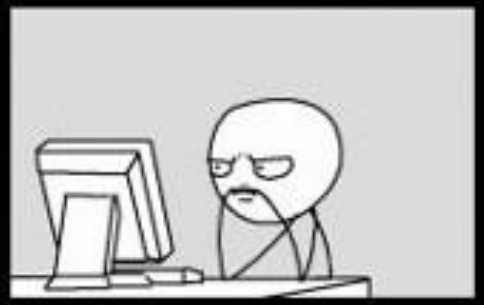
Software Craftsmanship

or How to make your job delightful

Software Engineers

What Society Believes I Do



What My Wife Believes I Do

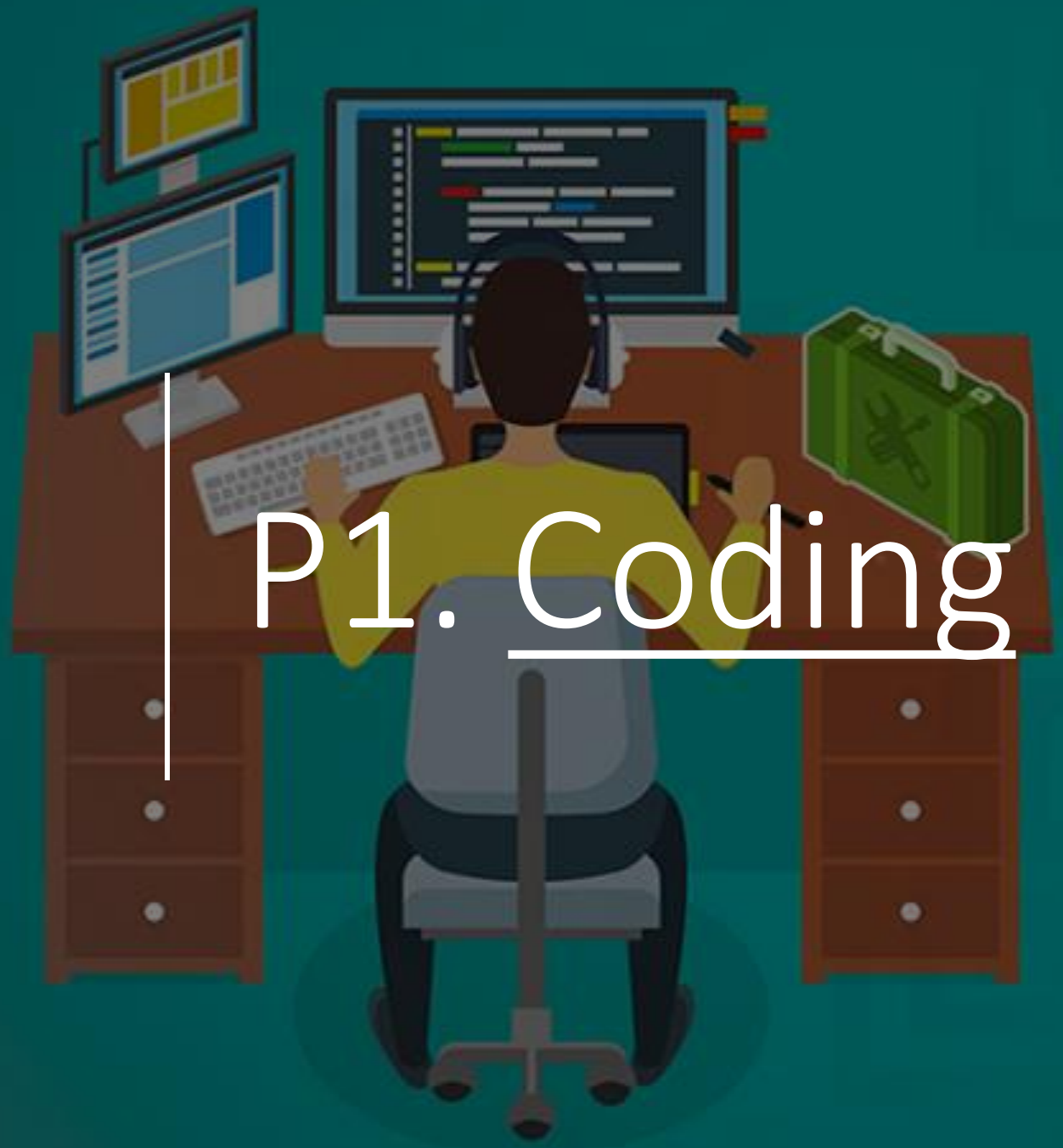
What My Mom Believes I Do

What My Boss Believes I Do

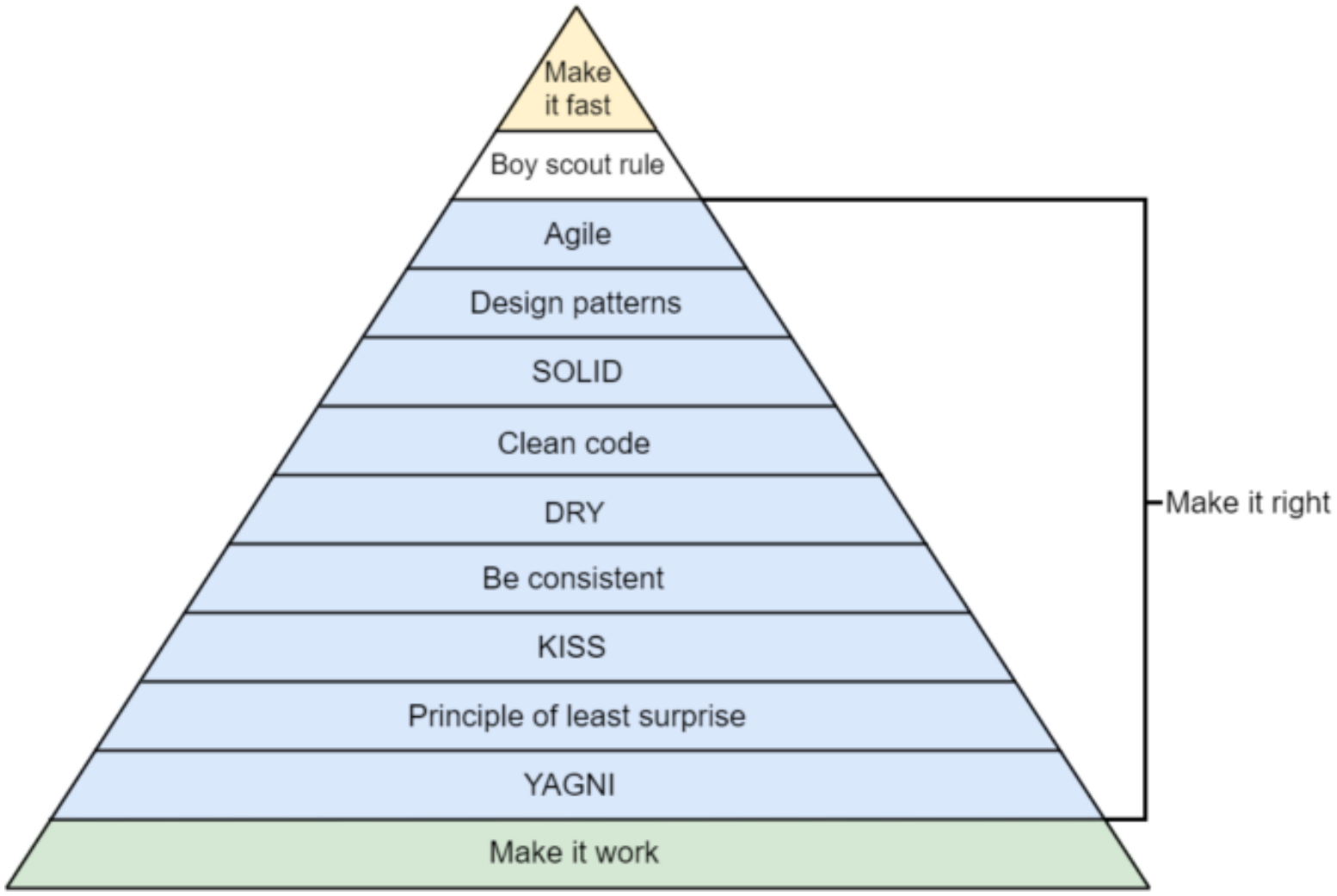
What I Believe I Do

What I Really Do

Best Practice is a technique or methodology that, through experience and research, has proven to reliably lead to the desired result.

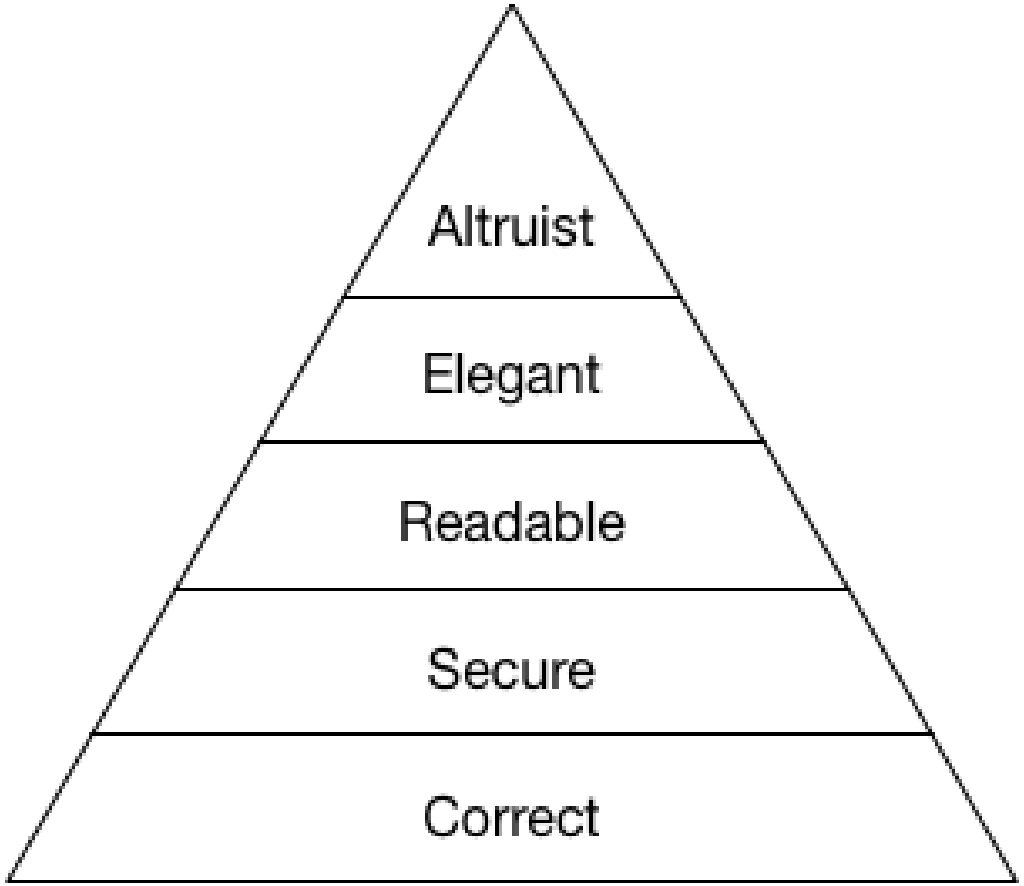


P1. Coding



https://medium.com/swlh/the-must-know-clean-code-principles-1371a14a2e75

When you open a Pull Request, you're Saying "My Code Is Production Ready"

