livelycells

Welcome to the livelycells package!
It lets you play Conway´s Game of Life in an R Shiny App.

You can find more information about the game on its Wikipedia page (https://en.wikipedia.org/wiki/Conway's_Game_of_Life).

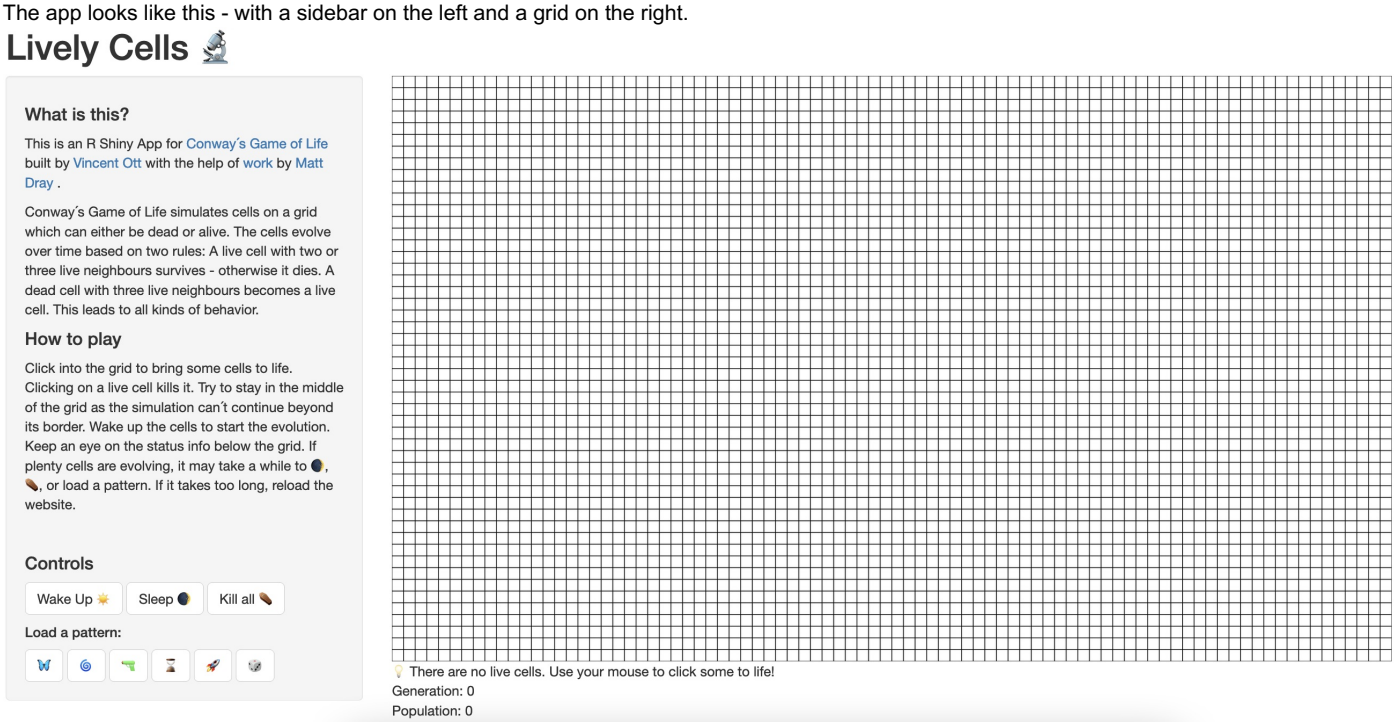
The first step is to load the package.

```
library(livelycells)
```

Next, use the package´s only function to start the app in your browser.

```
play()
```

The app looks like this - with a sidebar on the left and a grid on the right.



On the sidebar there are instructions…

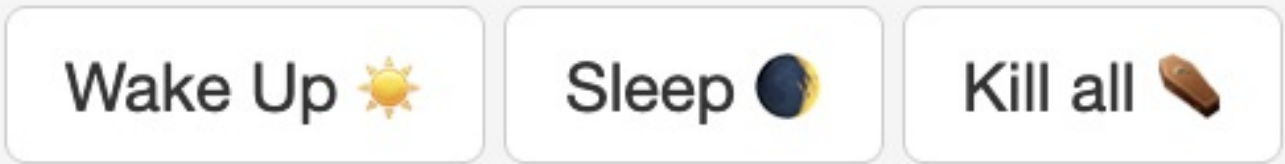
Conway´s Game of Life simulates cells on a grid which can either be dead or alive. The cells evolve over time based on two rules: A live cell with two or three live neighbours survives - otherwise it dies. A dead cell with three live neighbours becomes a live cell. This leads to all kinds of behavior.

