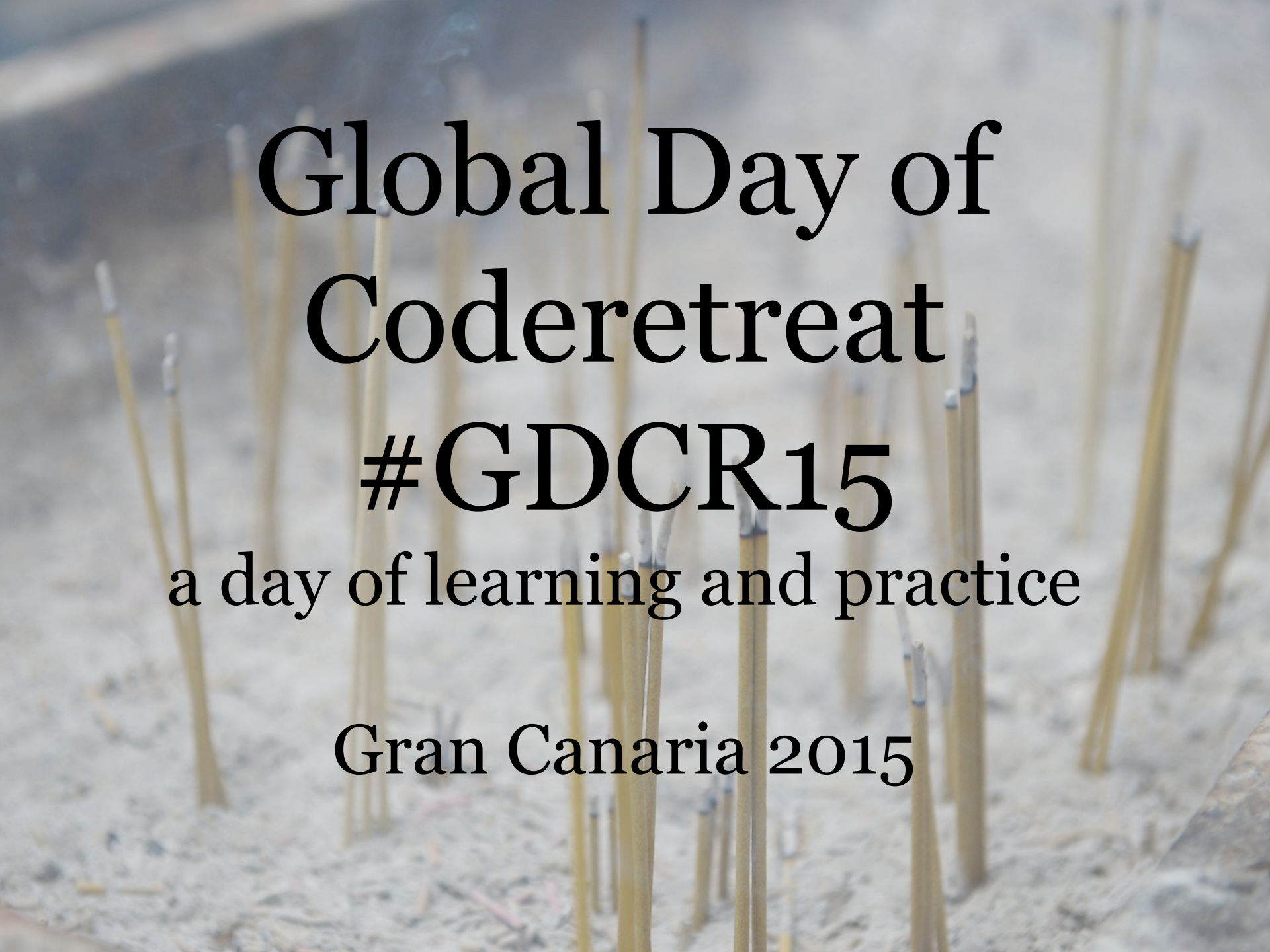

# Global Day of Coderetreat #GDCR15

a day of learning and practice

Gran Canaria 2015

# Carlos Ble

- Software craftsman
- Author
- Consultant & trainer
- Vegan
- Organic farmer apprentice

