

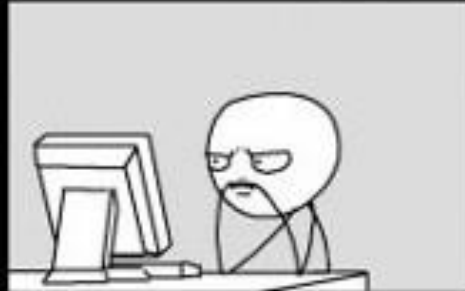
Software Craftsmanship

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



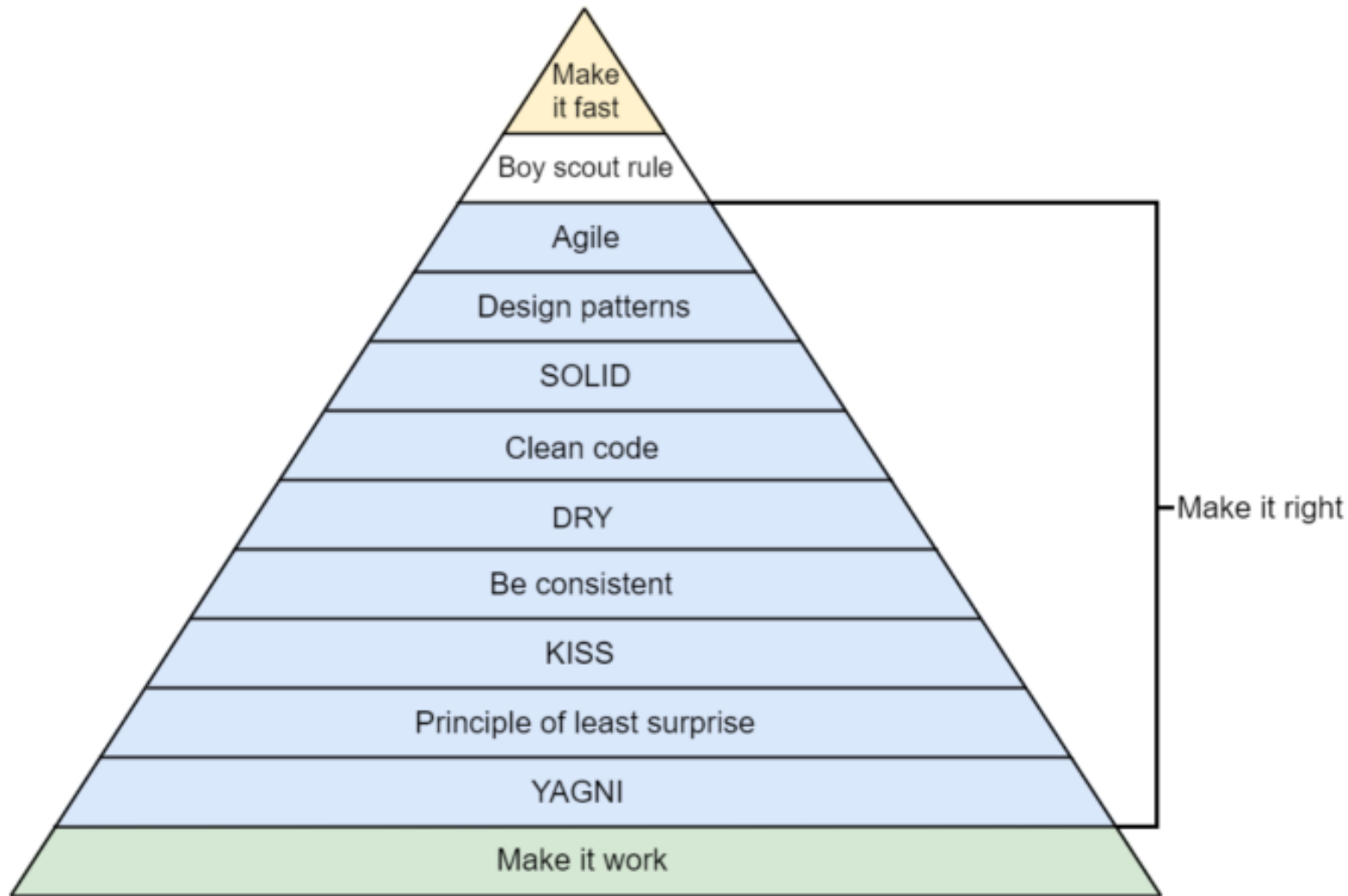
What I Really Do

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

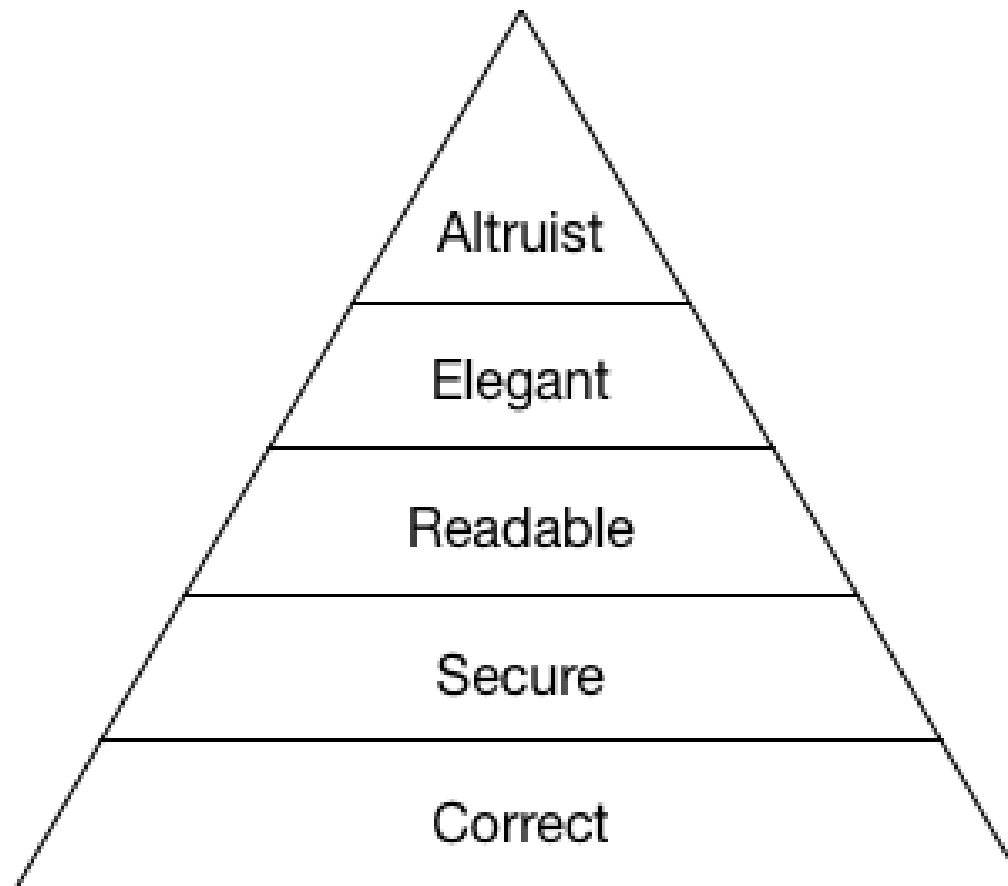




P1. Coding



