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Twist to Conway's Game Of Life

L-System
Assignement -
Creative Algorithms

Inspiration

I always like to add user interaction with a mouse and a generative aspect to my designs so they evolve to something I can’t control so I looked for projects that would have these elements.

I started off learning programming in Java by implementing Conway’s Game Of Life but I hadn’t done a GUI, I only printed the results to the console.
Since I’m not too familiar with processing yet but it is made for making visual creative works I thought that implementing the game and making a visual interface would be interesting.

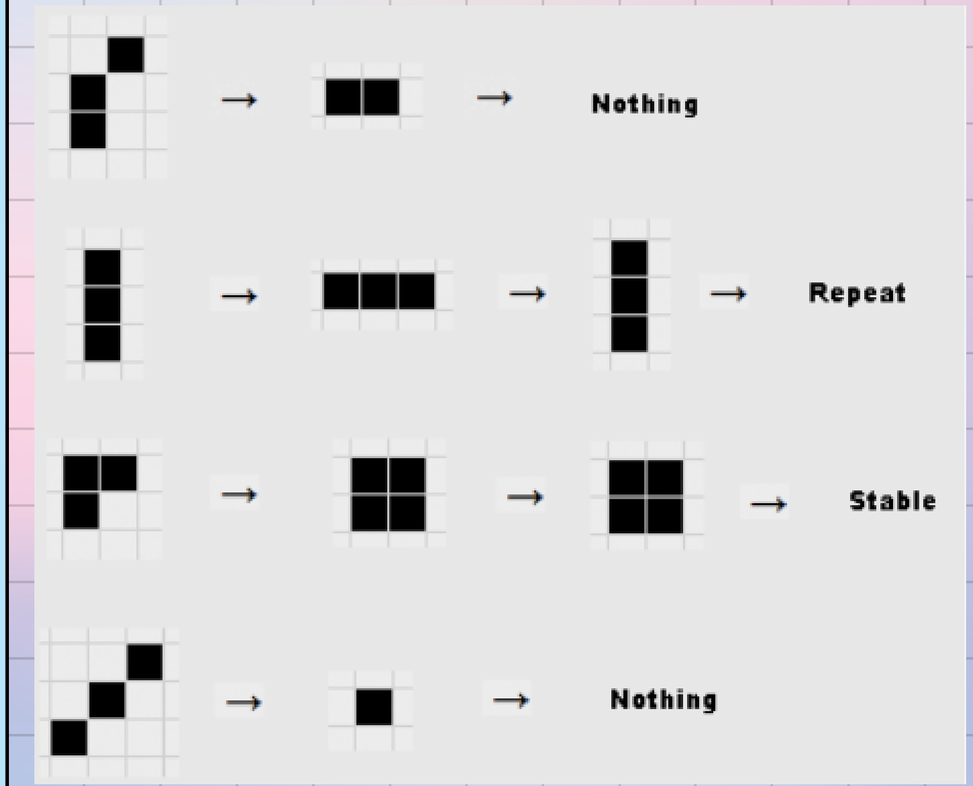
To add the usage of the L-System into the game, I intialize the game using patterns generated using a L-System.

The game’s basic rules

0 player game, the game iterates based on an initial configuration chosen by the user

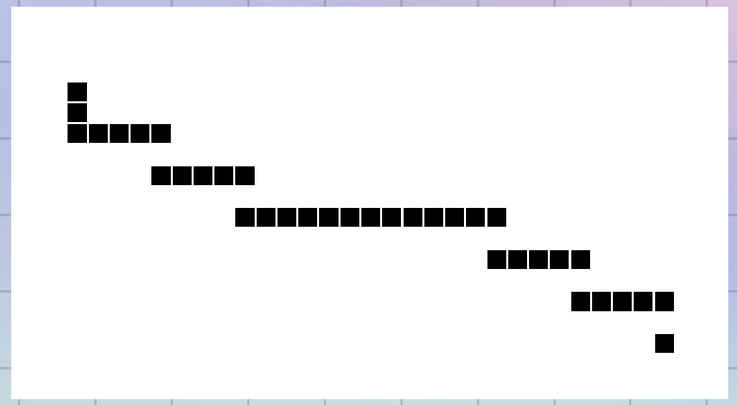
At each step in time, the following transitions occur:

