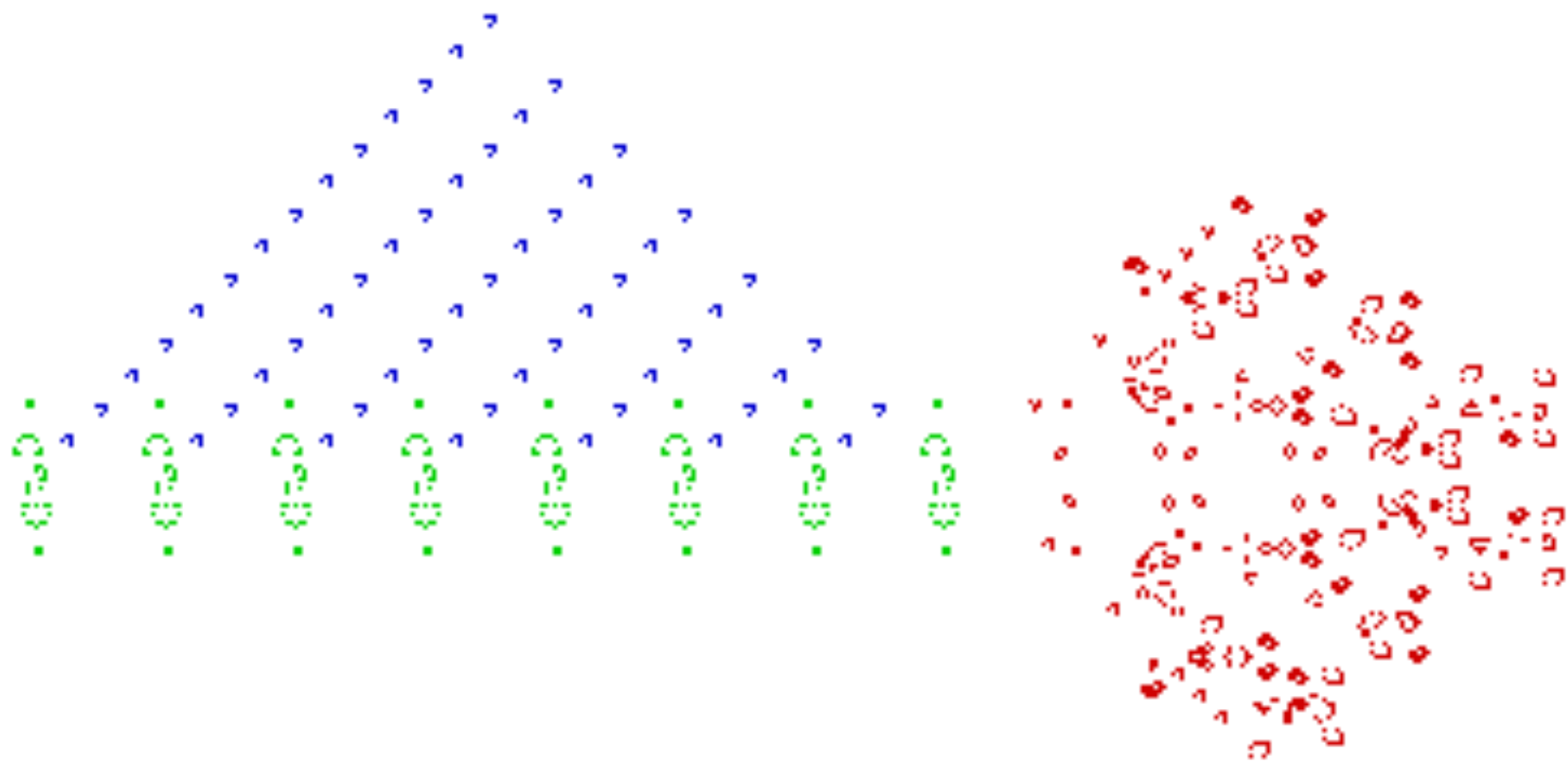


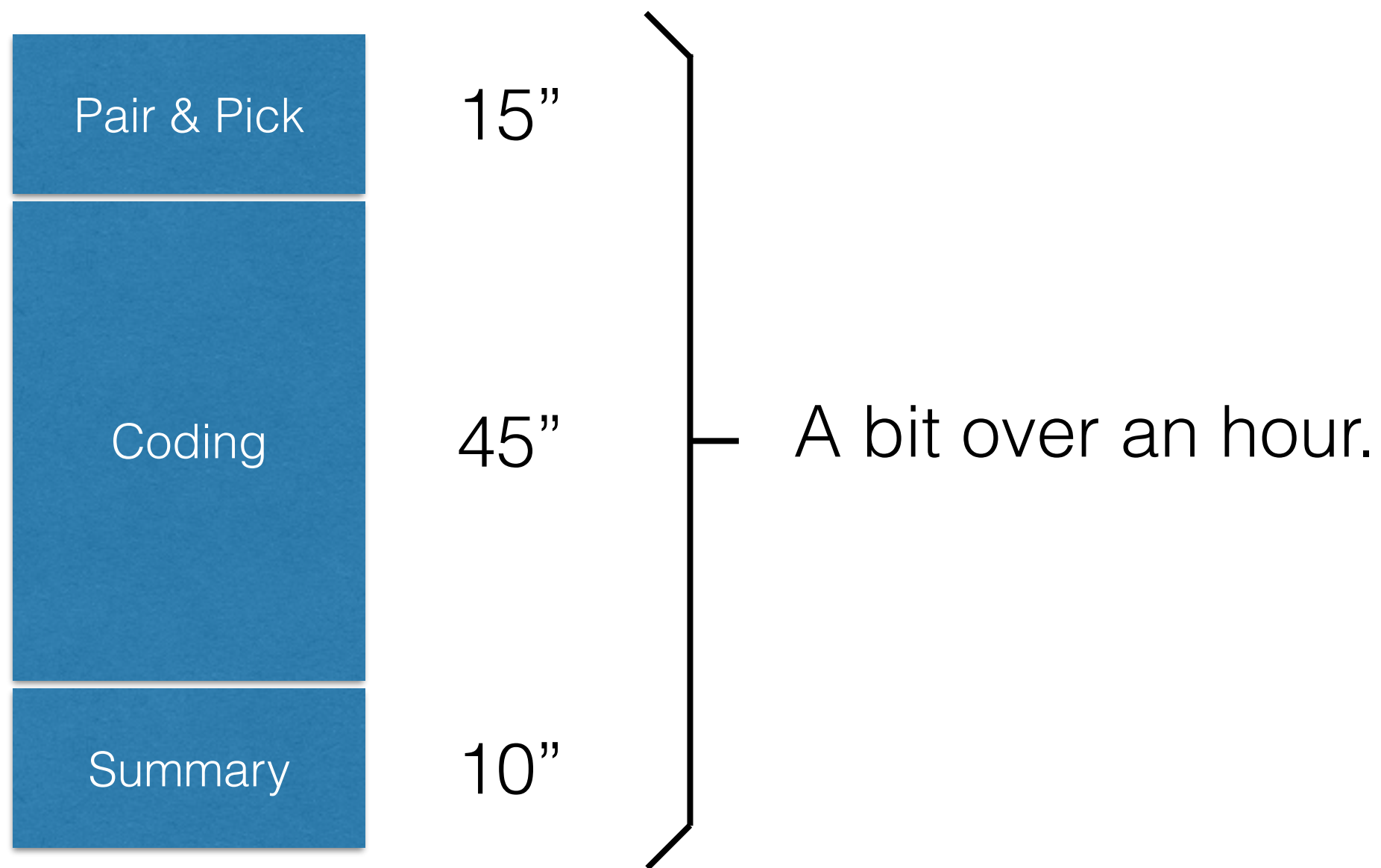
Seattle.**rb** Workshop

Have laptop, will code!



March 2015

How long?



How will it work?



Pair & Pick

Coding

Summary

Step 1: Pair Up!