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



YAGNI



Ellen Shapiro @designatednerd · 18h

there's ordering an elevator with extra buttons in case you decide to build more floors.



4

3

34



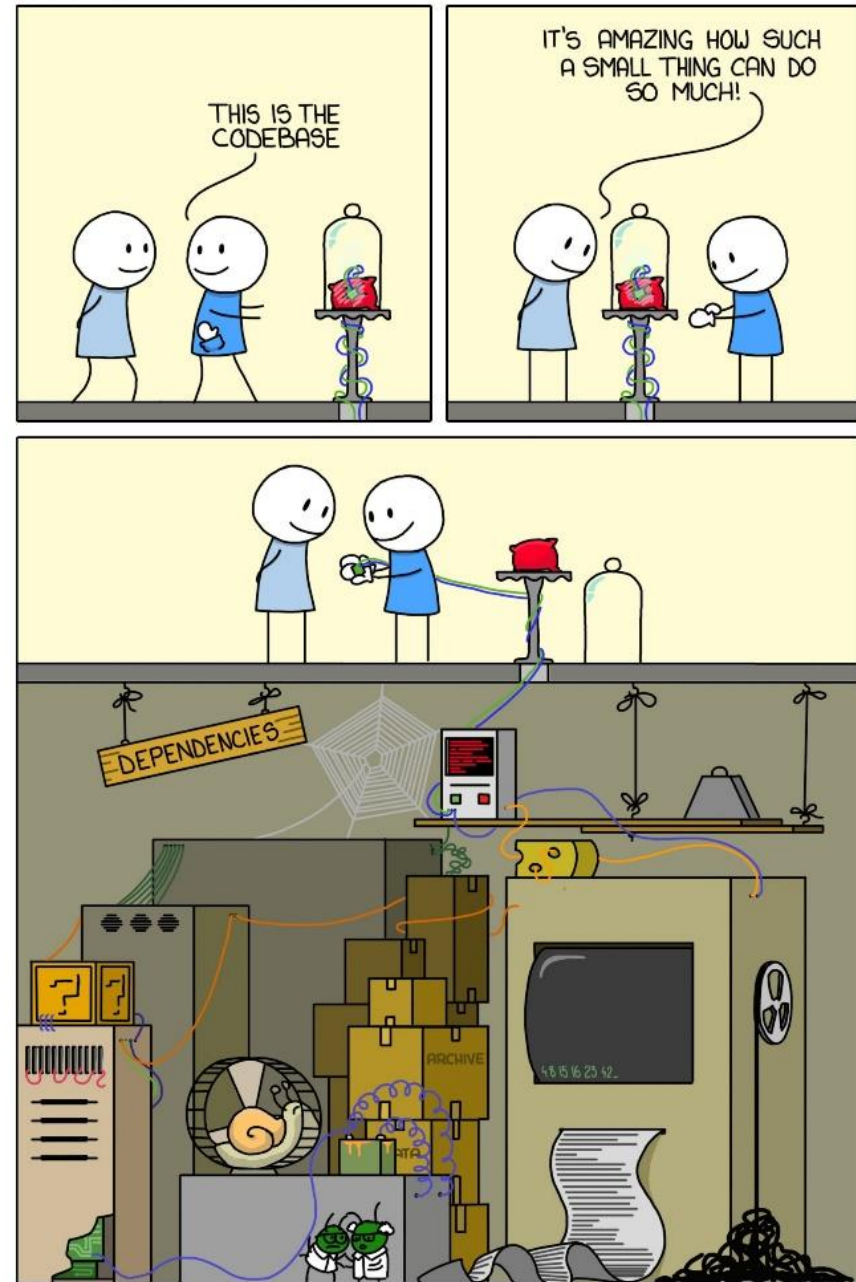
Maybe a ticket got merged in from the backlog



