

FRACT'OL

The term fractal was first used by mathematician Benoit Mandelbrot in 1974, he based it on the Latin word fractus, meaning "broken" or "fractured". A fractal is an abstract mathematical object, like a curve or a surface, which has a similar pattern whatever the scale.

The graphic library used in this project is the Minilibx (adapted from the original XLib). This program is only compatible on Mac OS Sierra devices.

First of all, you need to compile the program using the makefile :

```
$ make
```

When it's done you can launch the program and choose between mandelbrot, julia, or burningship :

```
$ ./fractol mandelbrot/julia/burningship
```

Controls

Keyboard

- . You can move around with the arrow keys
- . You can change the number of iterations with “+” and “-” (Not the ones on the numpad)
- . You can reset the map with “R”
- . You can lock/unlock Julia with “L”
- . You can exit the window with “ESC”

Mouse

- . You can zoom/dezoom using the mouse wheel
- . If you've unlocked Julia, you will see some changes happening while moving the mouse around

Screenshots