By experience level.

Yet totally flexible.

How will it work?

Pair & Pick

Coding

Summary

Step 2: Pick your poison!

The exercise is to recode...

...a problem you **know**...

How will it work?

Pair & Pick

Coding

Summary

Step 2: Pick your poison!

The exercise is to recode...

...a problem you **know**...

...with added **constraint/s**

How will it work?

Pair & Pick

Coding

Summary

Step 2: Pick your poison!

The exercise is to recode...

...a problem you **know**...

...with added **constraint/s**

...**randomized!!**

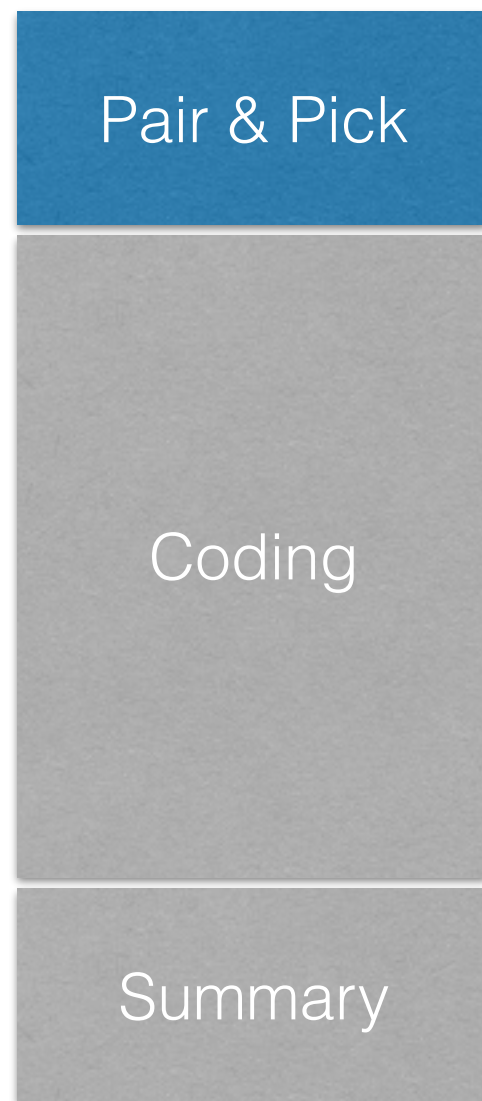
Wheel of Misfortune



Example Constraints:

- mute ping pong
- no conditionals
- no primitives as I/O
- methods ≤ 3 lines
- no getter/setters
- no instance vars
- ...and many more

How will it work?

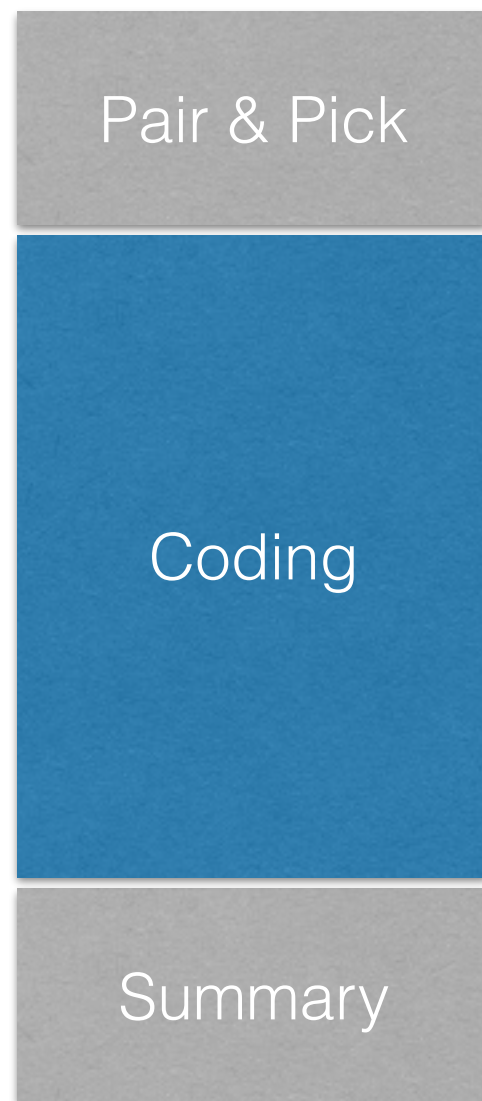


Fear not!