Principle Of Least Surprise

Keep It
Simple

IMPLEMENTATION

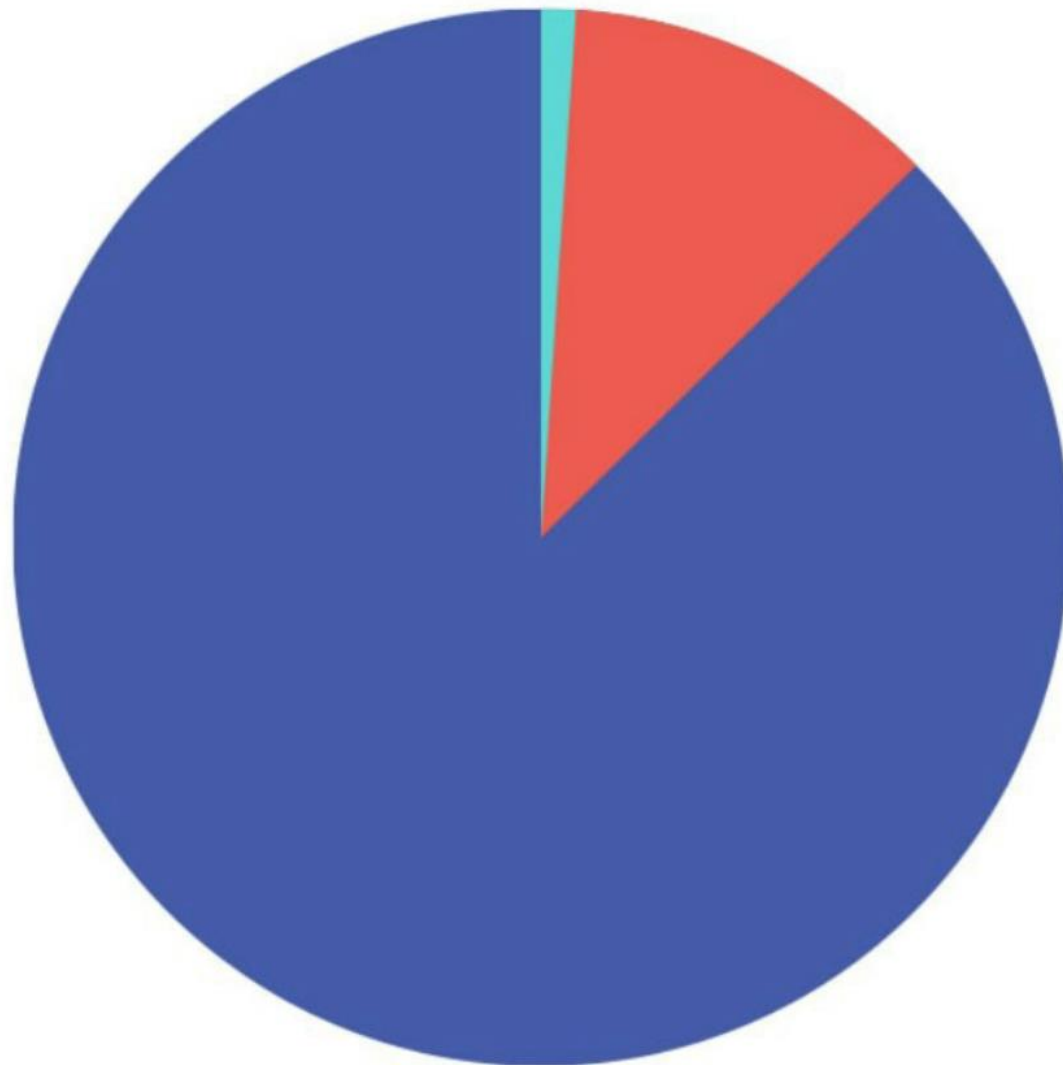


Do not
Repeat
Yourself

I will not repeat myself.
I will not repeat myself.
I will not repeat myself.
I will not repeat myself.



