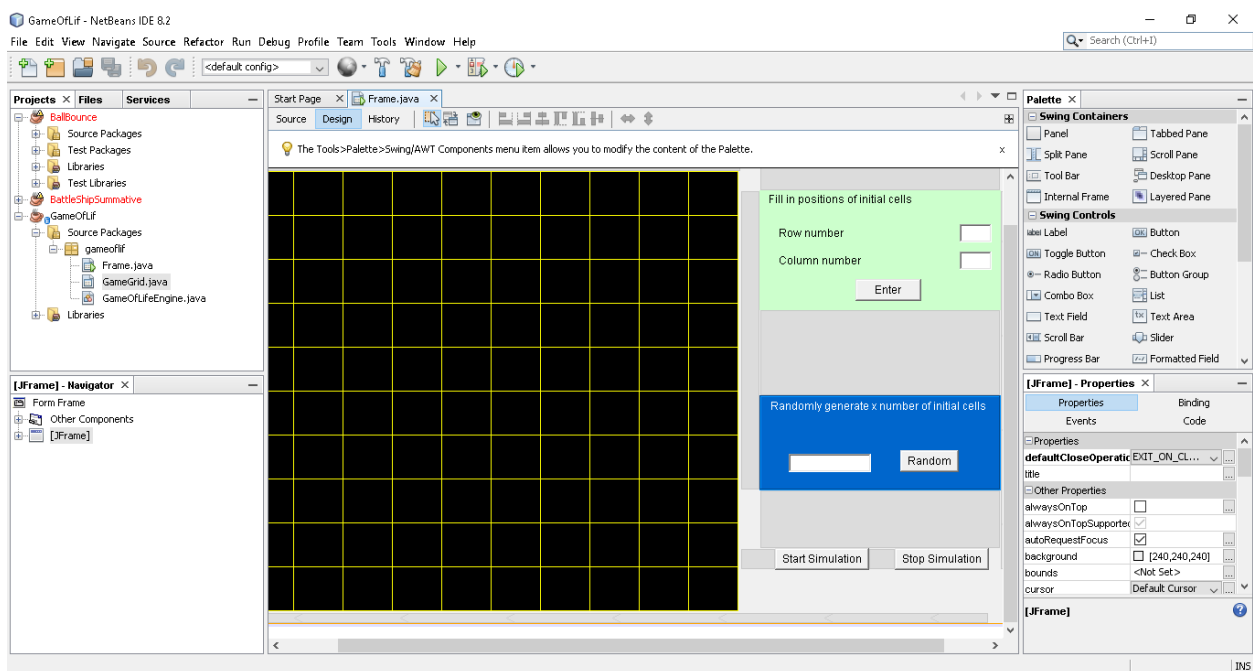
Environment and tools

(1) Netbeans IDE 8.2
(2) Java: 1.8.0_191

Game Screen Shot