- You can pick your constraint,
- ...or let fate decide (i.e. wheel!),
- ...or be creative!

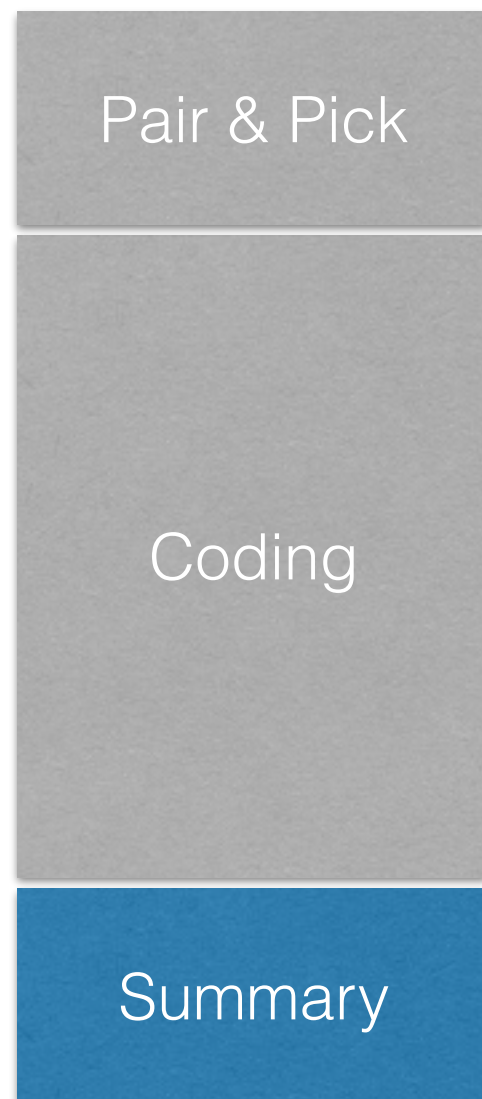
You and your partner decide.

How will it work?



Coding for 45 minutes.

How will it work?



Summary

Volunteer basis.

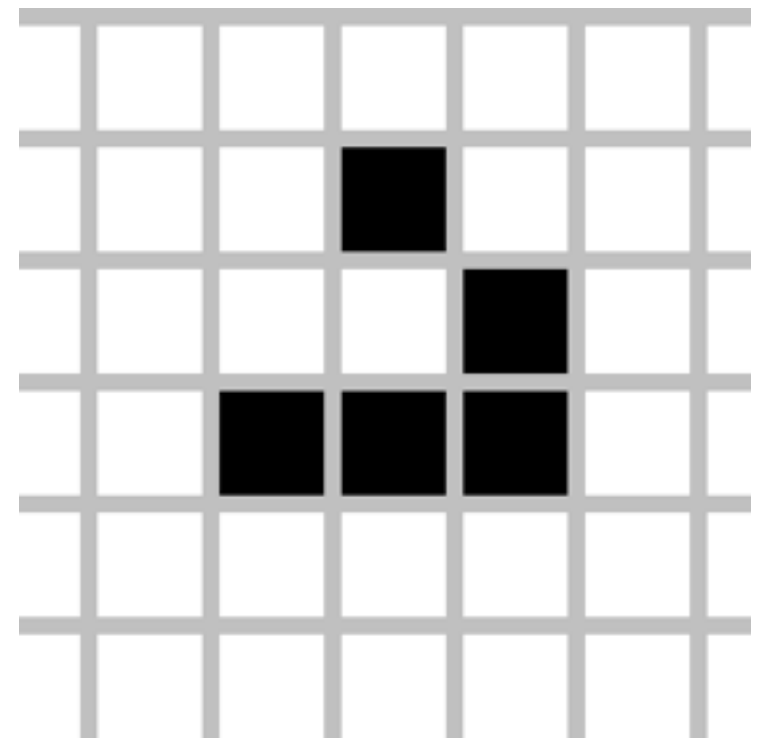
Step up and share conclusions.