CLEAN VARIABLE NAMES



Coding



Debugging



**Deciding what this
variable should be
named**



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

-Robert C. Martin

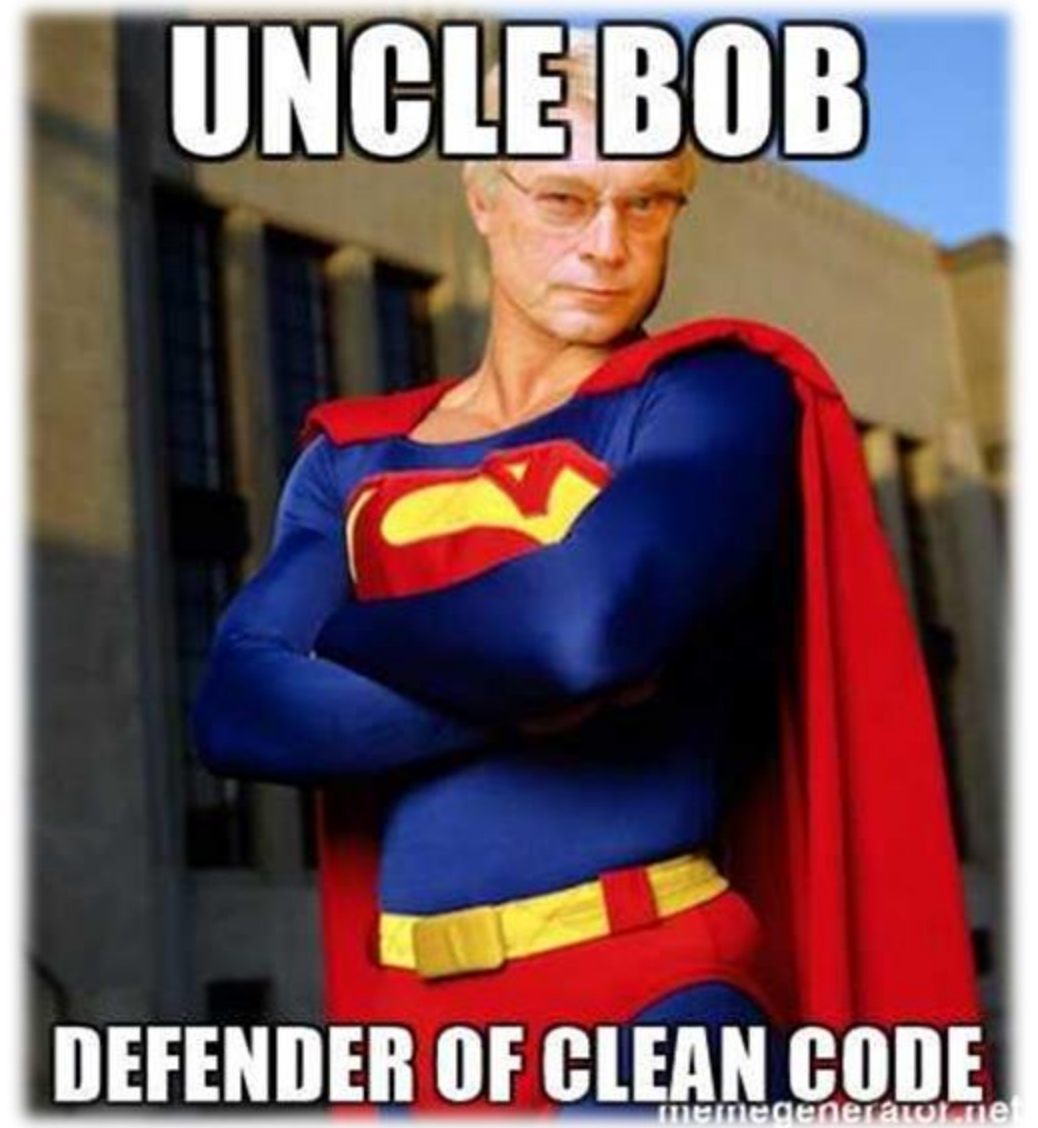


There's a man named Uncle Bob,
He's the cleanest coder on the job,
With his agile moves and architecture too,
He'll make your code shine like brand new,
Uncle Bob, Uncle Bob...

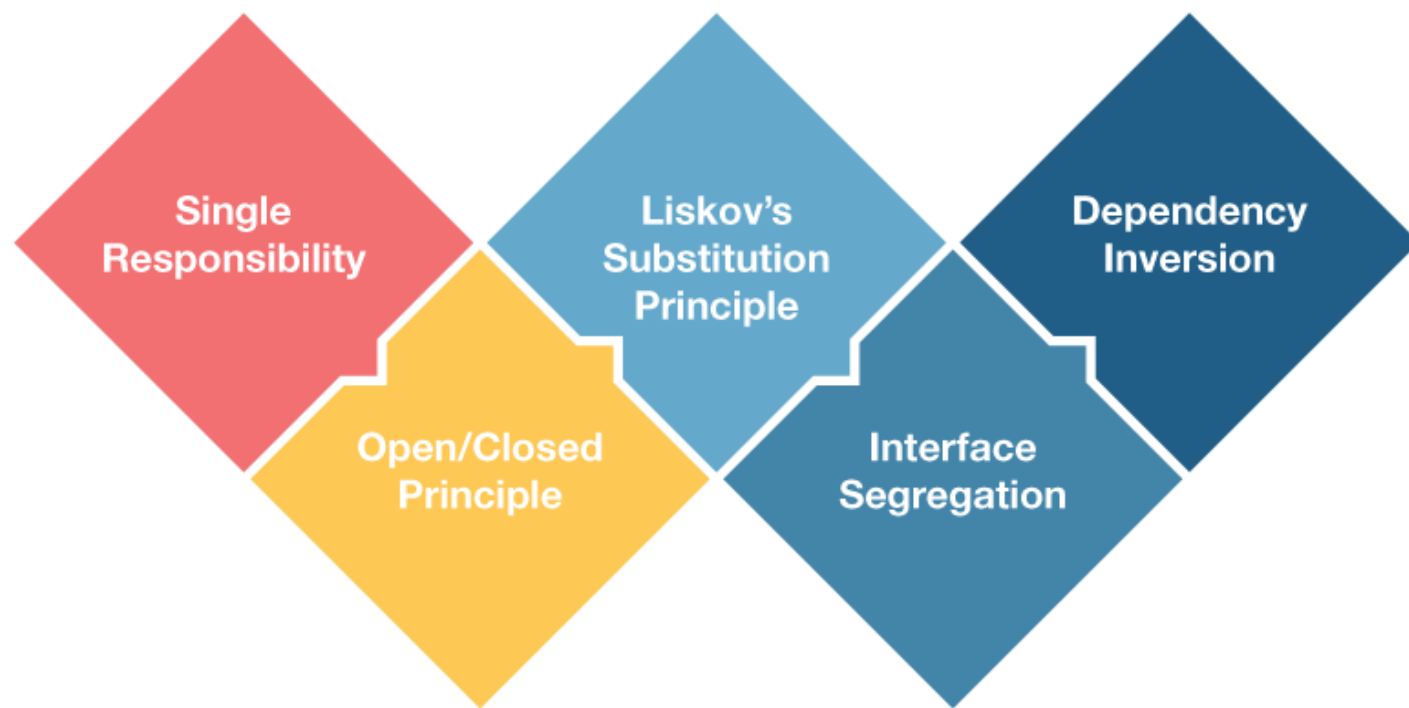


"Clean code is simple and direct. Clean code reads like well-written prose. Clean code never obscures the designer's intent but rather is full of crisp abstractions and straightforward lines of control."

Robert "Uncle Bob" Martin



S.O.L.I.D.