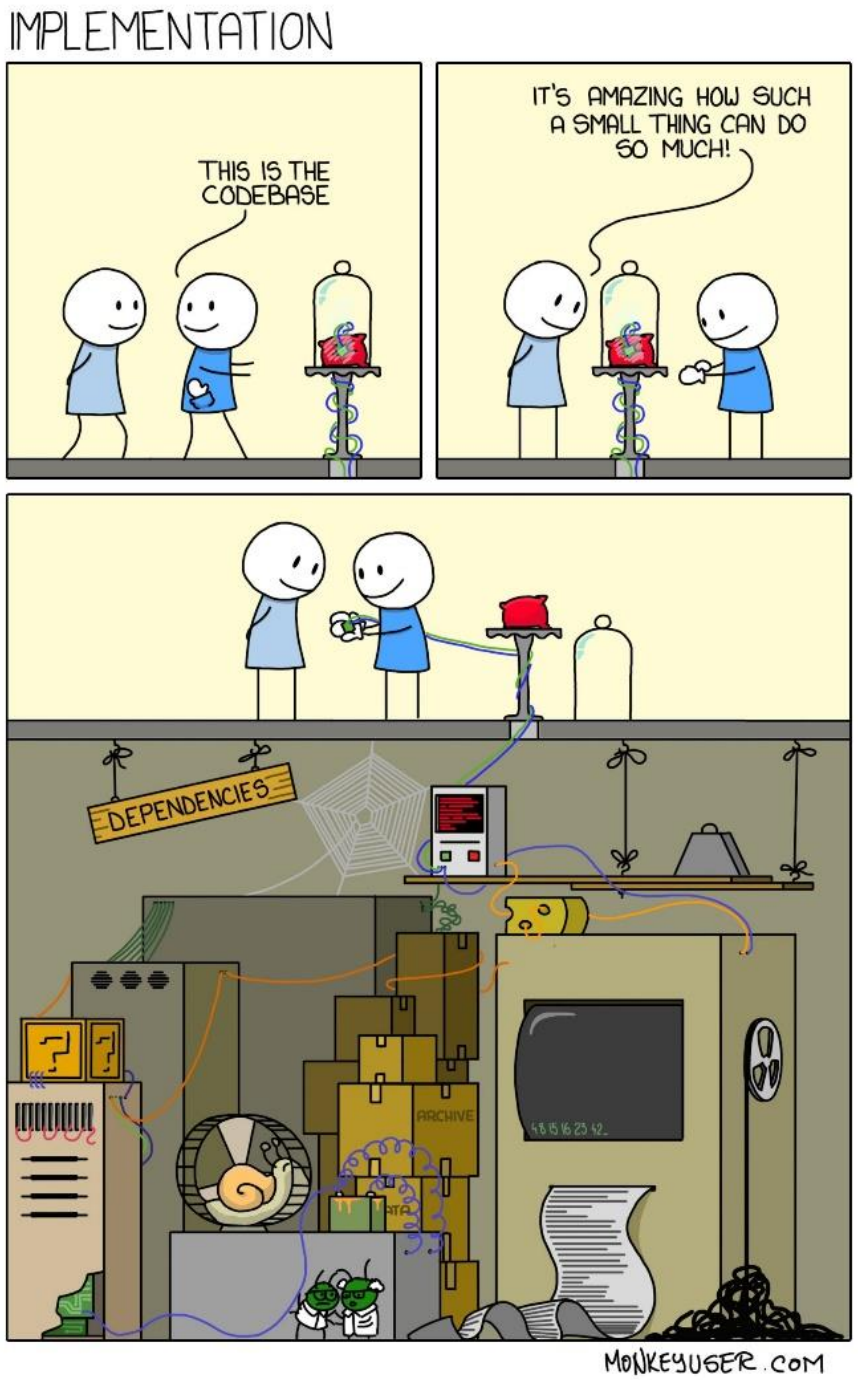


YAGNI

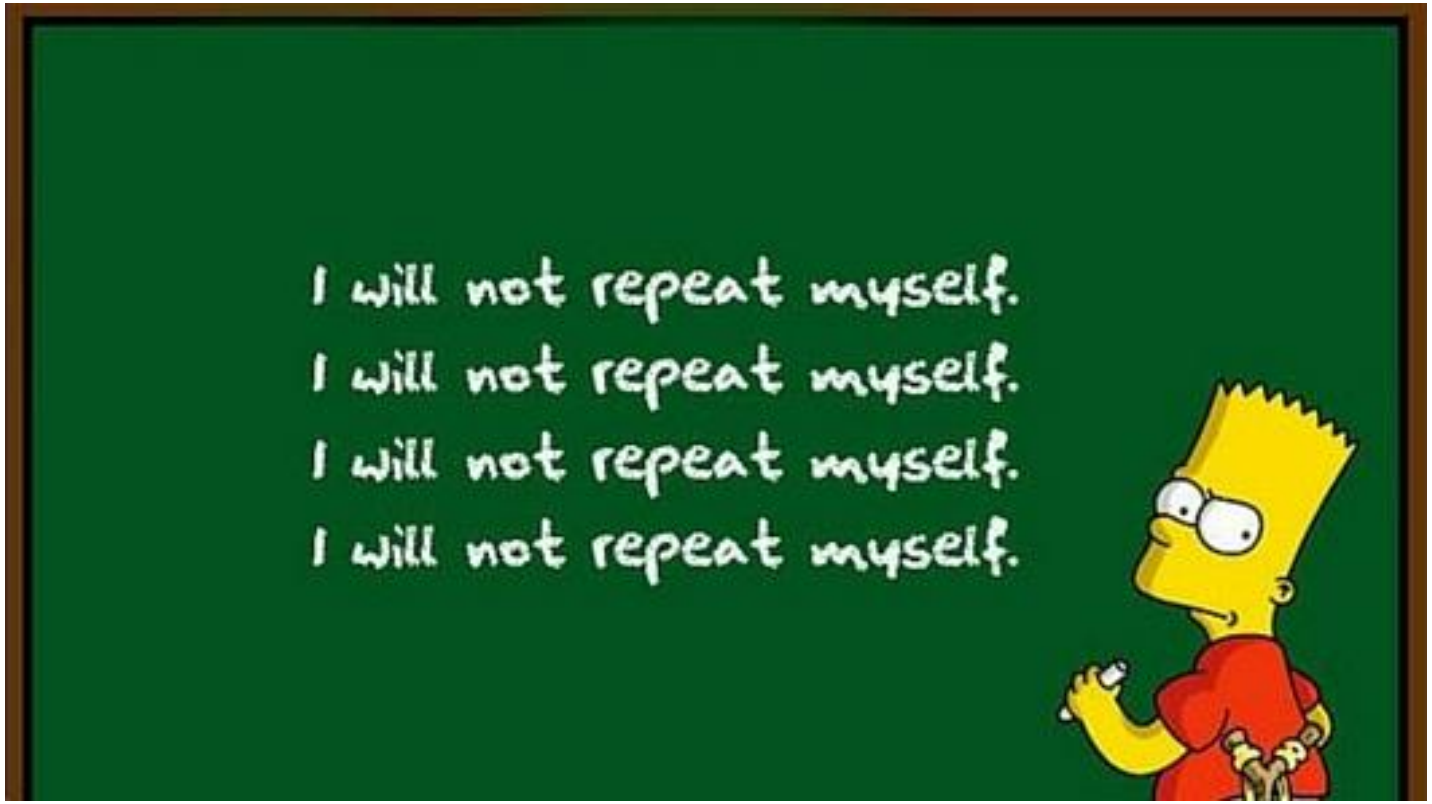
Maybe a ticket got merged in from the backlog