Show off cool code.

Which problem?

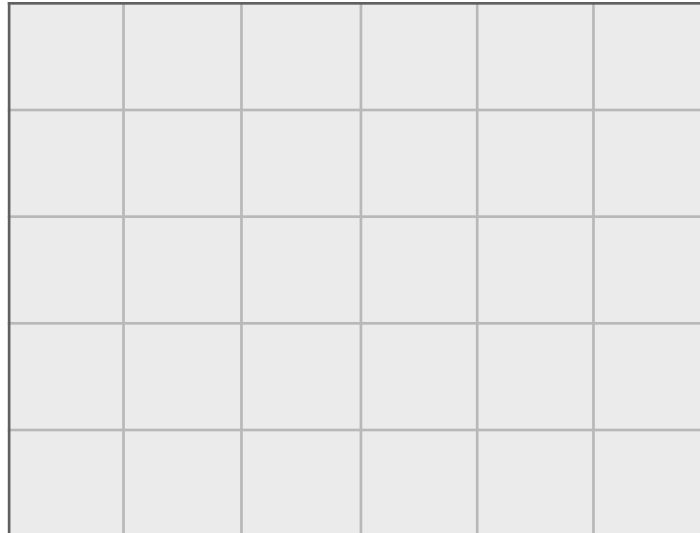
Conway's Game of Life (GoL):

- Proven concept.
- Easy to code.
- Good for newbies and senior dev.
- Digital Petri Dish.



Game of Life

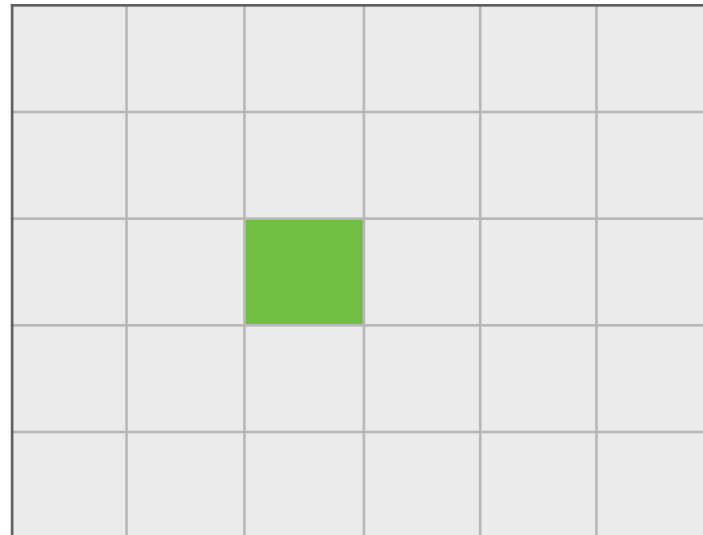
An infinite two-dimensional grid of square cells.



Game of Life

An infinite two-dimensional grid of square cells.

Each cell is in one of two possible states, dead or alive.