Software Design Patterns

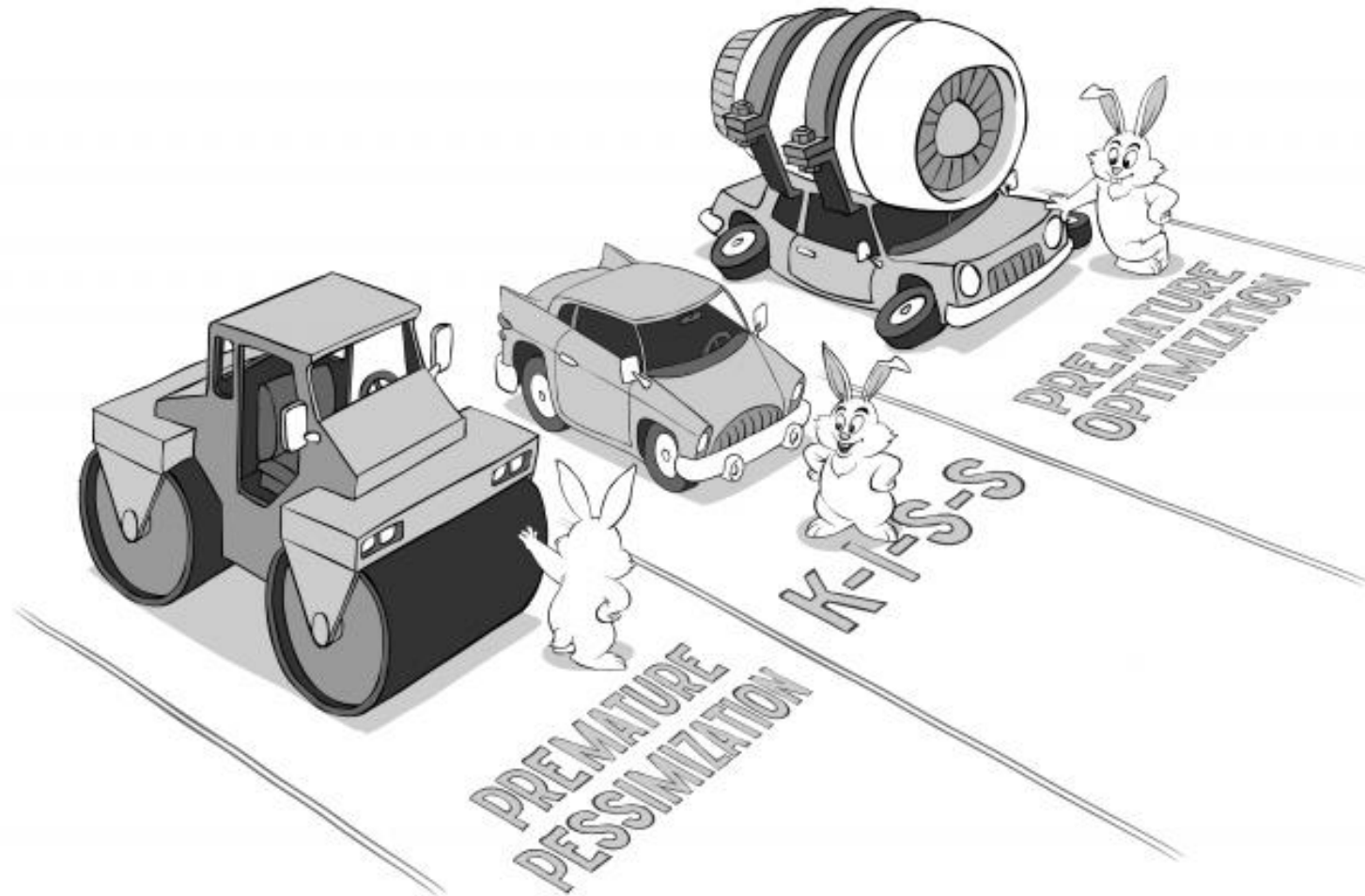
THE BOY SCOUT RULE



**ALWAYS
LEAVE
CODE
CLEANER
THAN YOU
FOUND IT!**

The Boy
Scout Rule

Avoid Premature Optimization



Test
your
code



Brenan Keller

@brenankeller









A QA engineer walks into a bar.
Orders a beer. Orders 0 beers. Orders
9999999999999999 beers. Orders a lizard.
Orders -1 beers. Orders a ueicbksjdhd.

First real customer walks in and asks
where the bathroom is. The bar bursts
into flames, killing everyone.

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



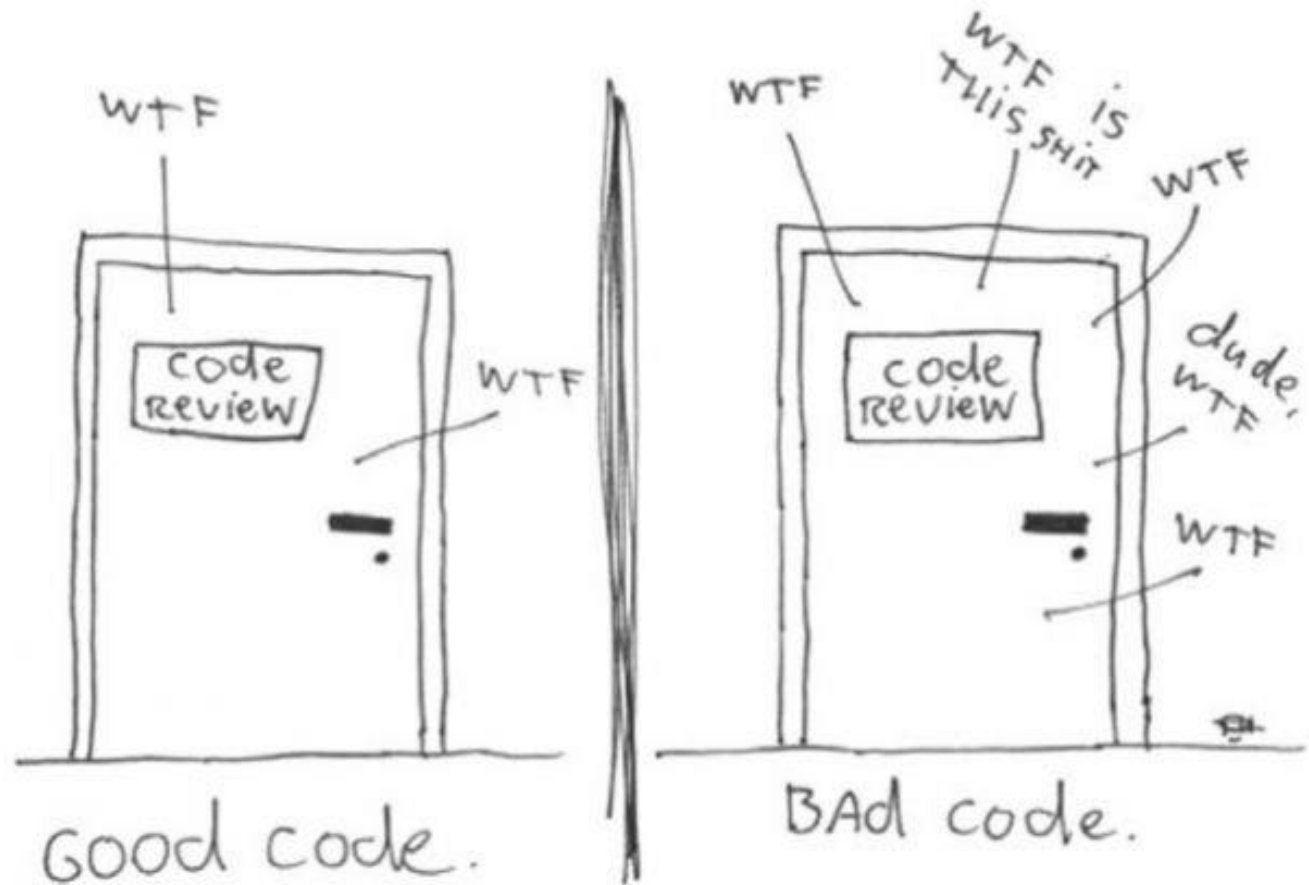
Code review.