How to play

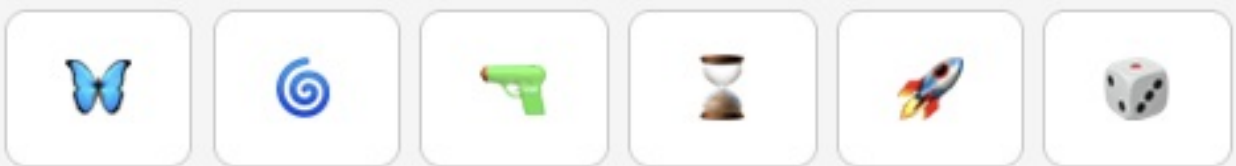
Click into the grid to bring some cells to life. Clicking on a live cell kills it. Try to stay in the middle of the grid as the simulation can´t continue beyond its border. Wake up the cells to start the evolution. Keep an eye on the status info below the grid. If plenty cells are evolving, it may take a while to 🌑, 🪶, or load a pattern. If it takes too long, reload the website.

…and controls.

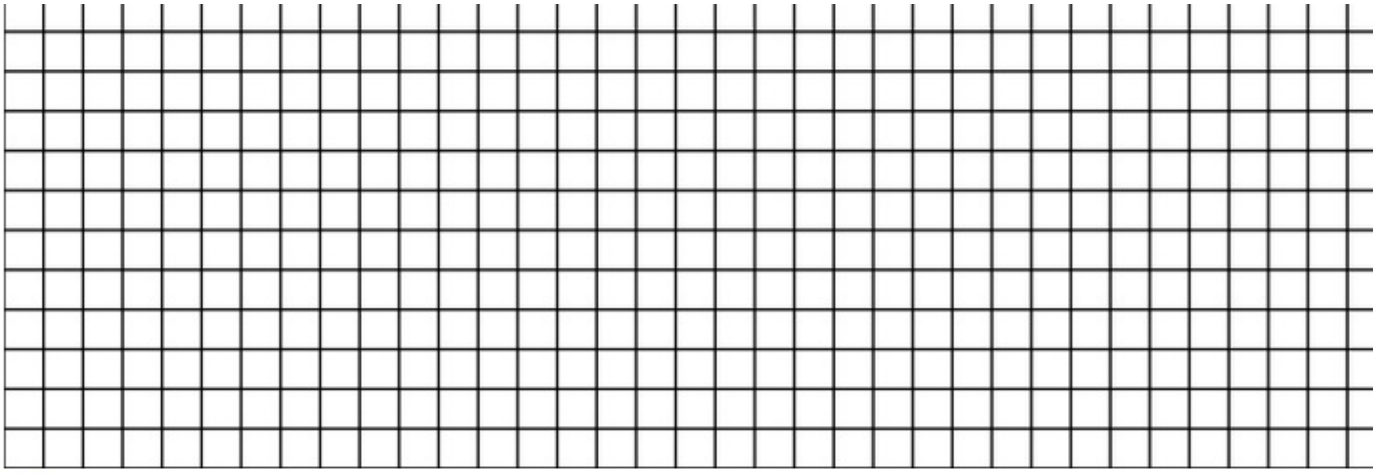
Controls



Load a pattern:



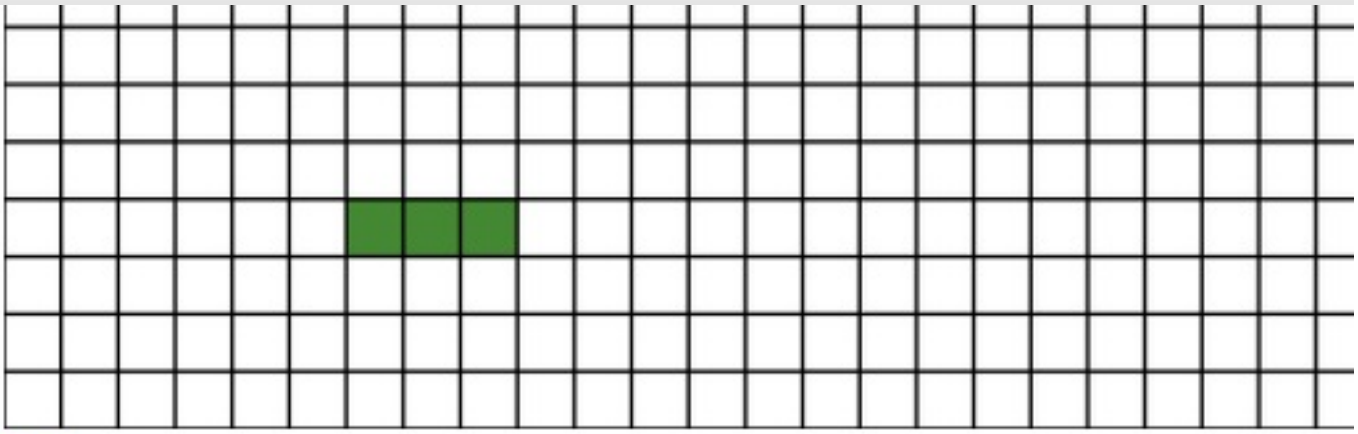
The grid is where the fun happens! Here you can click cells to life with your mouse and also kill them again.



💡 There are no live cells. Use your mouse to click some to life!