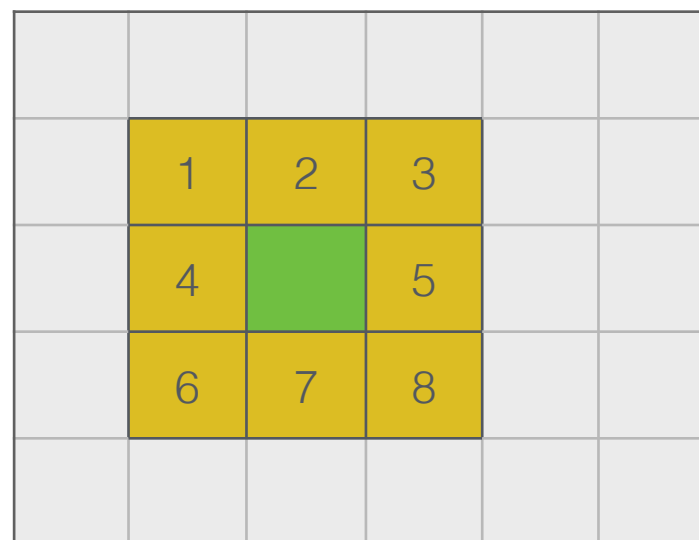


Game of Life

An infinite two-dimensional grid of square cells.

Each cell is in one of two possible states, dead or alive.

Every cell interacts with its eight neighbors.



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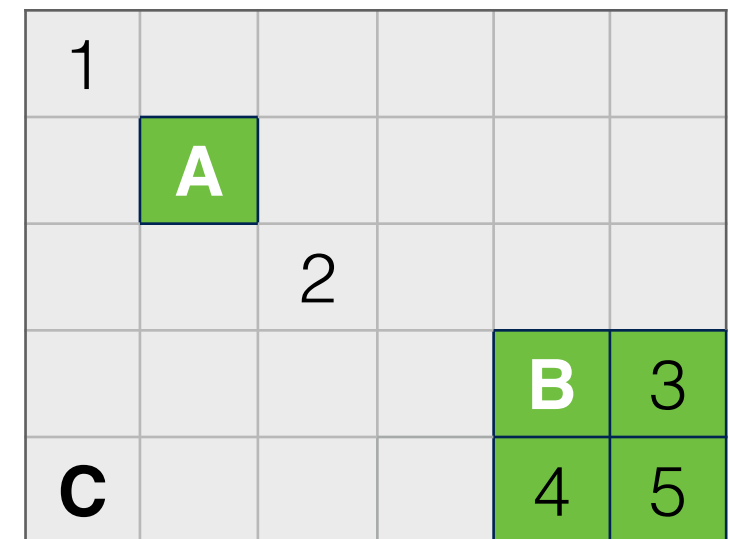
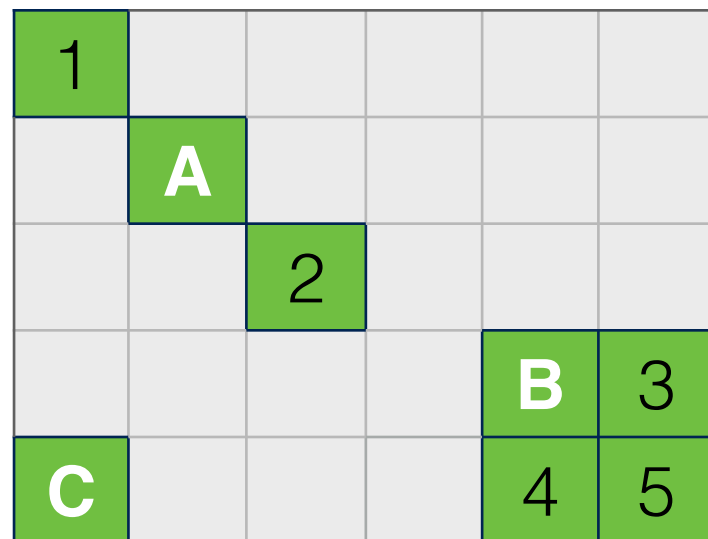
Every cell interacts with its eight neighbors.

At each step in time, 2 rules decide which cells live and die.

Births / deaths happen simultaneously in a tick of the clock.

Game of Life Rules

A living cell stays alive **if and only if** it has 2 or 3 living neighbors.