Quality
measurement

Code review.

Quality
measurement

The ONLY valid measurement
of code quality: WTFs/minute



(c) 2008 Focus Shift

Reproduced with the kind permission of Thom Holwerda.
http://www.osnews.com/story/19266/WTFs_m



Self-
documented
code:
What, Why
and How

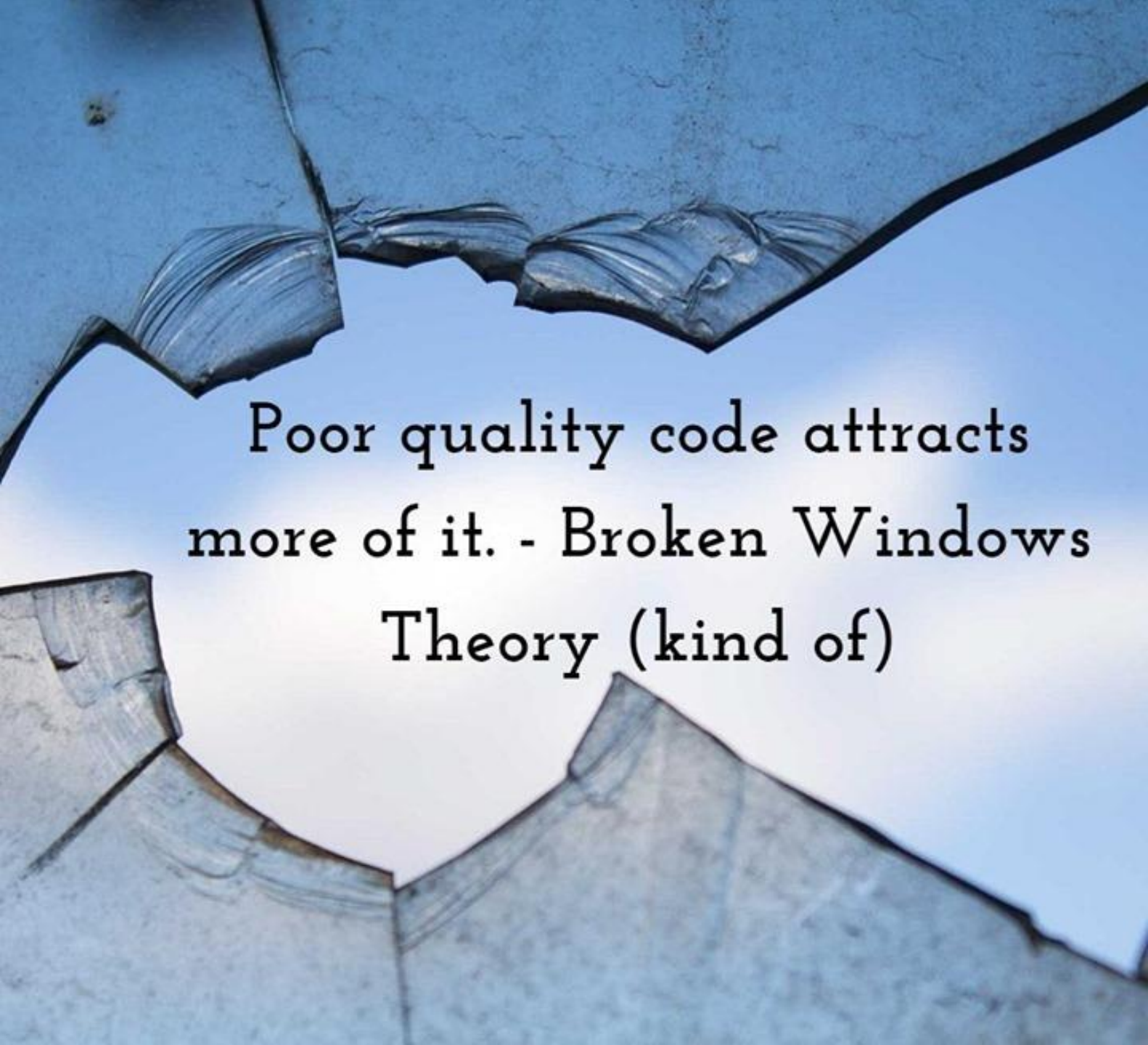


```
try {  
    something  
} catch(e) {  
    window.location.href =  
        "http://stackoverflow.com/search?q=[js] + "  
        + e.message;  
}
```