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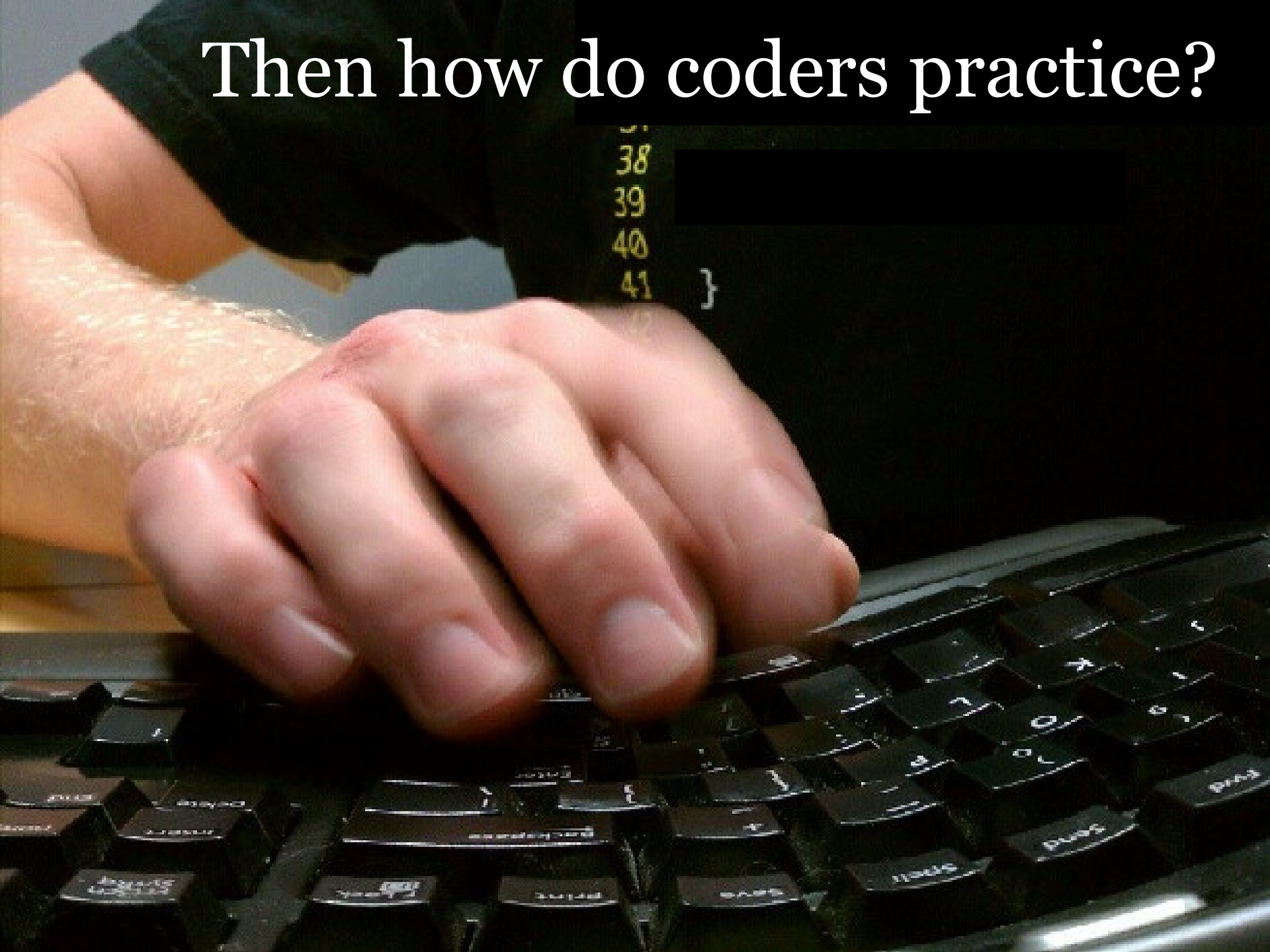
# Peter Kofler


- Ph.D. (Appl. Math.)
- Professional Software Developer for 15 years
- “fanatic about code quality”
- www.code-cop.org
  @codecopkofler

# How do musicians practice?

# Then how do coders practice?



# Why repeat the same kata?

- de-emphasise the generation of code
- concentrate on
    - the process of writing the code
    - naming test cases
    - the Red/Green cycle

# Code Retreat Principles

- Learn through pairing (switch pairs)
- Practice
- Experiment
- Have **fun**!

