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.

Lively Cells 🔬

What is this?

This is an R Shiny App for Conway´s Game of Life built by Vincent Ott with the help of work by Matt Dray .

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.

Controls

Wake Up 🌟   Sleep ⚫   Kill all ✏️

Load a pattern:

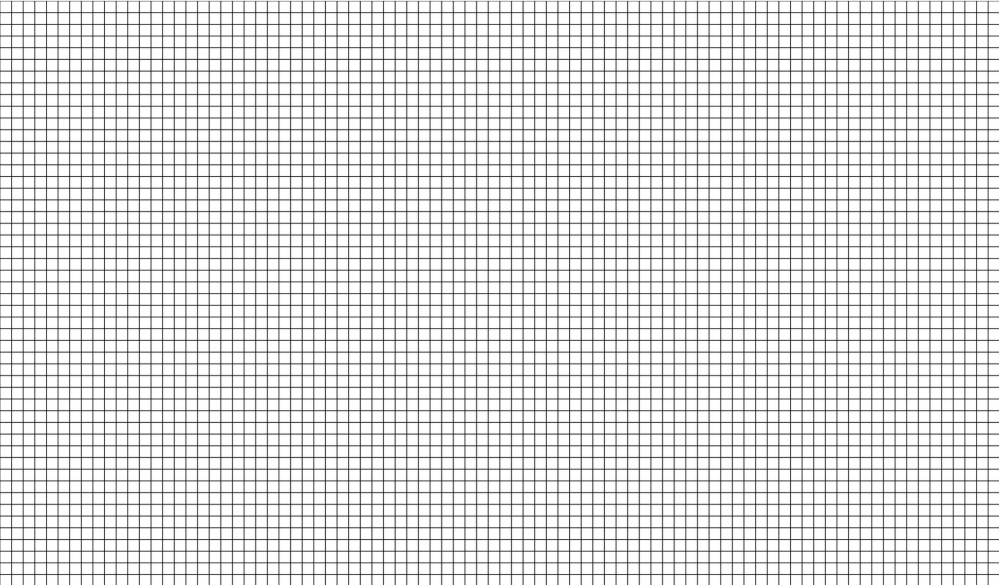Ⓦ   ◎   ⌐   ⏳   🚀   🌀

💡 There are no live cells. Use your mouse to click some to life!
Generation: 0
Population: 0

On the sidebar there are instructions…

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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.
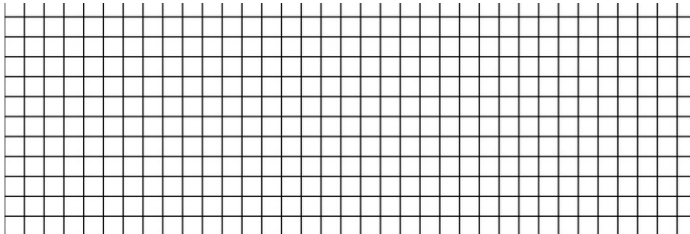
…and controls.

Controls

| Wake Up ☀️ | Sleep 🌑 | Kill all 🪓 |

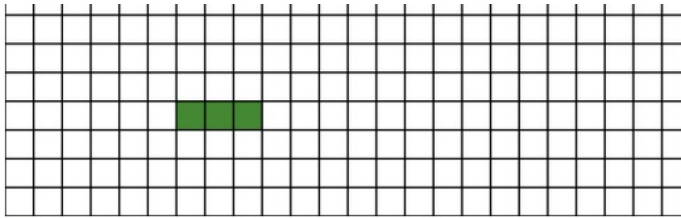## Load a pattern:

| 🦋 | 🌀 | 🔫 | ⏳ | 🚀 | 🎲 |

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!
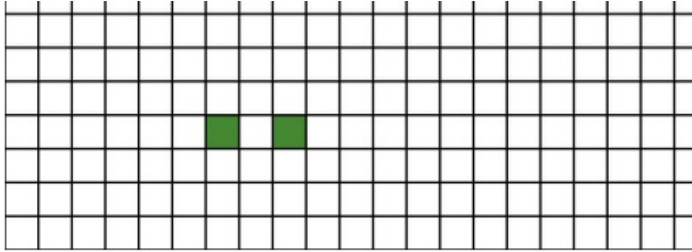
Generation: 0