Copy and Paste carefully



App logging



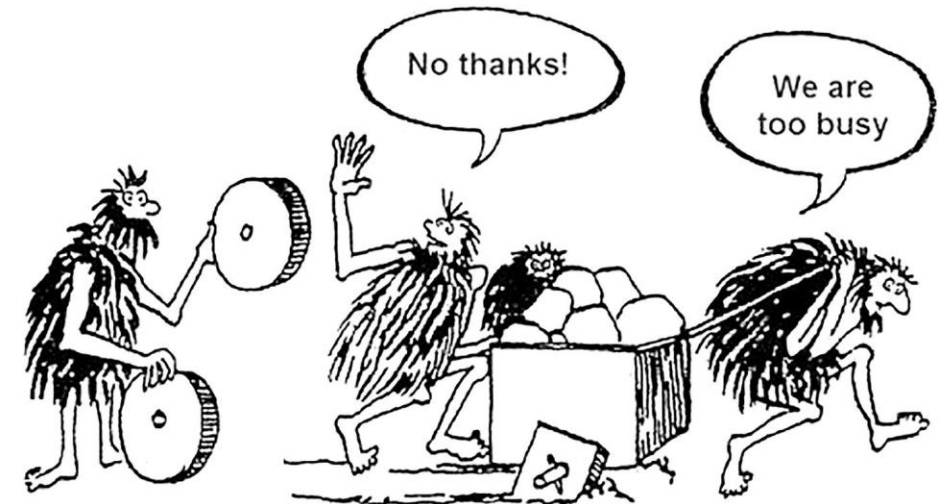
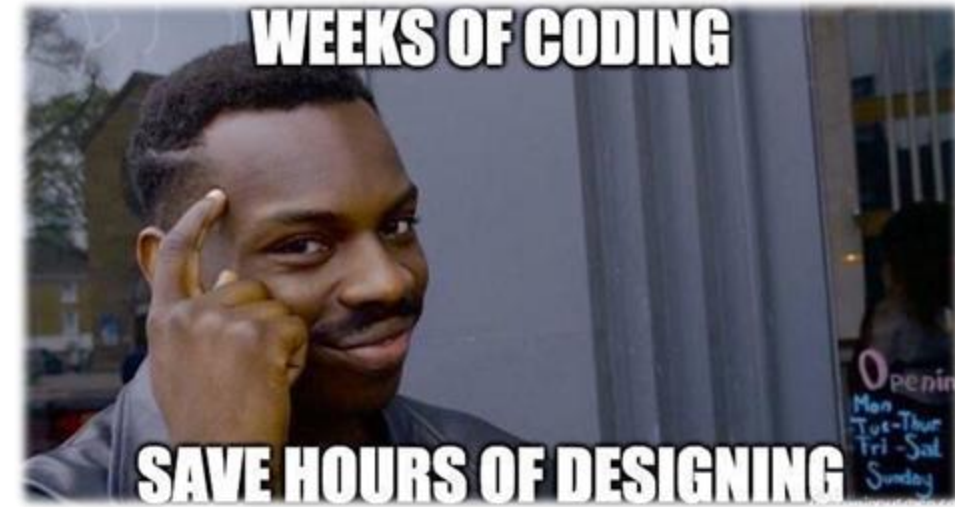
Poor quality code attracts
more of it. - Broken Windows
Theory (kind of)

**Broken
windows
theory**

P2. Thinking



Think twice,
do once



Stuck? Talk to
your duck!



**HAVE
YOU
TRIED**

EXPLAINING

IT TO THE

RUBBER DUCK?