Coderetreat

*- honing the craft together*

*Coderetreat, http://coderetreat.org/*

# Coding Dojo Mindset

- Safe place outside work
- We are here to learn
- Need to slow down
- Focus on doing it right
- Collaborative Game

# Constraints

- Challenges during a dojo or coderetreat
- Moving to the extreme is a way of learning
- Examples
    - Missing Tool (No Mouse, ...)
    - Missing Feature (No IFs, ...)

# Why delete the code?

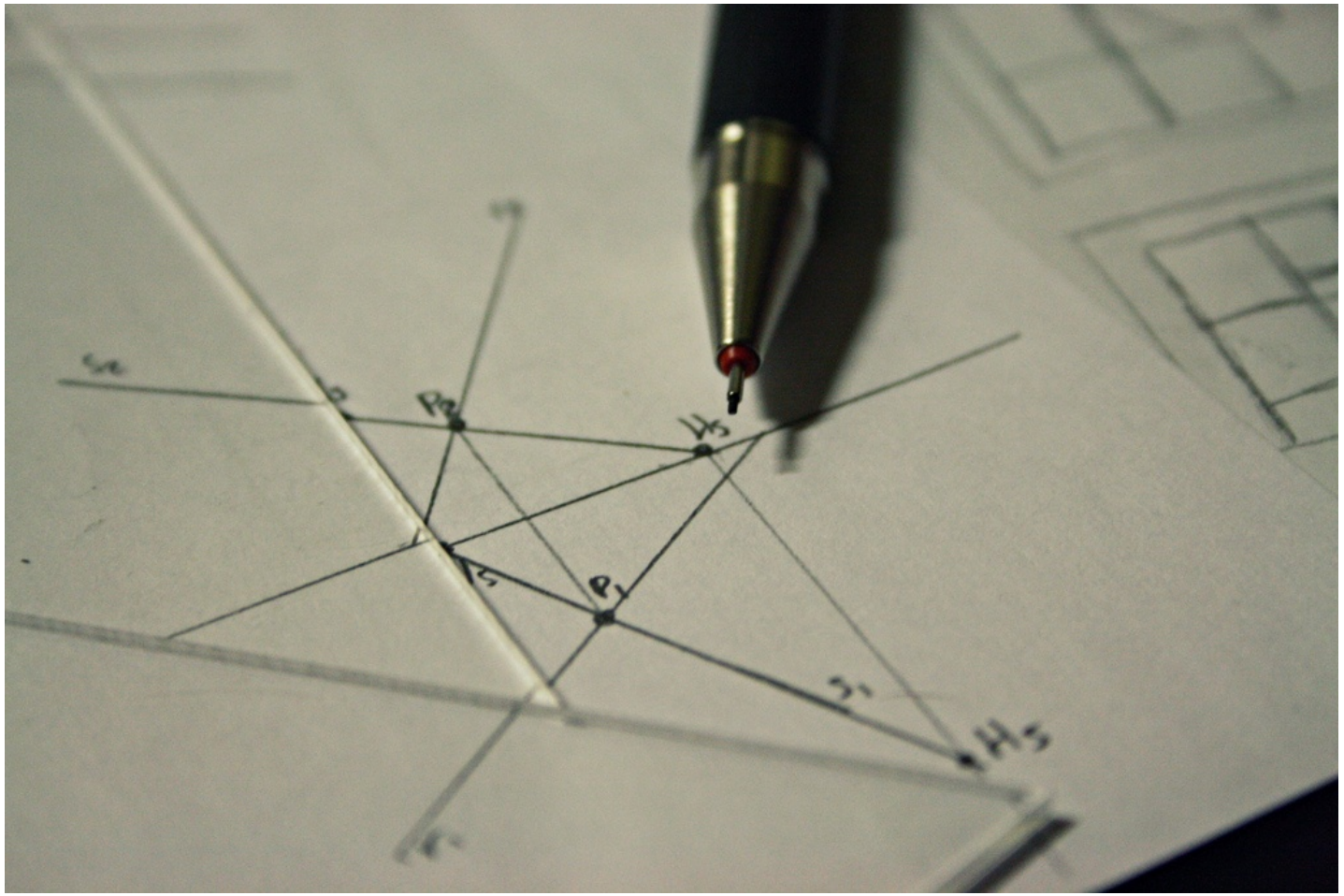
- No. Listen.
- Stop trying to go faster, start trying to go slower.
- Don't think about finishing, think about improving.
- Think about practising. As a team.
- That's what this day is for. Nothing else.