Game of Life Rules

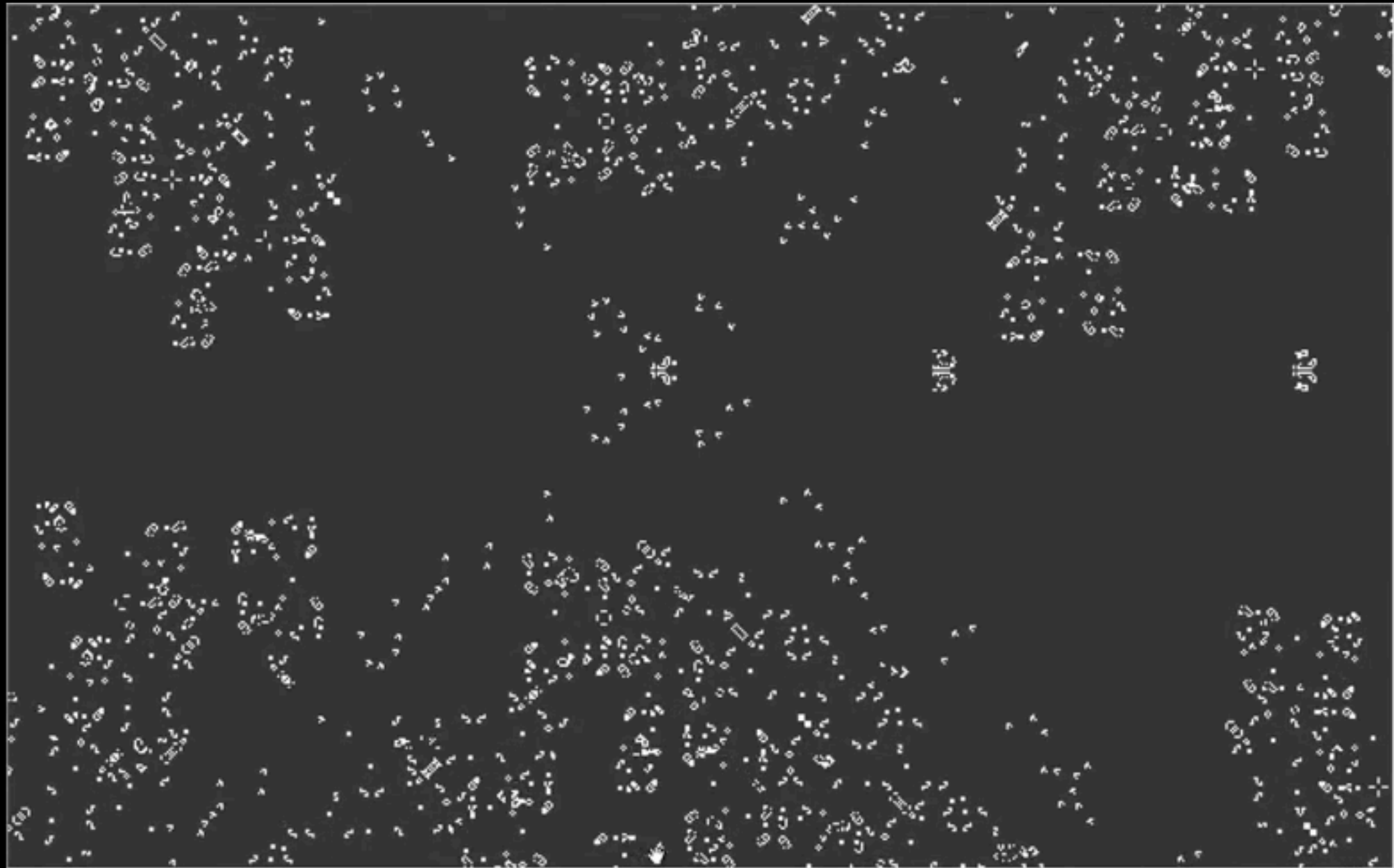
A dead cell with **exactly** 3 live neighbors becomes alive!

1	2		7		
3	4	A			
5	6				8
				B	9
					0



1	2		7		
3	4	A			
5	6				8
				B	9
					0

It's Alive!



Fork it!

<https://github.com/SeaRbSg/workshops>

- Example code (with testing),
- visualization code from Ryan Davis,
- and resources (code, history, videos,...).

sotoseattle@gmail.com