# Conway's Game of Life Simulator

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User Manual

Welcome, user! This tutorial will teach you how to use my implementation of Conway's Game of Life.

When loading the page, you will see several fields that you can adjust to your liking. If you are happy with the default settings, go ahead and click "Start Simulation" at the bottom of the page. Here are descriptions of each of these options:

## 1. Speed Selector

Default: 150 ms

Adjust speed of simulation:

Speed:

527 ms

The Speed Selector will allow you to specify the interval between generations. The far left side of the slider will set the delay to 600 ms, or approximately 1.6 generations per second. The far right side will set the delay to 1 ms, which will update the board at 1000 generations per second (very fast!).  **The speed selector can be changed at any time during the simulation.**

## 2. Board Size

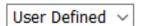Default: 50x50

Board Size:

| 30 |
|----|

This field will let you specify the number of square cells in the board. You can type in any integer between 10 and 100, as long as it is divisible by 5.

Smaller boards will likely die quickly because of the lack of space for cells to grow, so I recommend board sizes >= 50.

## 3. Scenario Preset

Default: Random

Scenario Preset:

| User Defined ⌄ |
|----------------|

The scenario preset selector will allow you to select between a couple of pre-made scenarios, as well as the option to draw the starting board yourself.

Option #1: Random

The "Random" option will generate a completely random board. This is the most fun option.

Option #2: 10 cell line

This option will start the board with a line of 10 living cells, which ends up being a pretty neat oscillator in the simulation.

Option #3: User-Defined

If you wish to select the initial set of living cells yourself, select this option. After clicking "Start Simulation", a new area of text and a button will show up. To begin, click anywhere on the game board to set a cell "alive". Once finished, click "Start User-Defined Simulation".

It is worth nothing that **at any time during any type of simulation**, you can click on the board to set a cell "alive". This is useful to bringing boards back to life when they get stuck. However, if you set a cell with no living neighbors to "alive", it will die instantly.