Principle Of Least Surprise

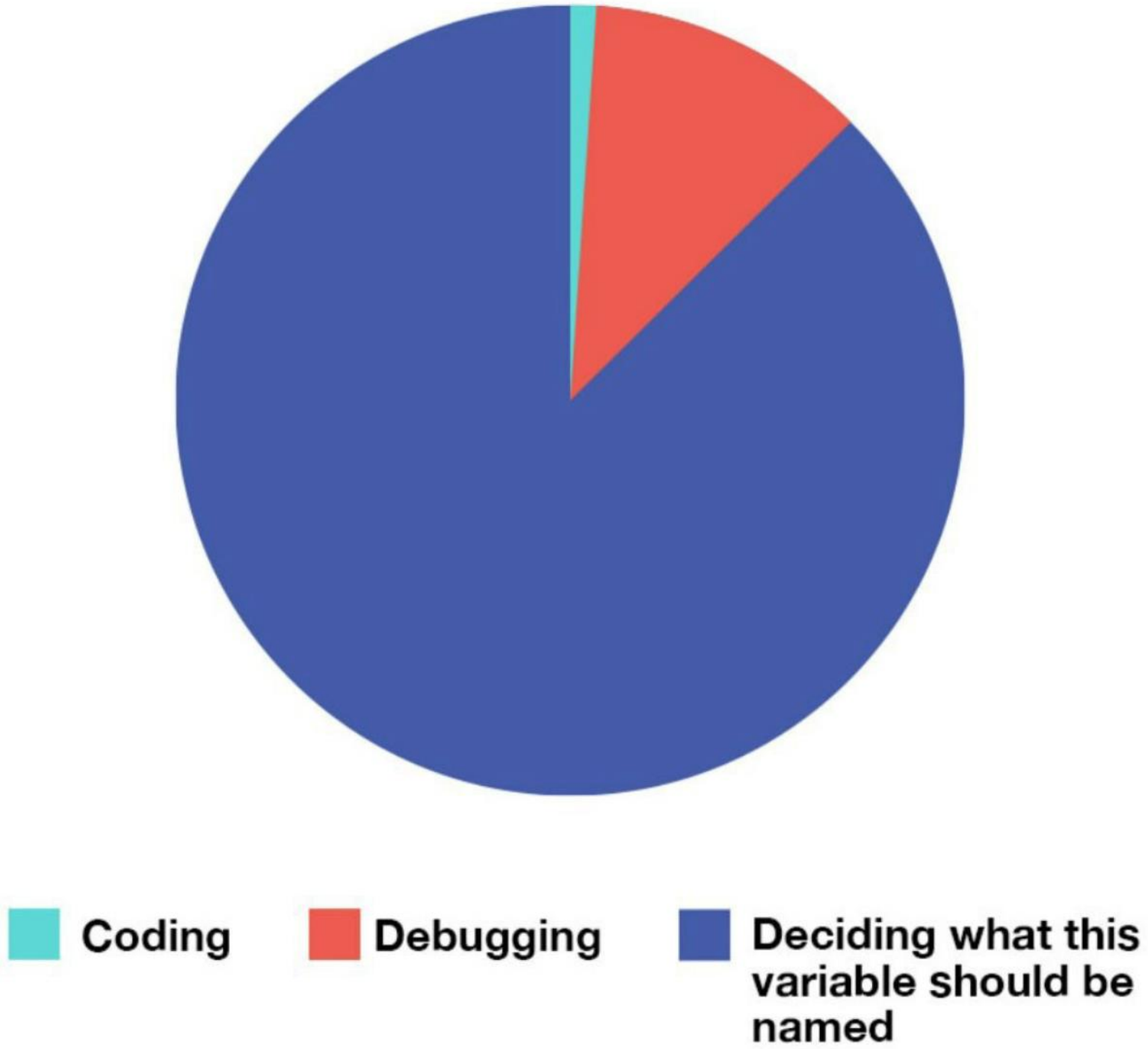
Keep It Simple



Do not Repeat Yourself



Clean Variable Names



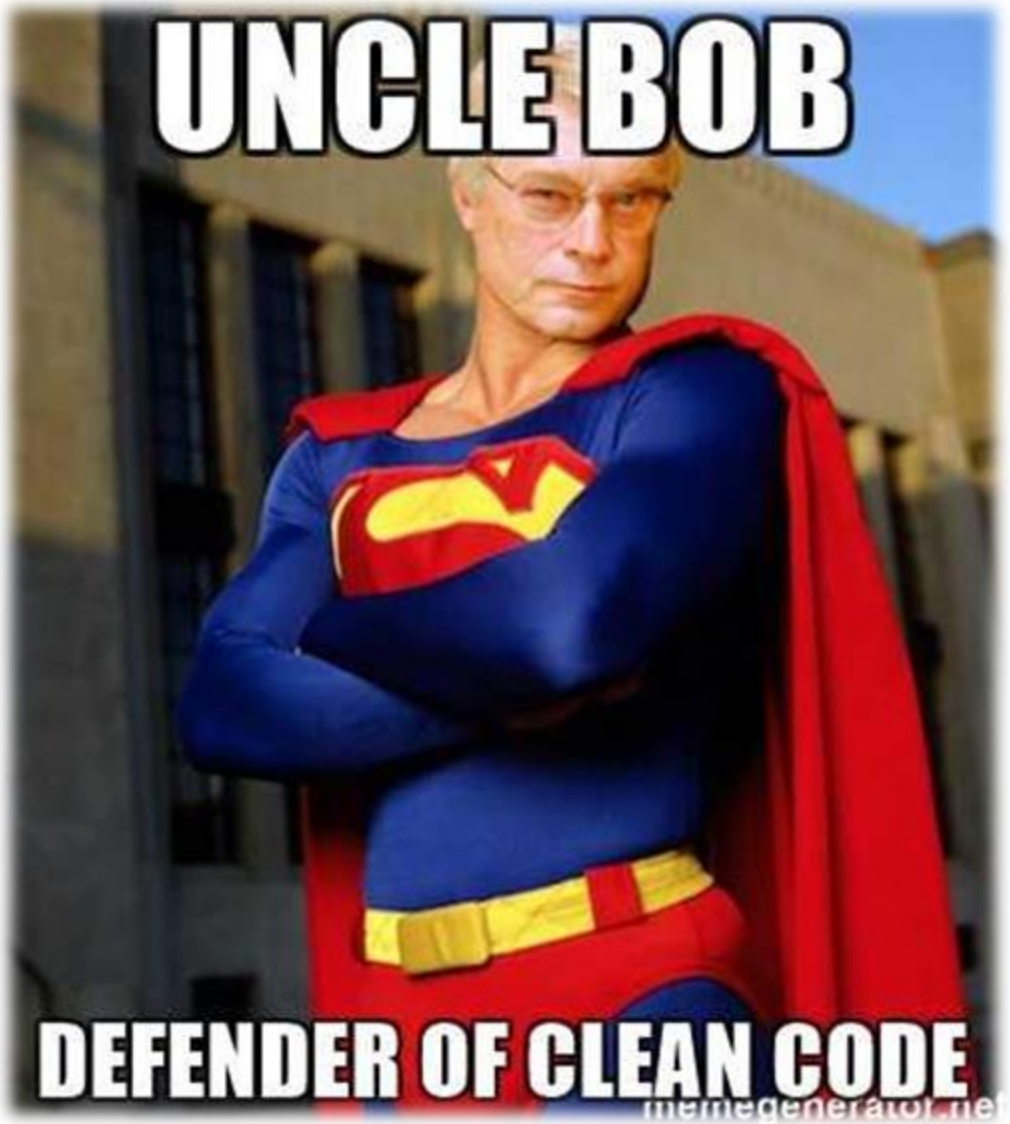
Master programmers think of systems as stories to be told rather than programs to be written

-Robert C. Martin

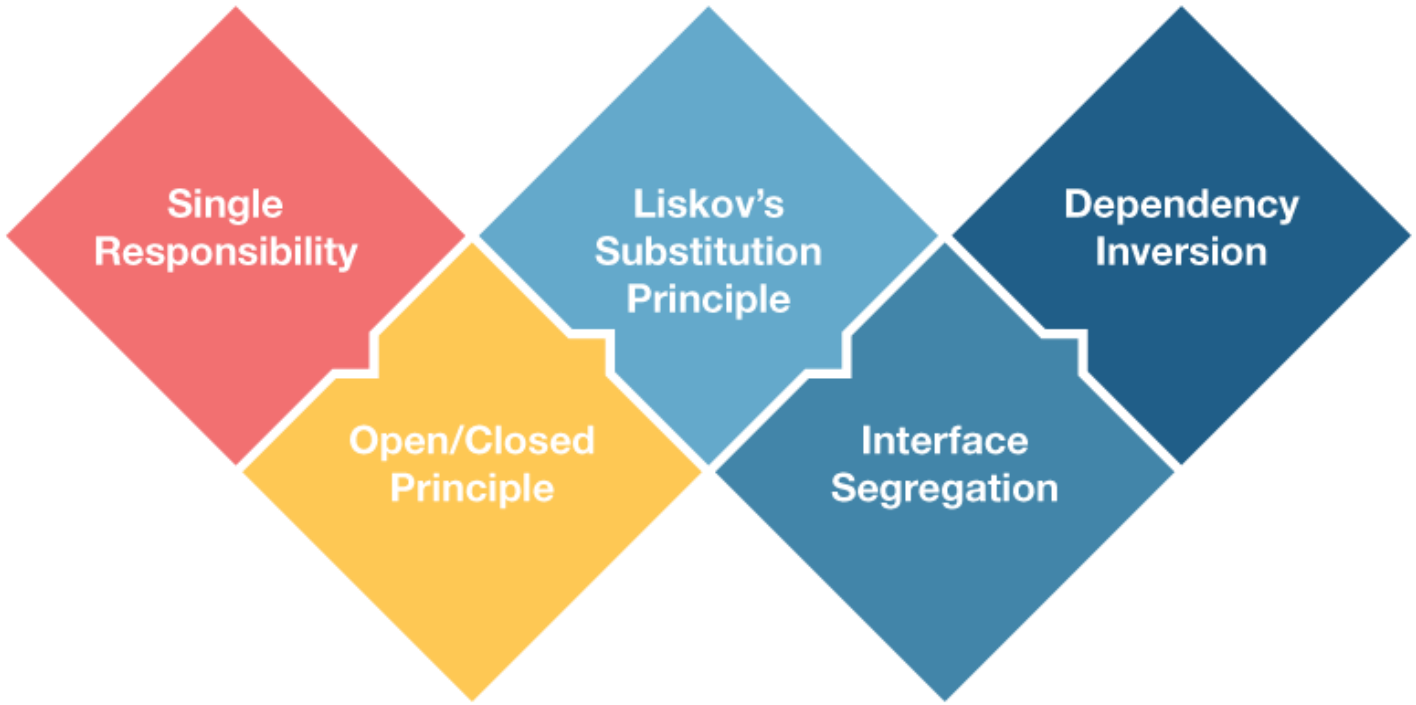
♫♫♫
There's a man named Uncle Bob,
He's the cleanest coder on the job,
With his agile moves and architecture too,
He'll make your code shine like brand new,
Uncle Bob, Uncle Bob…
♫♫♫

"Clean code is simple and direct. Clean code reads like well-written prose. Clean code never obscures the designer's intent but rather is full of crisp abstractions and straightforward lines of control."