*No. Listen.* http://cyber-dojo.org/

# How to take advantage

- Embrace freedom of deleting the code
- Do what you always wanted but couldn't
- Get out of your comfort zone
- Pair with strangers in languages you do not know
- What you learn is your responsibility
  - Think about what you want to practice

# (OO) Software Design



# Why Software Design?

# OOP by Alan Kay

- Everything is an object.
- Objects communicate by sending and receiving messages.
- Hiding of state.
- Extreme late-binding (polymorphism).

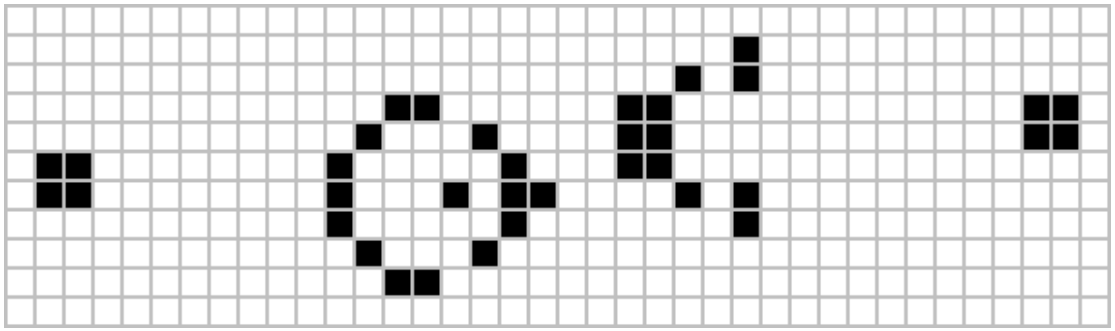
# Abstraction and Encapsulation

- Abstraction focuses on the observable behaviour of an object…
- Encapsulation focuses upon the implementation that gives rise to this behaviour…
- Encapsulation is most often achieved through information hiding, which is the process of hiding all of the secrets of object that do not contribute to its essential characteristics.

*Grady Booch says (in Object Oriented Analysis and Design)*

# Conway's Game of Life

- infinite, two-dimensional grid of cells
- interacts with its eight neighbours
- at each step in time, transitions occur
- four rules for cells depending on number of live neighbours