Generation: 0

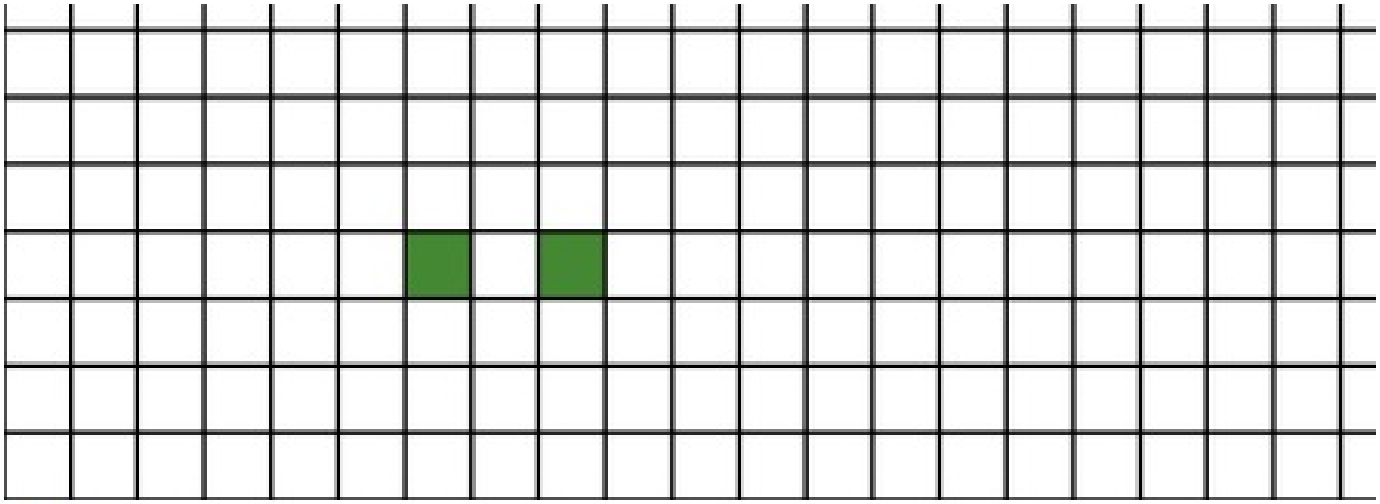
Population: 0



😴 the cells are sleeping

Generation: 0

Population: 3



😴 the cells are sleeping

Generation: 0

Population: 2

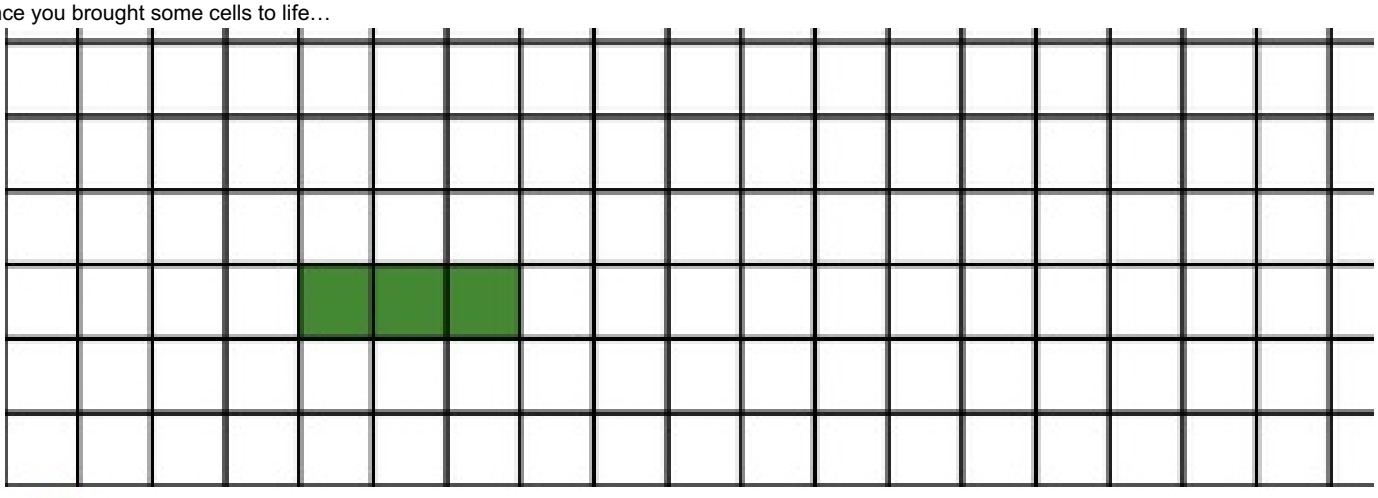
Below the grid there is information about the current status of the Game
comprising a statement, the current generation, and the current population.

💡 There are no live cells. Use your mouse to click some to life!

Generation: 0

Population: 0

Once you brought some cells to life…



😴 the cells are sleeping

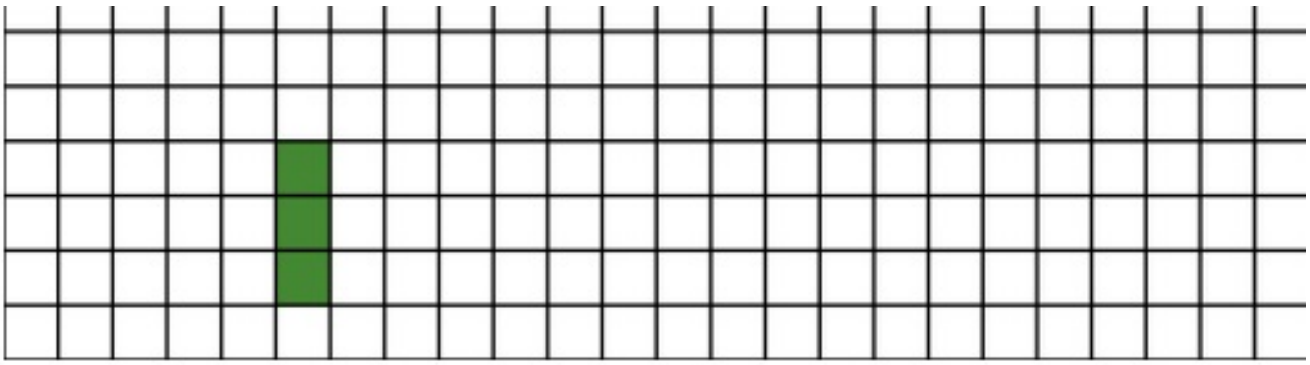
Generation: 0

Population: 3

you can wake them up and watch them evolve…

Controls

Wake Up ☀️



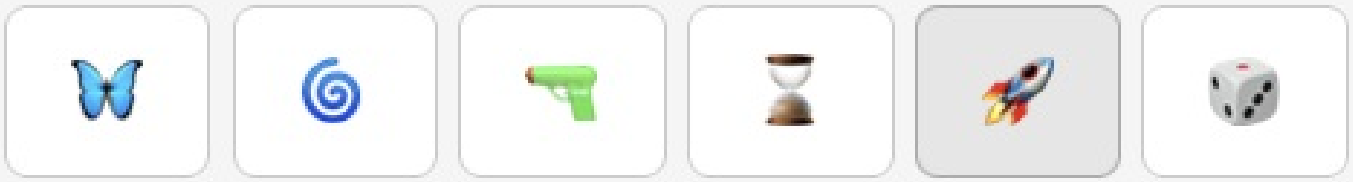
🥳 Watch, the cells are lively and evolving!