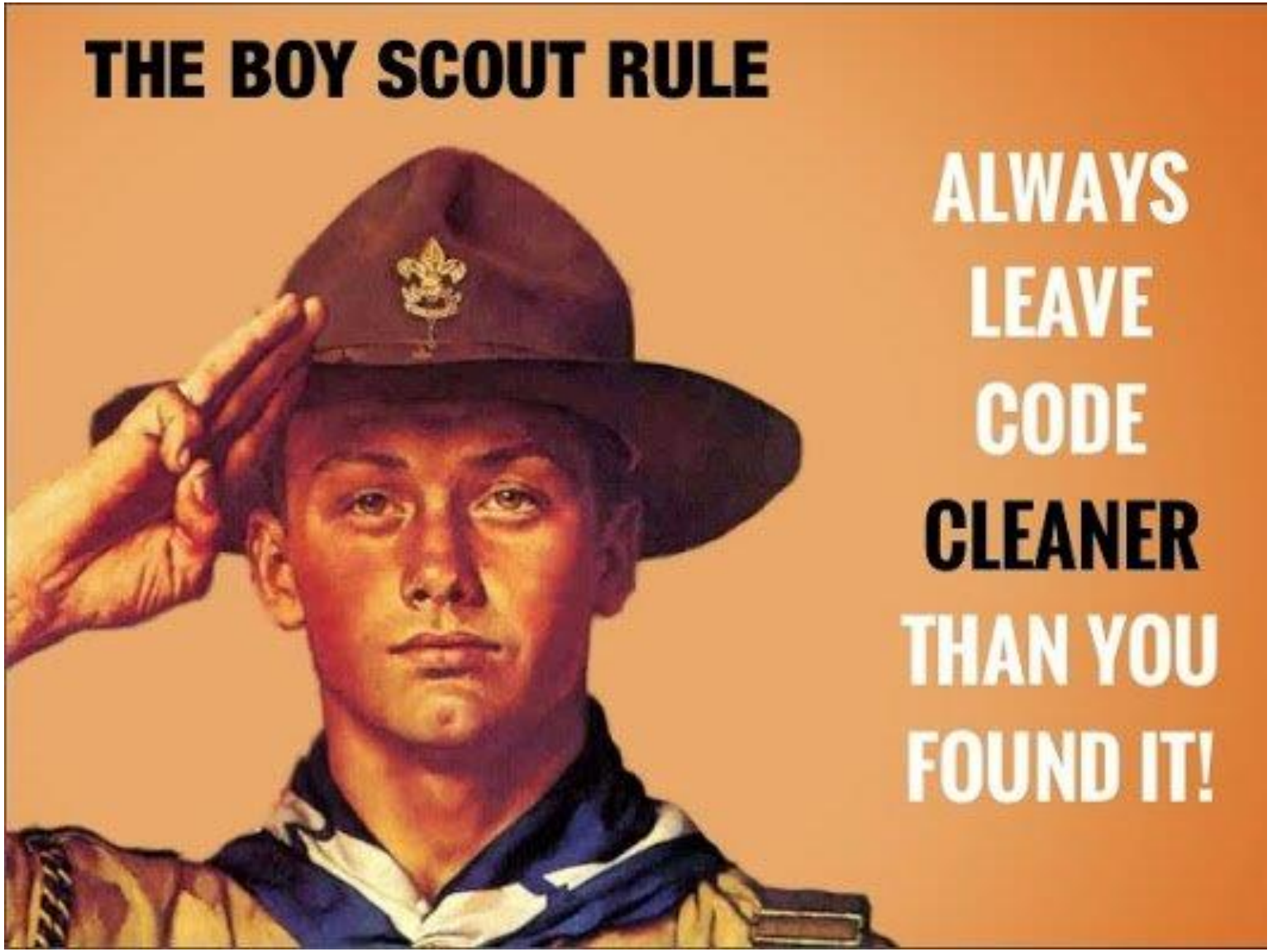
Robert "Uncle Bob" Martin



S.O.L.I.D.

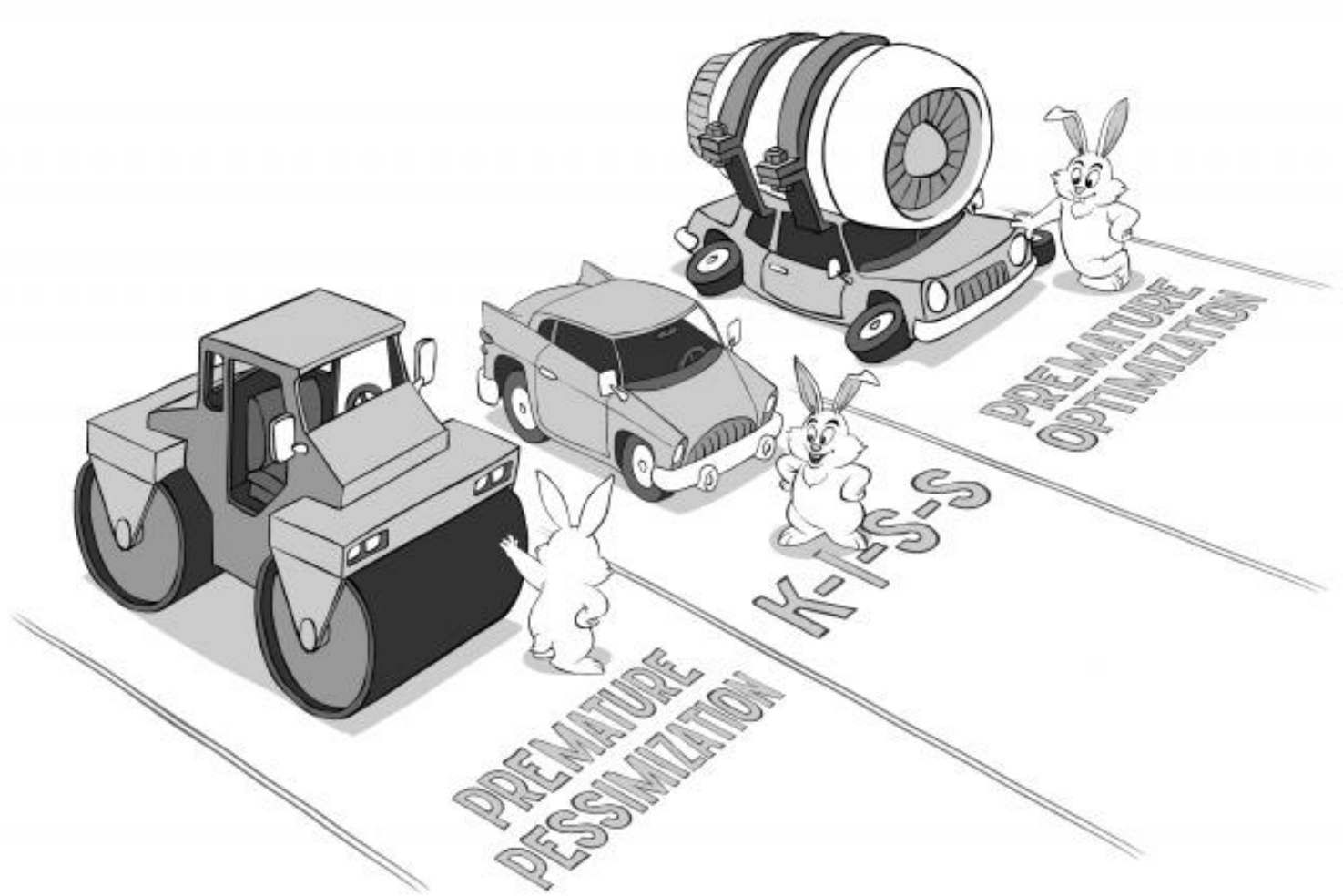

Single Responsibility
Open/Closed Principle
Liskov's Substitution Principle
Interface Segregation
Dependency Inversion

Software Design Patterns



The Boy Scout Rule

Avoid Premature Optimization



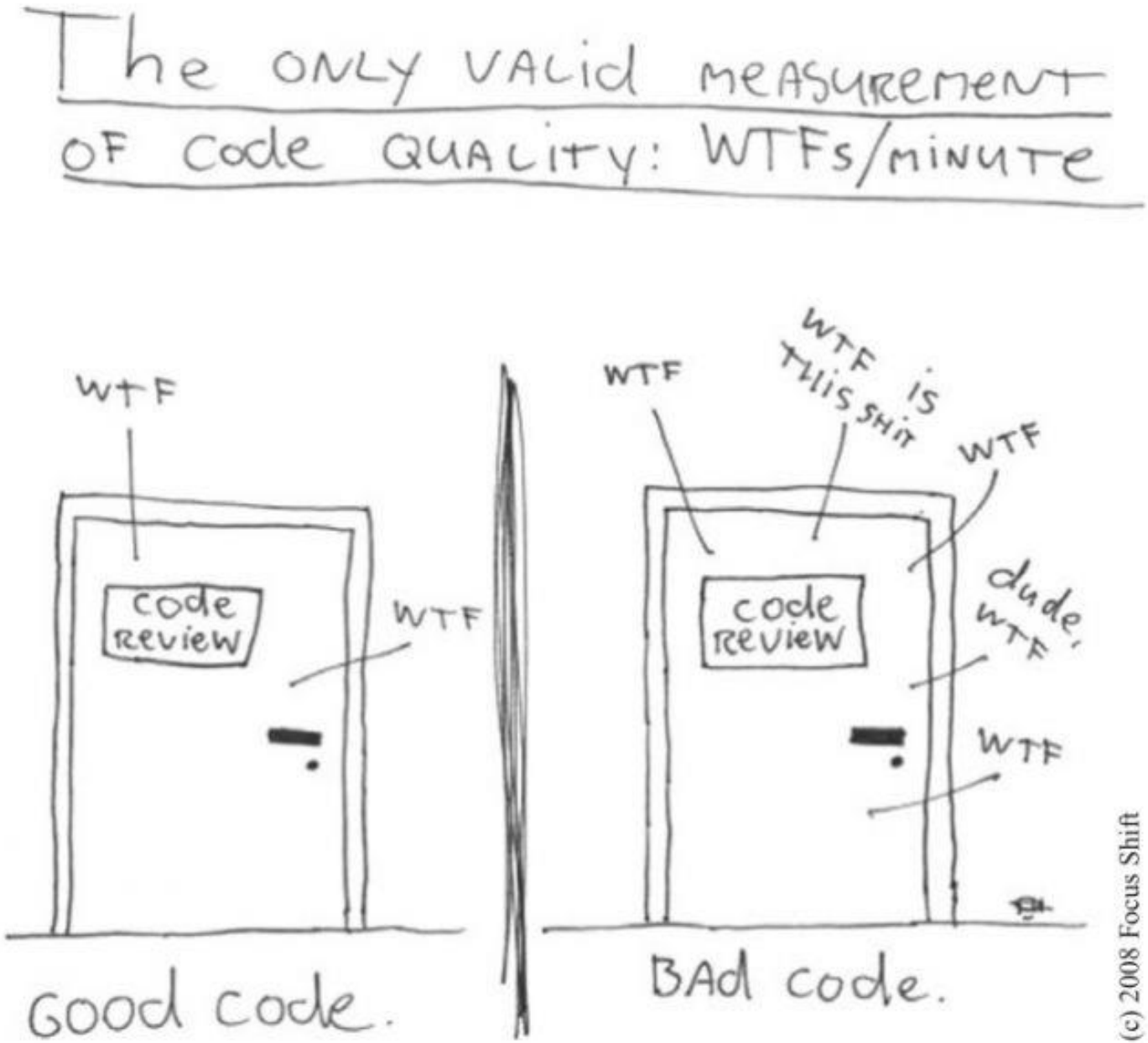
Test your code

Write Tests

Software Testing Best Practices
Test Early, Test Often
Test Coverage and Code Coverage
Automate Testing
Testable Requirements
End to End Testing
Bug Prevention

Code review.

