Cellular Automata

Requirements

- The program shall have the following classes
    - Cell
    - Automata
    - RuleTable
    - Simulation
- Cells shall contain on/off values represented b
- Automata shall have a circular linked list of Cells, of a length set by the user
- RuleTables shall have a length which depends on the number of neighbors to be considered. For n neighbours, the rules table is of length 2^n.
- The program shall generate the combinations for the rules table, and ask the user to input the results in a single string 2^n characters (1's and 0's only) long.
- The Simulation shall operate the ticks, the number of which is set by the user. The Simulation shall have an Automata and a RuleTable.
- When updating the Atuomata, the new values shall be stored in a temporary array, and then the setter methods of the cells shall be used to set the new values.
- The number neighbours shall not be allowed to exceed; floor of (length - 1)/2 to avoid using squares twice.