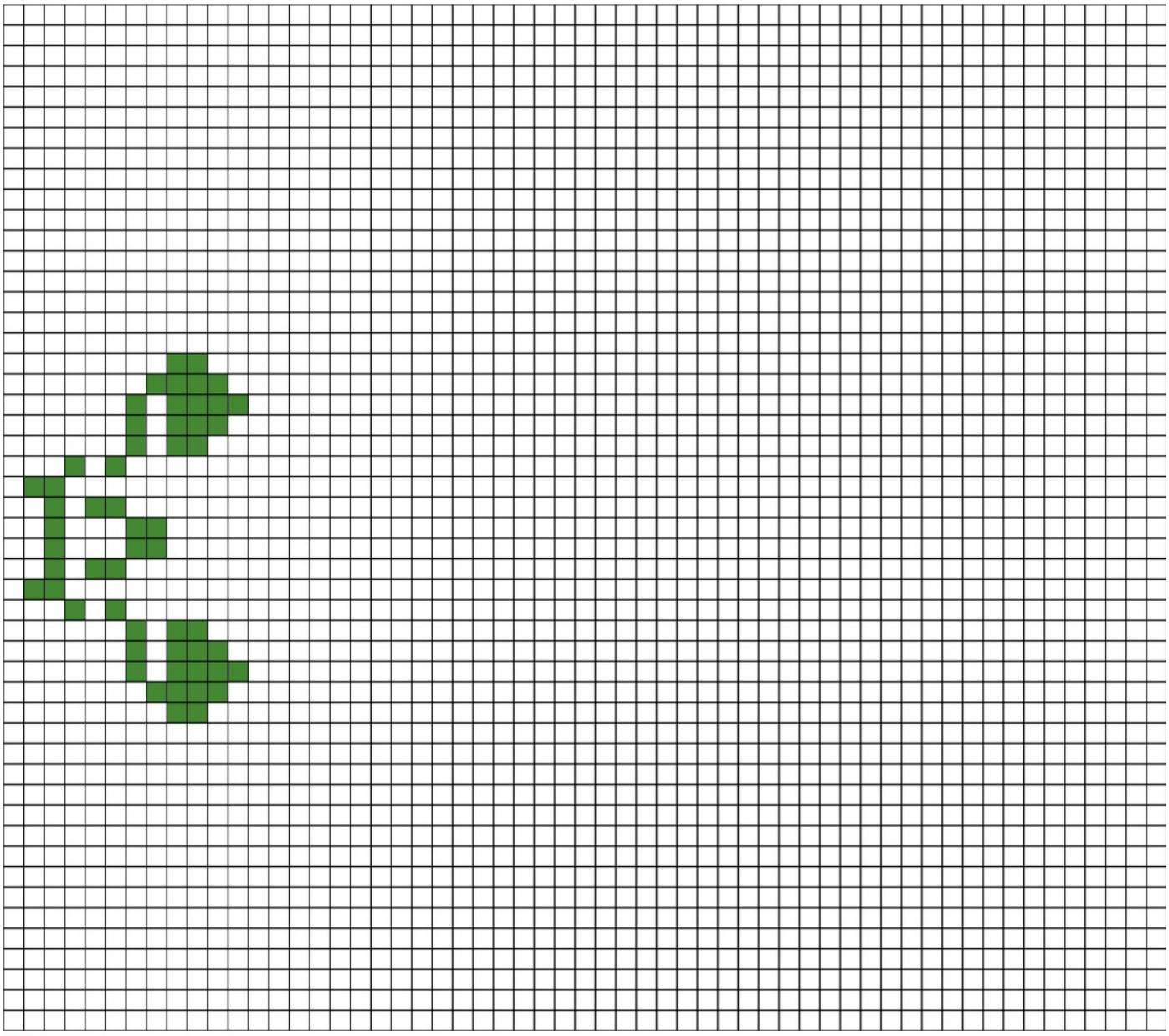
Generation: 1

Population: 3

Make sure investigate how these patterns evolve!

Load a pattern:





😴 the cells are sleeping

Generation: 0

Population: 56