Quality measurement



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http://www.osnews.com/story/19266/WTFs_m

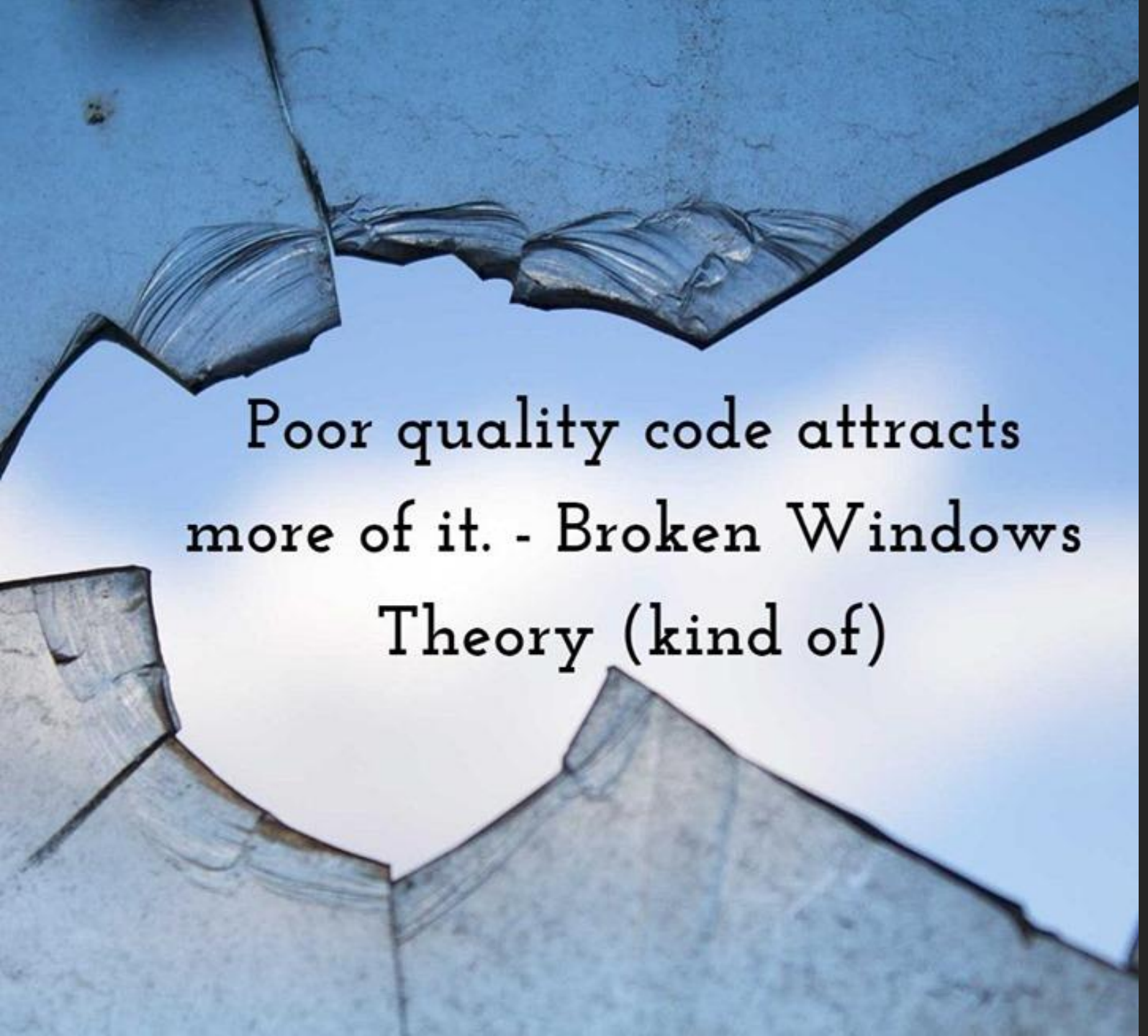
Self-documented code:

What, Why and How

```
try {
   something
} catch(e) {
   window.location.href =
        "http://stackoverflow.com/search?q=[js] + "
        + e.message;
}
```