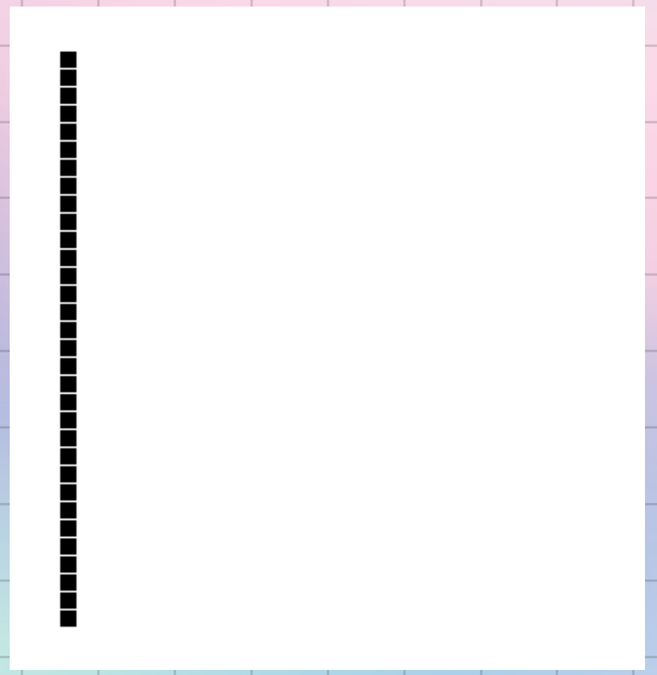
1. **Any live cell with fewer than two live neighbours dies, as if caused by underpopulation.**
2. **Any live cell with two or three live neighbours lives on to the next generation.**
3. **Any live cell with more than three live neighbours dies, as if by overpopulation.**
4. **Any dead cell with exactly three live neighbours becomes a live cell, as if by reproduction.**



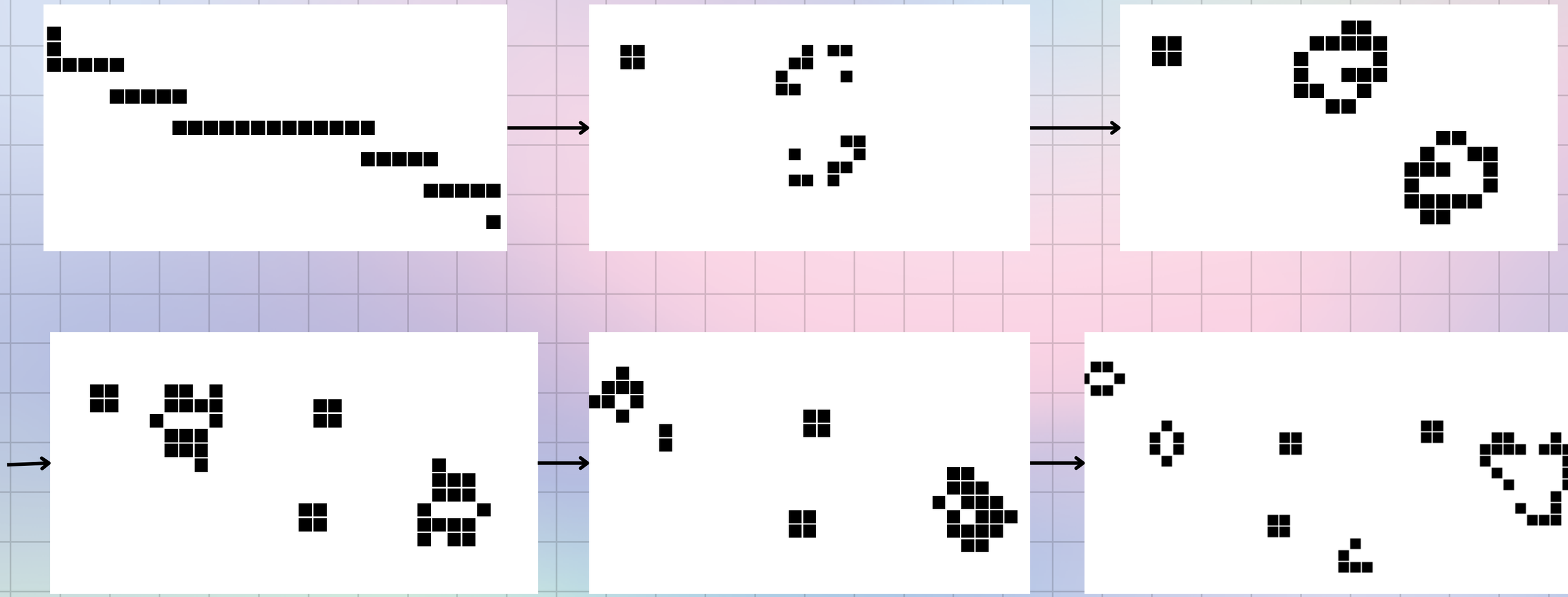
L-System generations

- I made three different initial configurations that we can use when starting the game using L-Systems





What these patterns turn to



Changes I would like to add

- I sticked to simple patterns for initial configurations that are known in the Game of Life. I would like to make more complex patterns using L-system to have very different results.