

# Coding Dojo #2

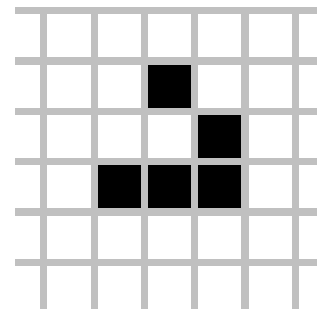
# Coding Dojo

- A Coding Dojo is a coding session centered around a small programming challenge, likely a Coding Kata.
  - One half of the pair is changed every 5 minutes.
  - The pair on the keyboard should continuously explain what they are doing.
  - The pair on the keyboard should stop when someone from the audience falls off the sled – and only continue when that someone is back on track again.
  - The audience should give comments on design only when there is green bar. (During red bar audience can only ask questions.)
  - The pair should not continue on writing new code if other participants are not happy with the current design. (The code should be always well refactored before starting to write new code.)

# TDD as if you meant it

1. Write exactly ONE failing test
2. Make the test from (1) pass by first writing implementation code IN THE TEST
3. Create a new implementation method/function by:
  1. Doing extract method on implementation code created as per (2), or
  2. Moving implementation code as per (2) into an existing implementation method
4. Only ever create new methods IN THE TEST CLASS
5. Only ever create implementation classes to provide a destination for extracting a method created as per (4).
6. Populate implementation classes by doing move method from a test class into them
7. Refactor as required
8. Go to (1)

# Conway's Game of Life



- Infinite two-dimensional grid of square *cells*. Each cell can be *live* or *dead*. Each cell has 8 *neighbors*.
- The initial pattern is the system's *seed*. At each *tick*, the following rules are applied to every cell, producing the next *generation* as a function of the previous generation:
  1. Any live cell with **fewer than two** live neighbours dies, as if caused by *underpopulation*.
  2. Any live cell with **more than three** live neighbours dies, as if by *overcrowding*.
  3. Any live cell with **two or three** live neighbours lives on to the next generation.
  4. Any **dead cell with exactly three** live neighbours becomes a live cell.