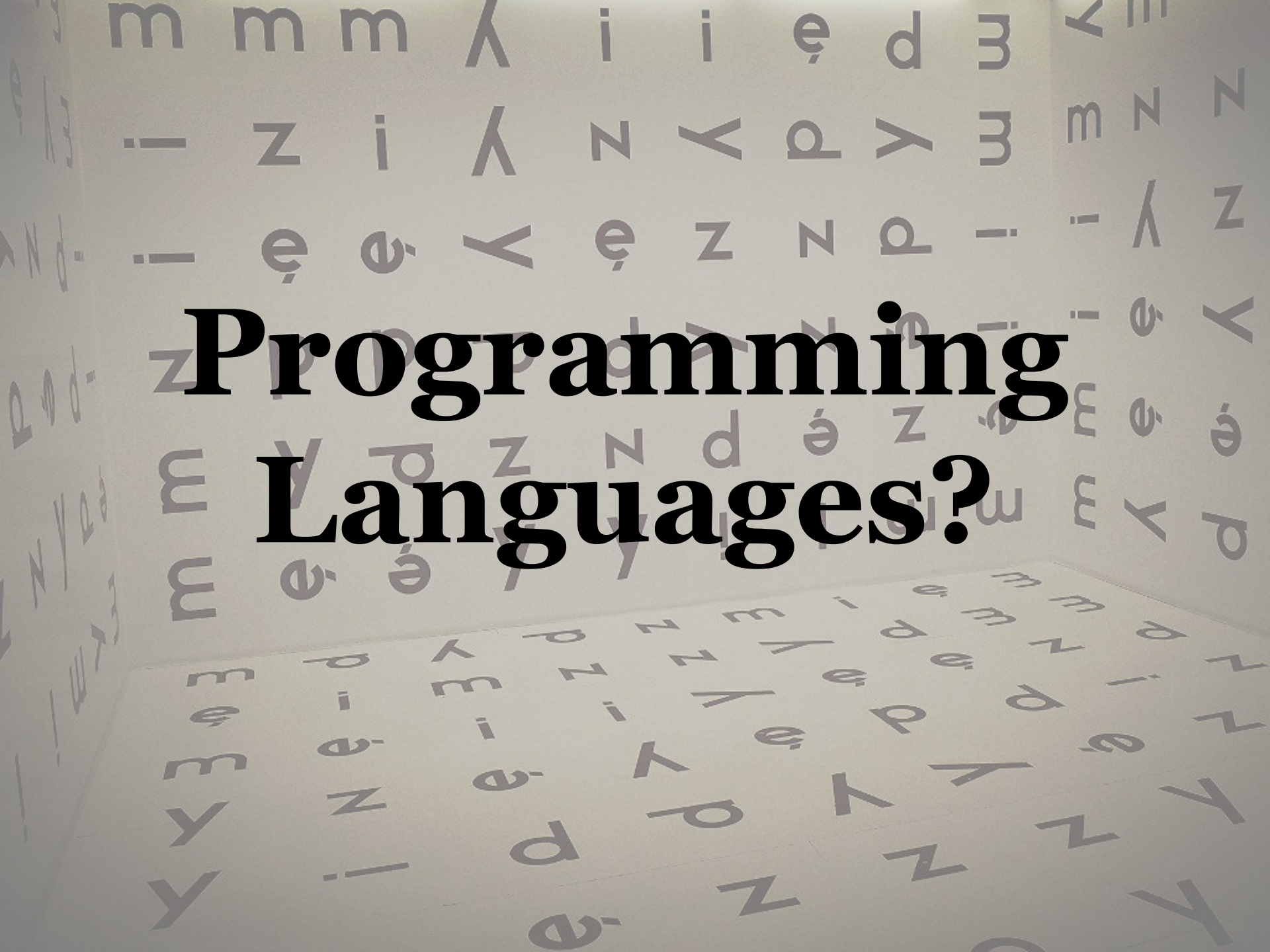


*http://en.wikipedia.org/wiki/Conway%27s_Game_of_Life*

# Rules of Cell Interaction

- Any live cell with fewer than two live neighbours dies by under-population.
- Any live cell with two or three live neighbours lives on to the next generation.
- Any live cell with more than three live neighbours dies, as if by overcrowding.
- Any dead cell with exactly three live neighbours becomes a live cell, by reproduction.

*http://en.wikipedia.org/wiki/Conway%27s_Game_of_Life*


Programming
Languages?

# Get Ready!

- Find a pair.
- Agree on language.
- Use one computer.
- Set up empty project.
- Write a failing test.
- Implement Game of Life.
- Use TDD if possible.

# Our Sessions

- explore the problem
- No Loops
- No Primitives
- Tell Don't Ask
- free session/No Mouse/Ping Pong

# Closing Circle

- What did you learn today?
- What surprised you today?
- What will you do differently in the future?

# CC Images

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