



Code Retreat @ Outbrain

TDD

CR @ OB

- 1 hour session every 2 weeks
- What do I get for X ?
 - Have Fun!
 - Improve your coding skills
 - Learn from others
 - Share with others
 - Play with new stuff

Today

- Conway's Game Of Life
- Test-Driven-Development



TDD

- Write a failing test (**red**)
- Make the test pass (**green**)
- Refactor code

REPEAT!

TDD

- Coined/Rediscovered by Kent Beck in 2003
- Benefits:
 - short feedback loop
 - writing small chunks of code
 - some claims it improves design
 - code remains tested



Uncle bob rules

- You are not allowed to write any production code unless it is to make a failing unit test pass.
- You are not allowed to write any more of a unit test than is sufficient to fail; and compilation failures are failures.
- You are not allowed to write any more production code than is sufficient to pass the one failing unit test.

<http://blog.cleancoder.com/>

TDD is DEAD (DHH said so...)

- It is controversial
- It is not working for everybody / all the time
- It requires practice
- TDD is like “Dual Entry Bookkeeping”

[https://vimeo.com/](https://vimeo.com/43734265)
43734265

Game of life Rules

- 2 dimensional “Universe” with cells (un/populated)
- At each step in time, the following transitions occur:
 - Any live cell with fewer than two live neighbours dies, as if caused 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 over-population.
 - Any dead cell with exactly three live neighbours becomes a live cell, as if by reproduction.

Rules #2

- A dead cell with exactly three live neighbors becomes a live cell (birth).



- A live cell with two or three live neighbors stays alive (survival).



- In all other cases, a cell dies or remains dead (overcrowding or loneliness).



Tips

- You still have to think / design (just not in red state)
- //use comments for more tests and TODO's
- Work on quality, not capacity

Enjoy!

Links

- <https://github.com/oshai/game-of-life>
- https://en.wikipedia.org/wiki/Conway%27s_Game_of_Life