

Life 2

A fast implementation of the classic Life simulation.

Written by David Bau, based on Sam Streeper's Life module code.

For use with BackSpace. Should work both intel and motorola NS 3.1+.

Installation

1. Uncompress the file `LifeView.tar.Z` from the Workspace or a shell. This will make a single directory `LifeView/` with all the sources.
2. From a shell, `cd LifeView`, and type `^make^` to compile the module
3. To install the module in `~/Apps/Backspace.app`, type `^make install^`. To install it elsewhere, for example in `/LocalLibrary/BackSpaceViews`, type `^make install INSTALLDIR=/LocalLibrary/BackSpaceViews^`.

About Life

Life is a cellular automaton that evolves a grid of cells from one generation to the next, using the following rule: A cell survives to the next generation only if it has two or three neighbors. An empty grid square grows a cell in the next generation only if it is surrounded by exactly three cells in the current generation. These two simple rules provide the framework for the interesting displays that you can see in this screen saver.

About Life 2

Life applies the Life rules to a patch of randomly distributed cells on the screen, changing the colors of the cells as they age. The module is based on Sam Streeper's Life module code, but the following features have been added:

- A sparse algorithm for applying the Life rules so that when the field is mostly empty, not too much work is done. As a result, Life 2 is quite fast.
- New drawing code so the display no longer flickers.
- Automatic restart code that can recognize a cyclic stasis of almost any period.
- A souped up inspector that lets you change cell size and color.
- Support for very small cell sizes, so the full screen field is really huge (from their point of view).

About Dave

Dave should be working right now instead of learning how to program screensavers, but Dave finds this kind of stuff irresistible. If you like this module or fix it up or find something interesting about it, it would delight Dave to no end if you sent him a postcard mentioning "Life 2 for NextStep" to let him know.

David Bau; 777 South Avenue; Weston, MA 02193. bau@cs.cornell.edu
01/15/94.