Copy and Paste carefully

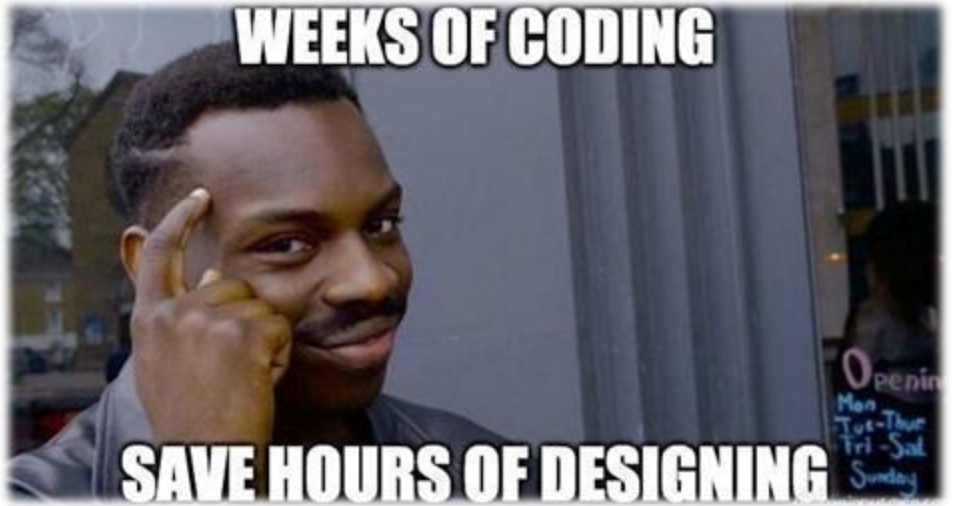
App logging

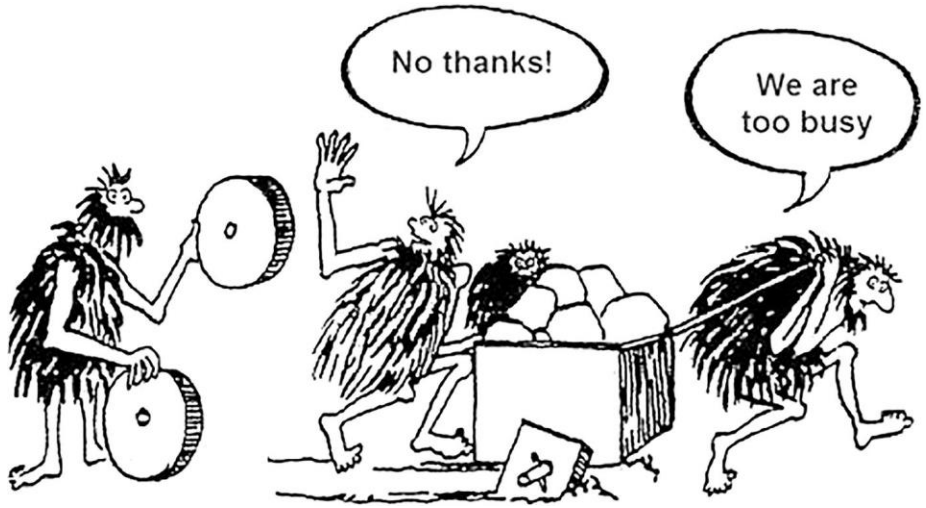


Broken windows theory

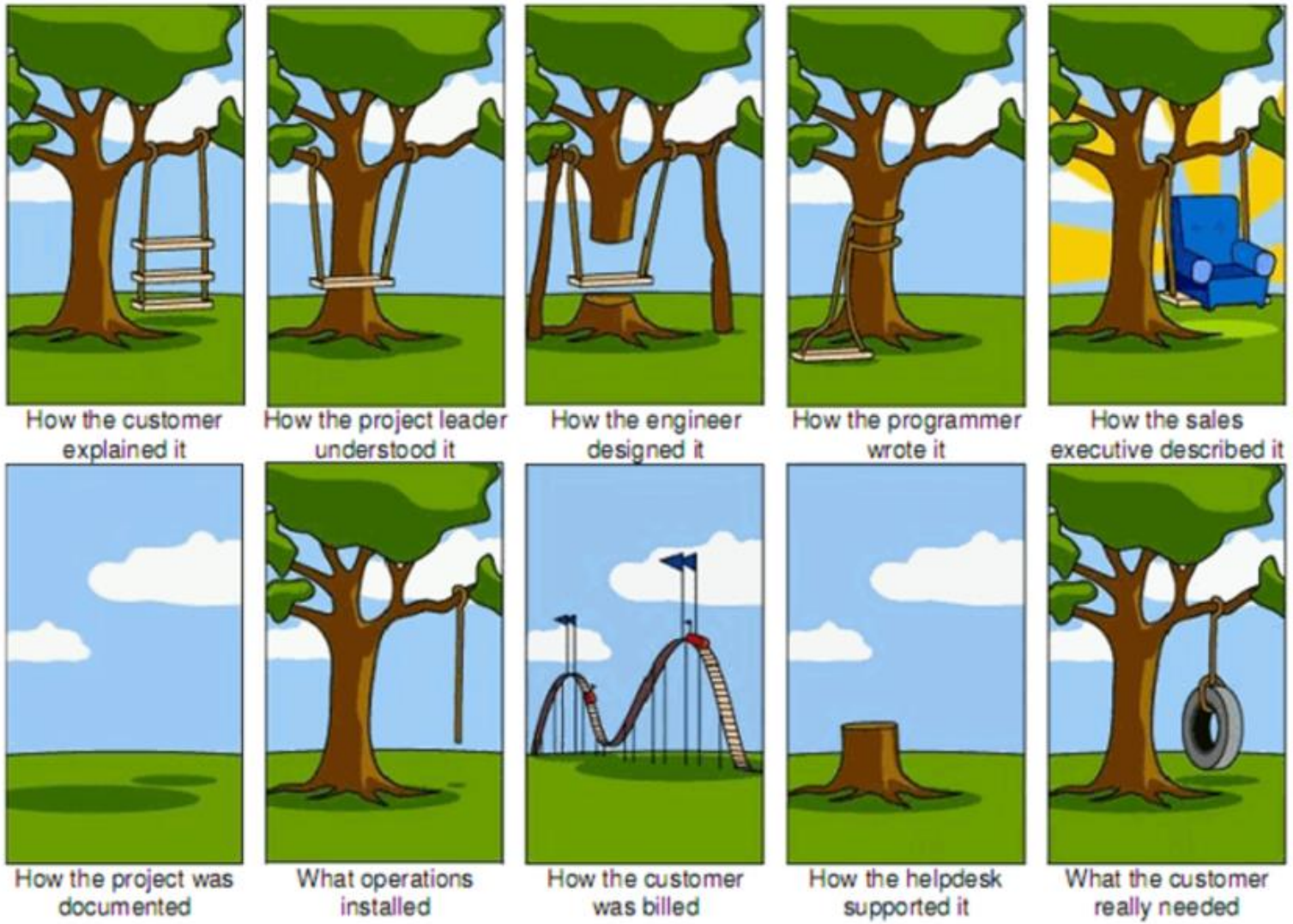
P2. Thinking

Think twice, do once





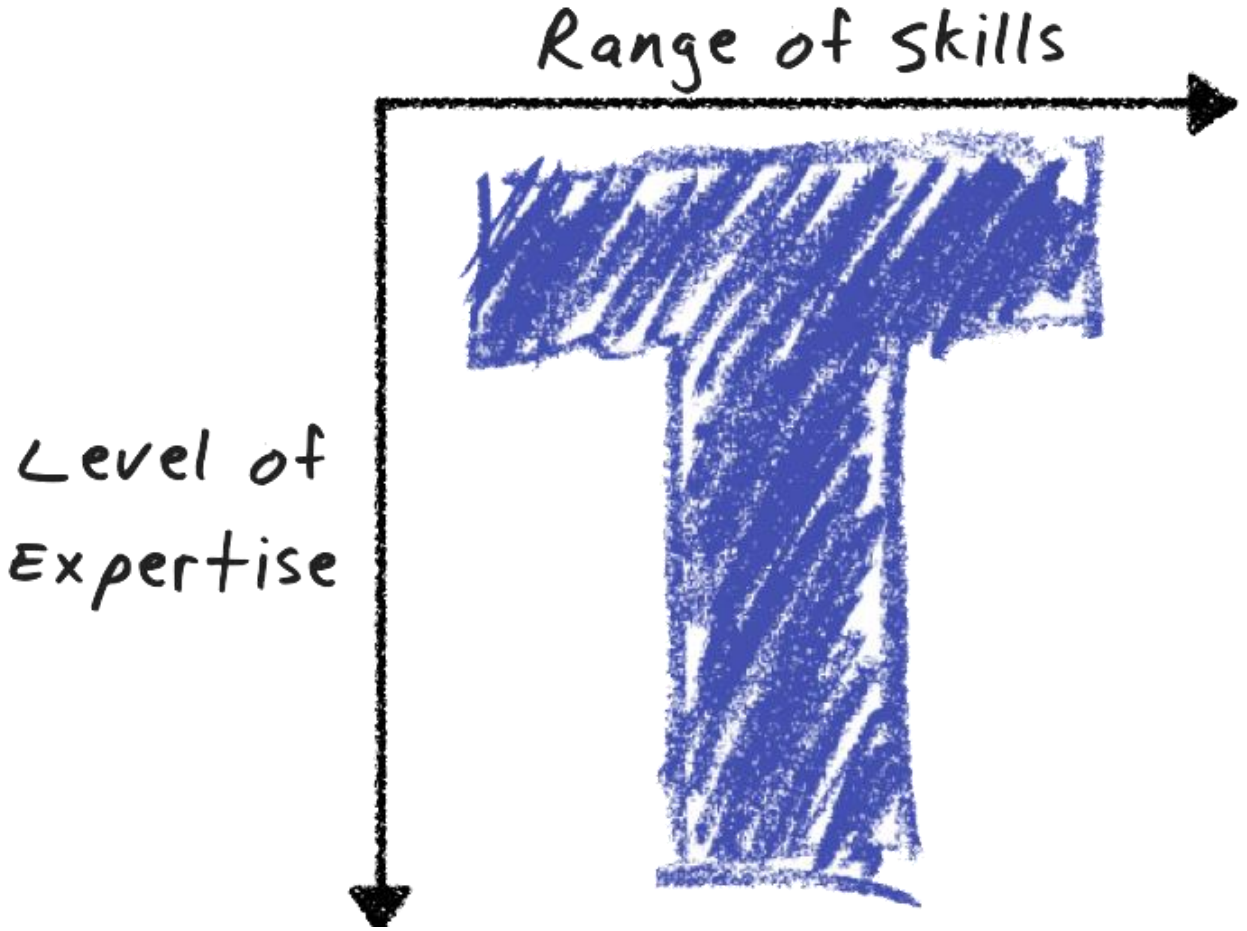
Stuck? Talk to your duck!