Population: 0

😴 the cells are sleeping

Generation: 0

Population: 3

😴 the cells are sleeping
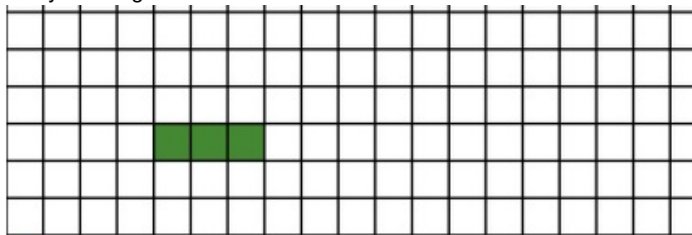
Generation: 0

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

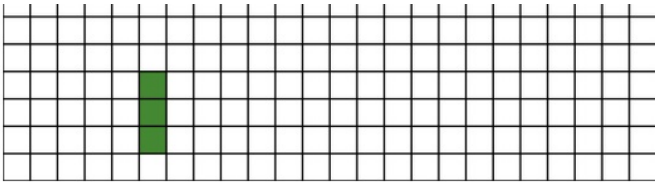Once you brought some cells to life…

😴 the cells are sleeping

Generation: 0

Population: 3

you can wake them up and watch them evolve…

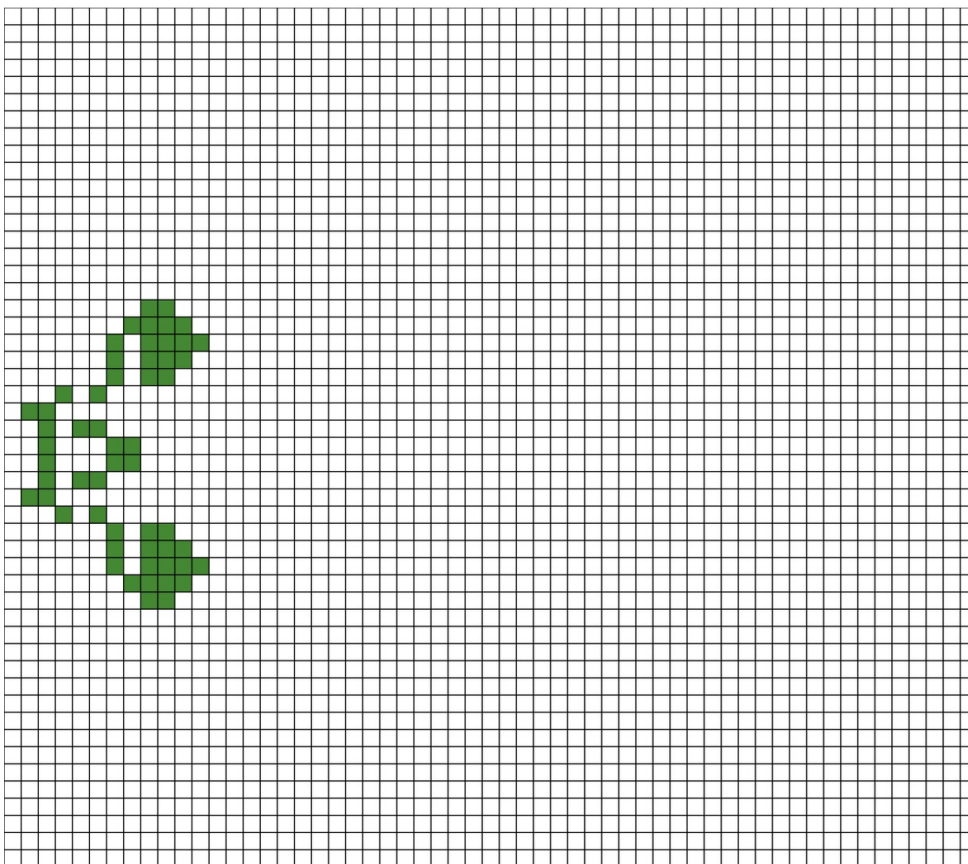# Controls

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