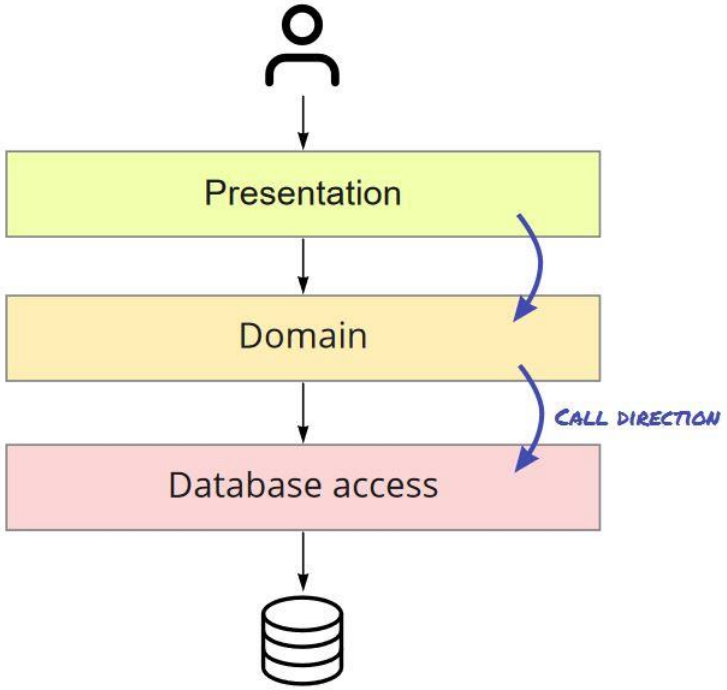


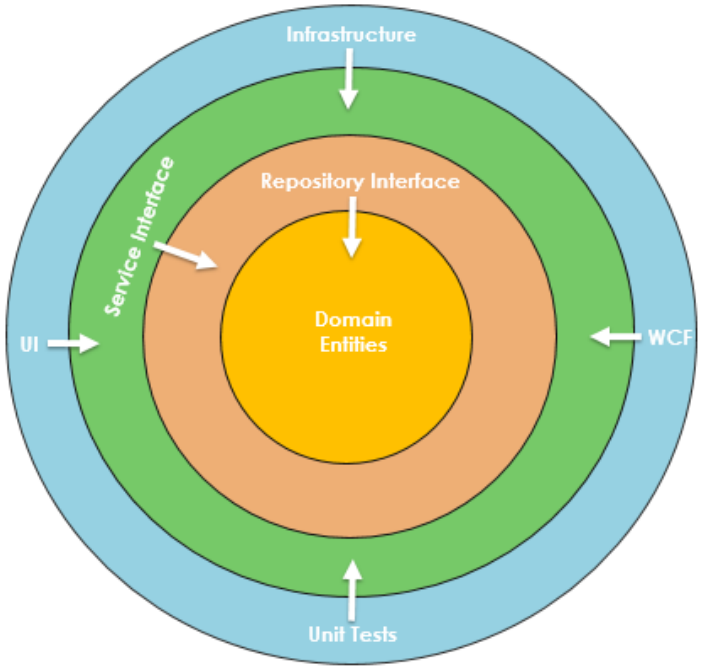
Communicate to the customer

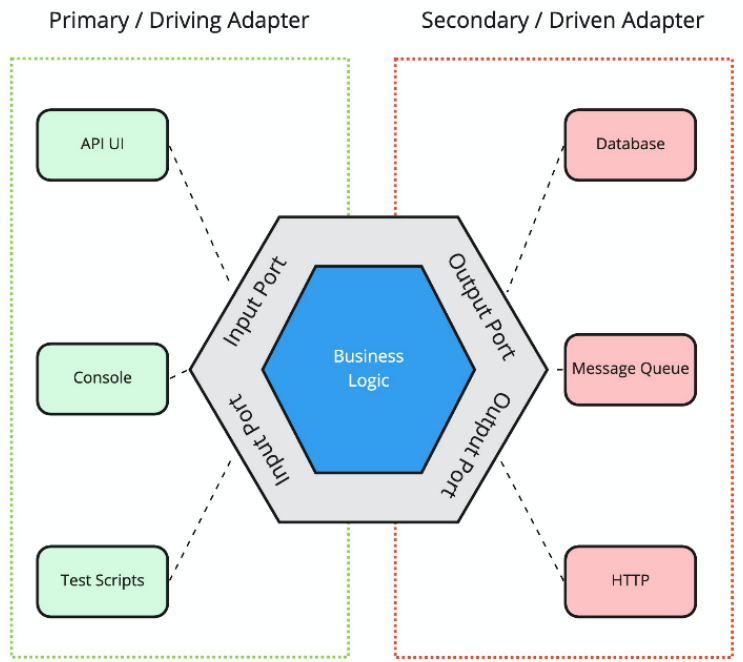
Team-work, conventions\standards

Diversify Your Knowledge: T-Shaped



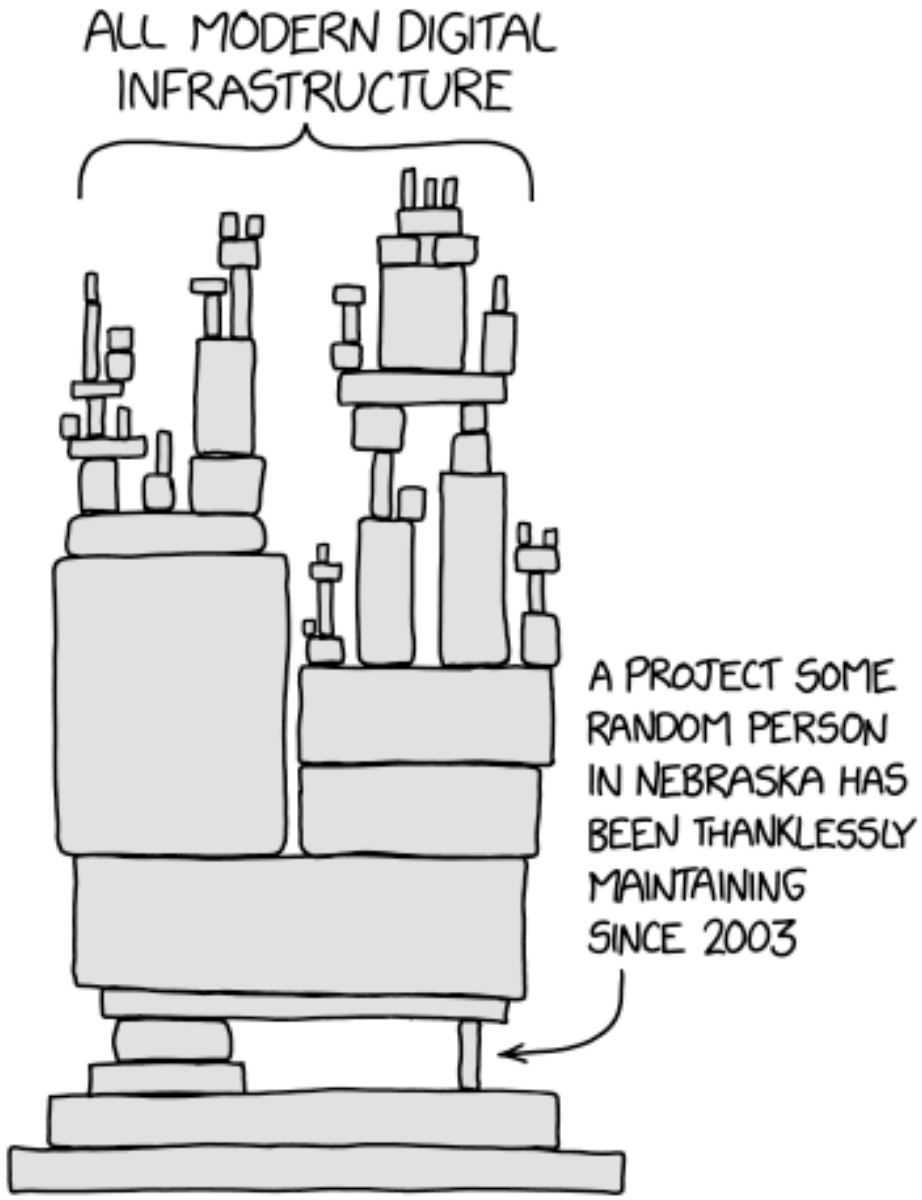


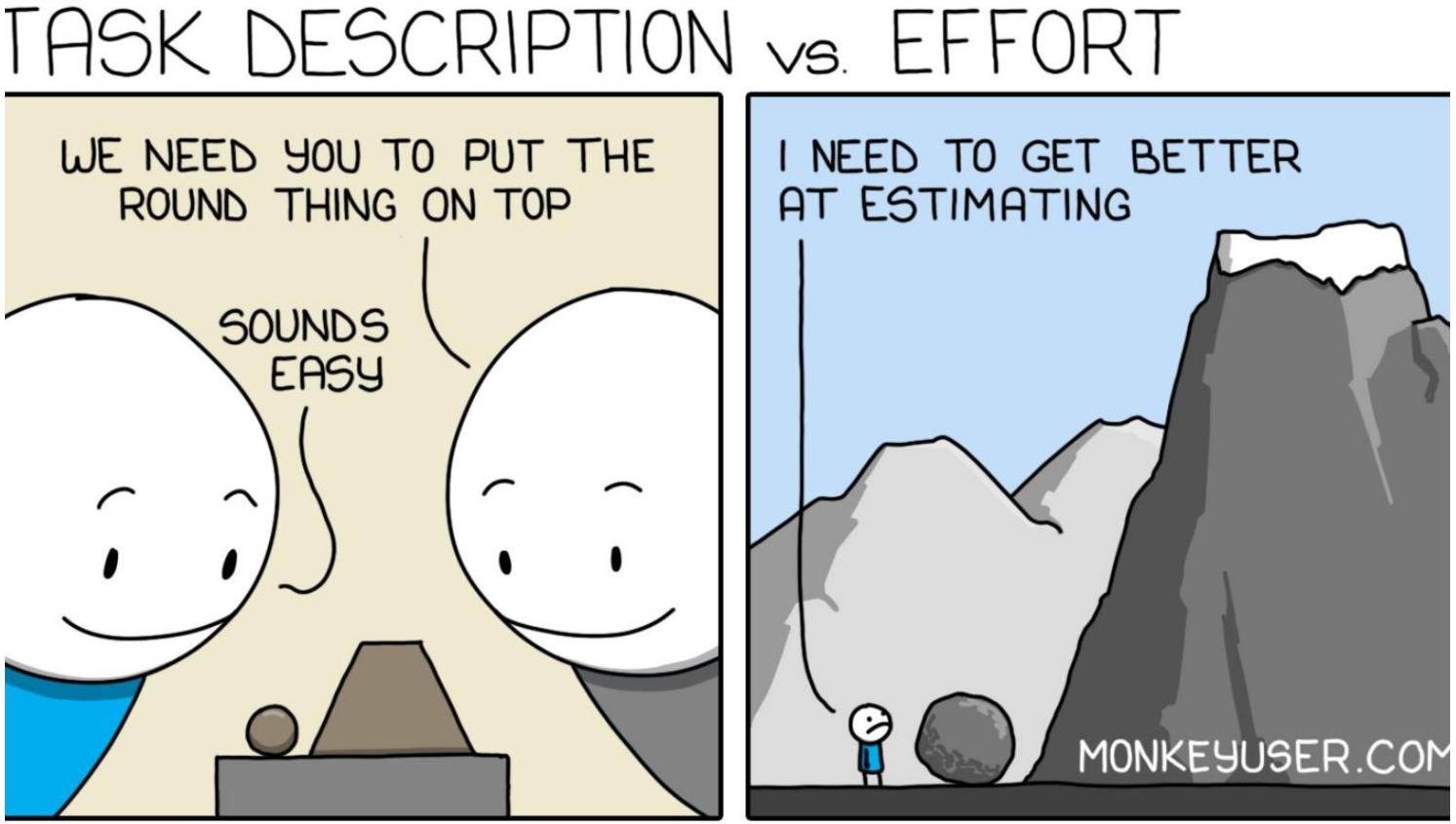




Architecture: N-Tier, Onion, Hexagonal, . . .

Technology is only how you get to the solution, it is not THE solution





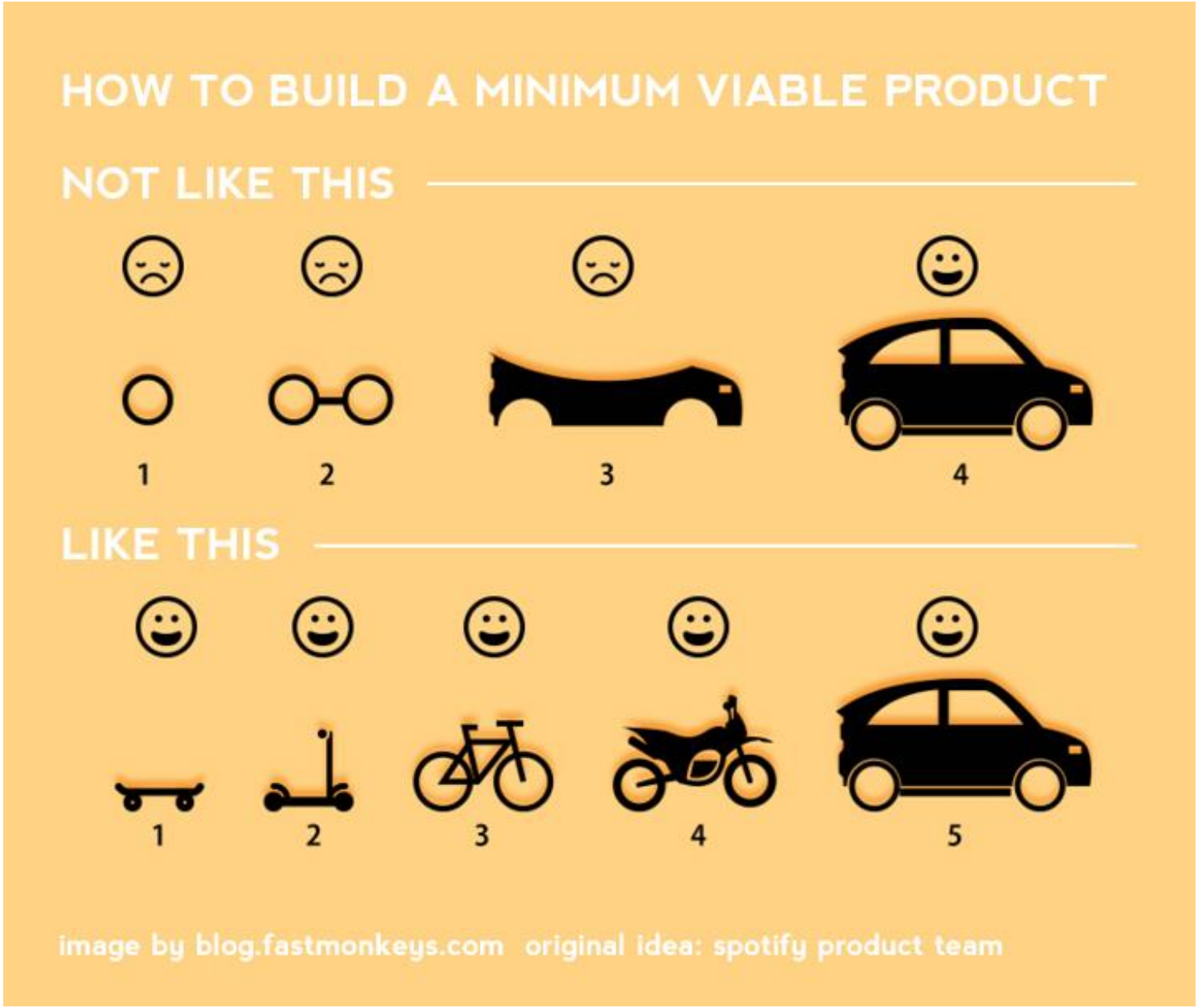
Set Deadlines

Estimate goals

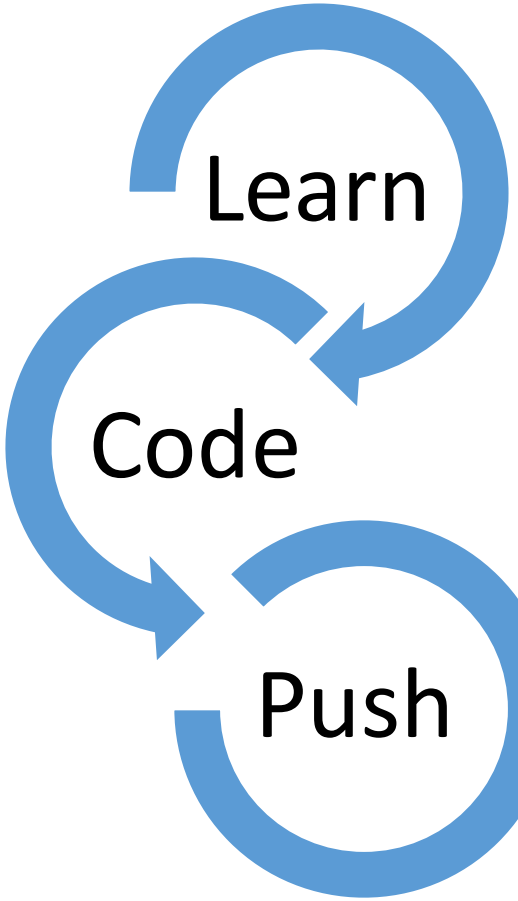
"The man who moves a mountain begins by carrying away small stones."
—Confucius

Setting goals

There are no ideal solutions



CLEAN CODERS



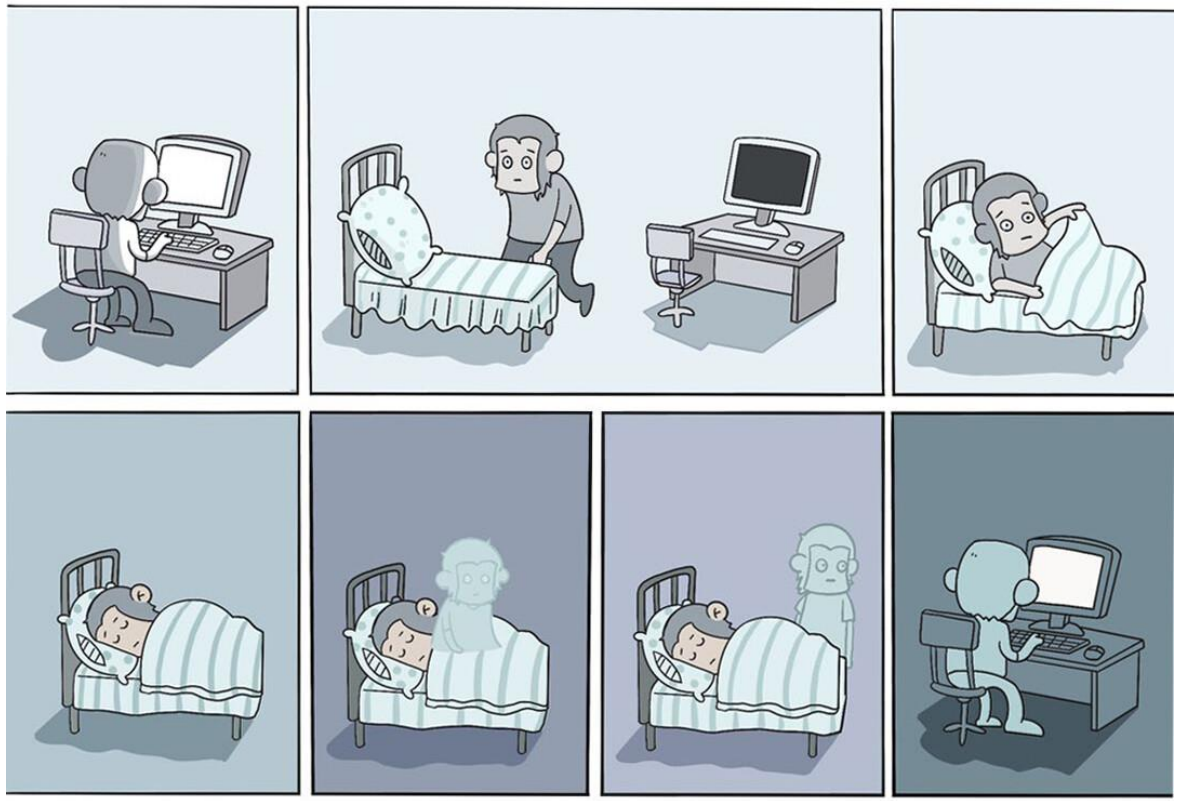
HackerRank

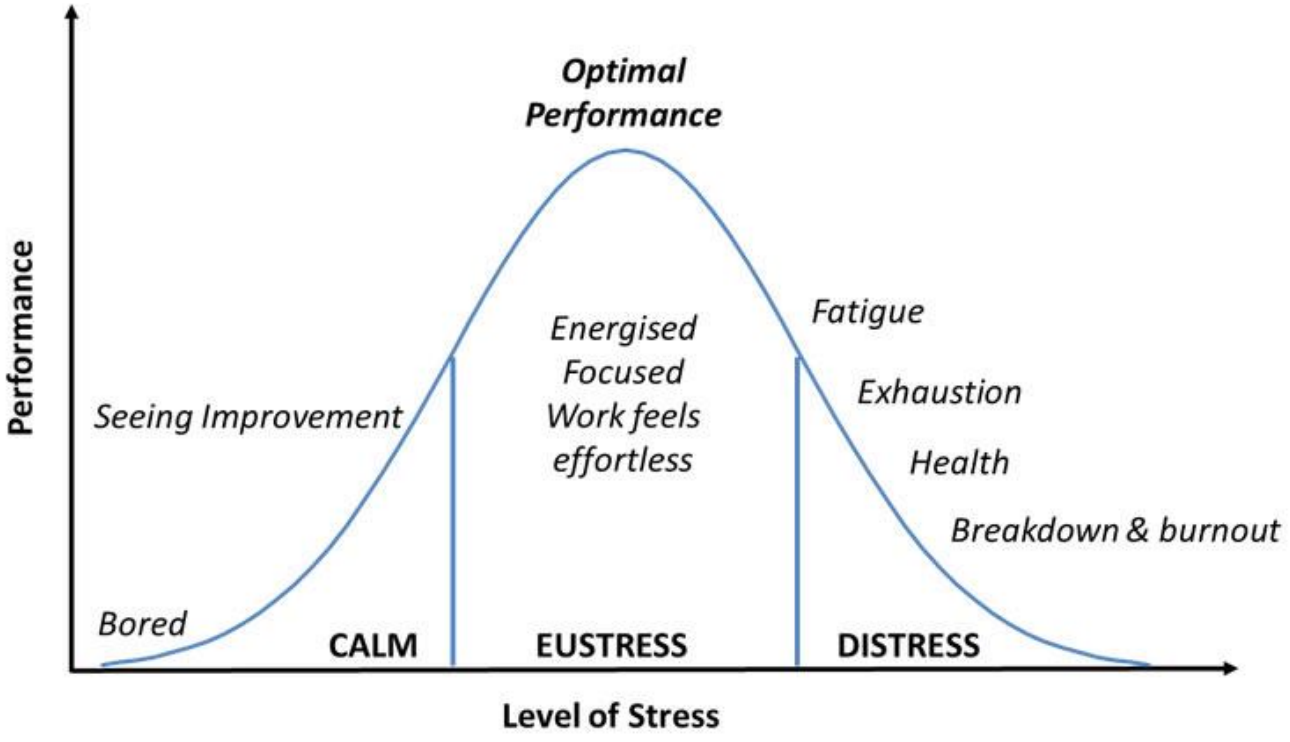
codecademy

LeetCode

* - all images are links and clickable

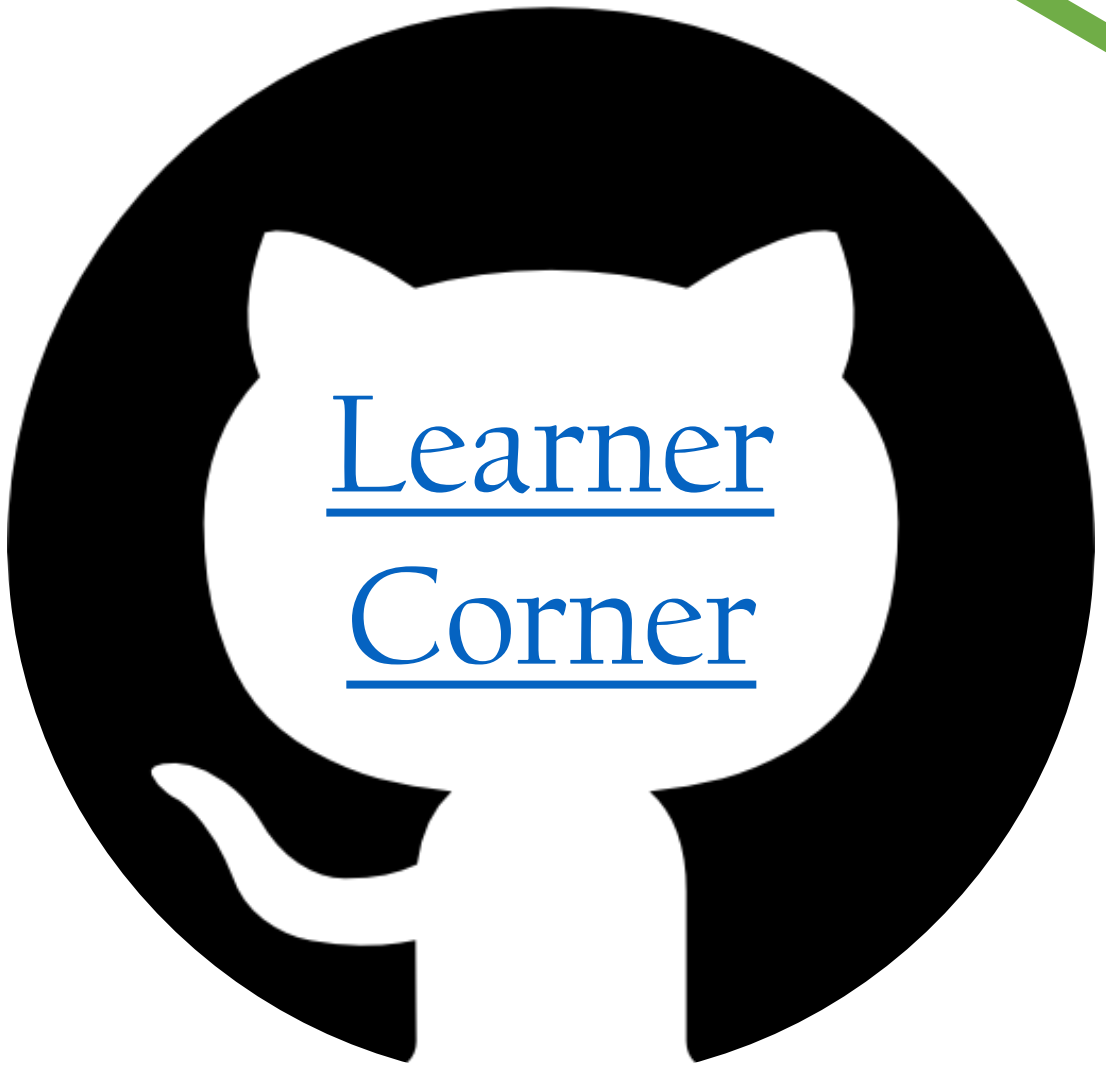
Work-life balance





https://betterprogramming.pub/non-technical-skills-that-help-developers-1d56e10c27db

Best practices are context dependent



Read with pleasure

Thank you