How the customer explained it



How the project leader understood it



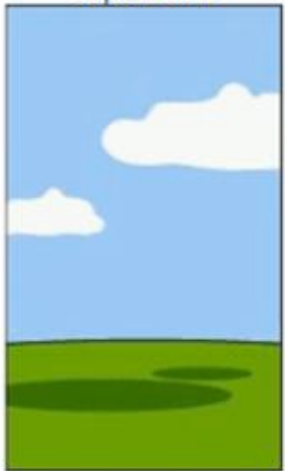
How the engineer designed it



How the programmer wrote it



How the sales executive described it



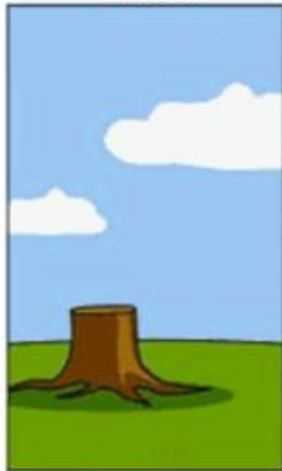
How the project was documented



What operations installed



How the customer was billed



How the helpdesk supported it



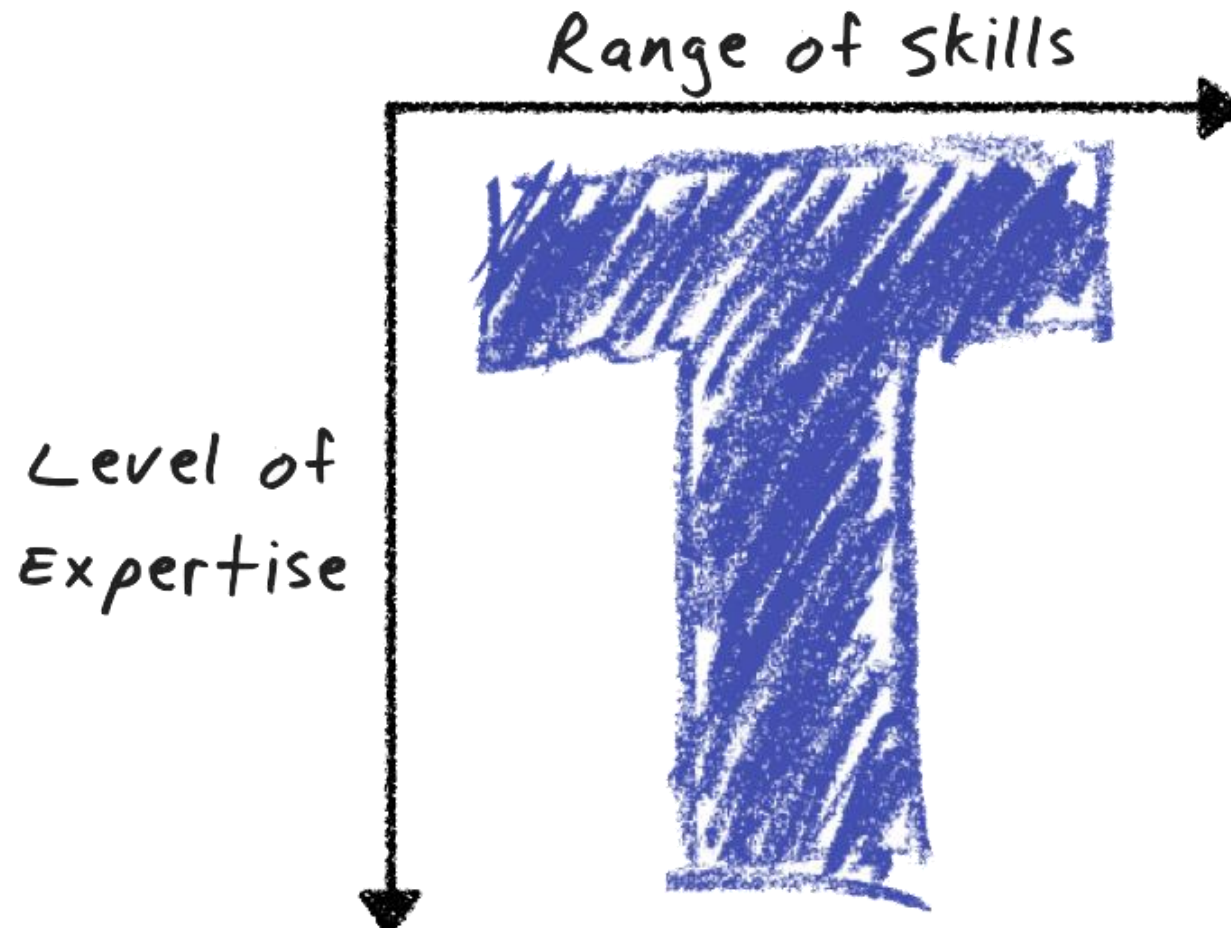
What the customer really needed

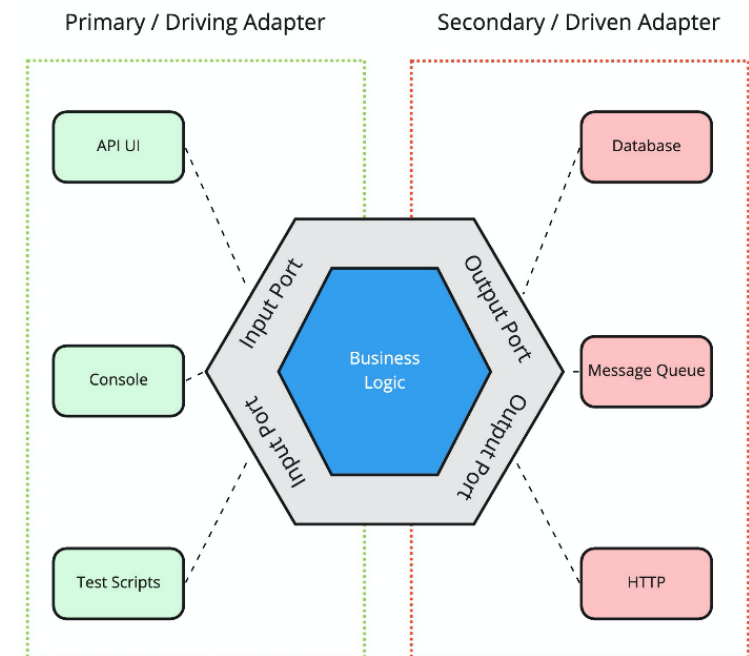
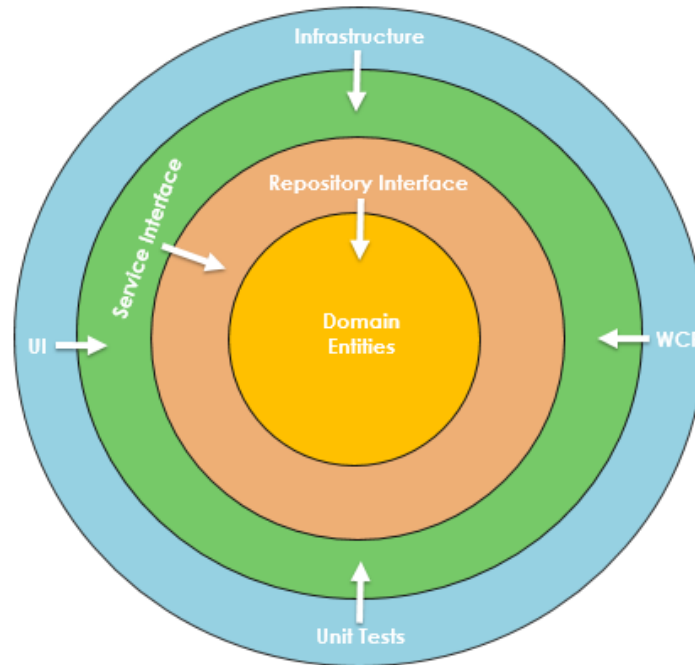
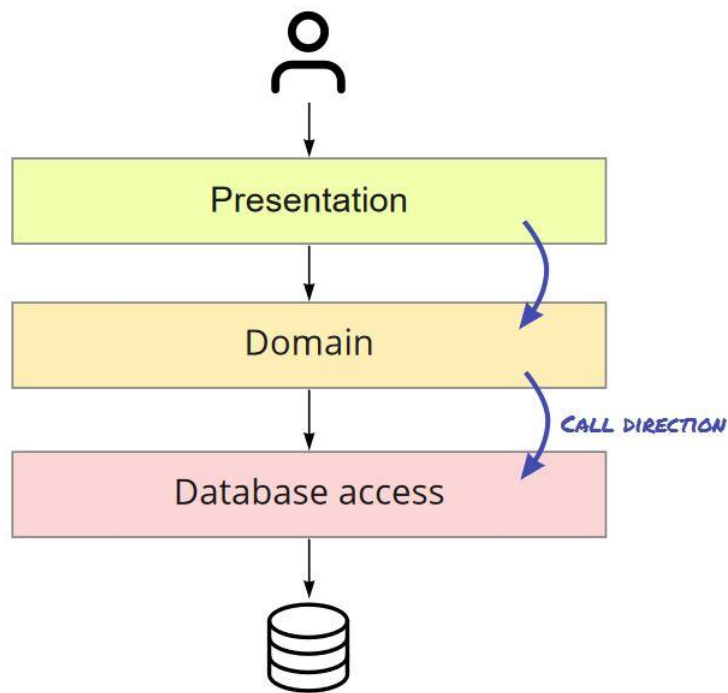
Communicate
to the
customer



Team-work, conventions\standards

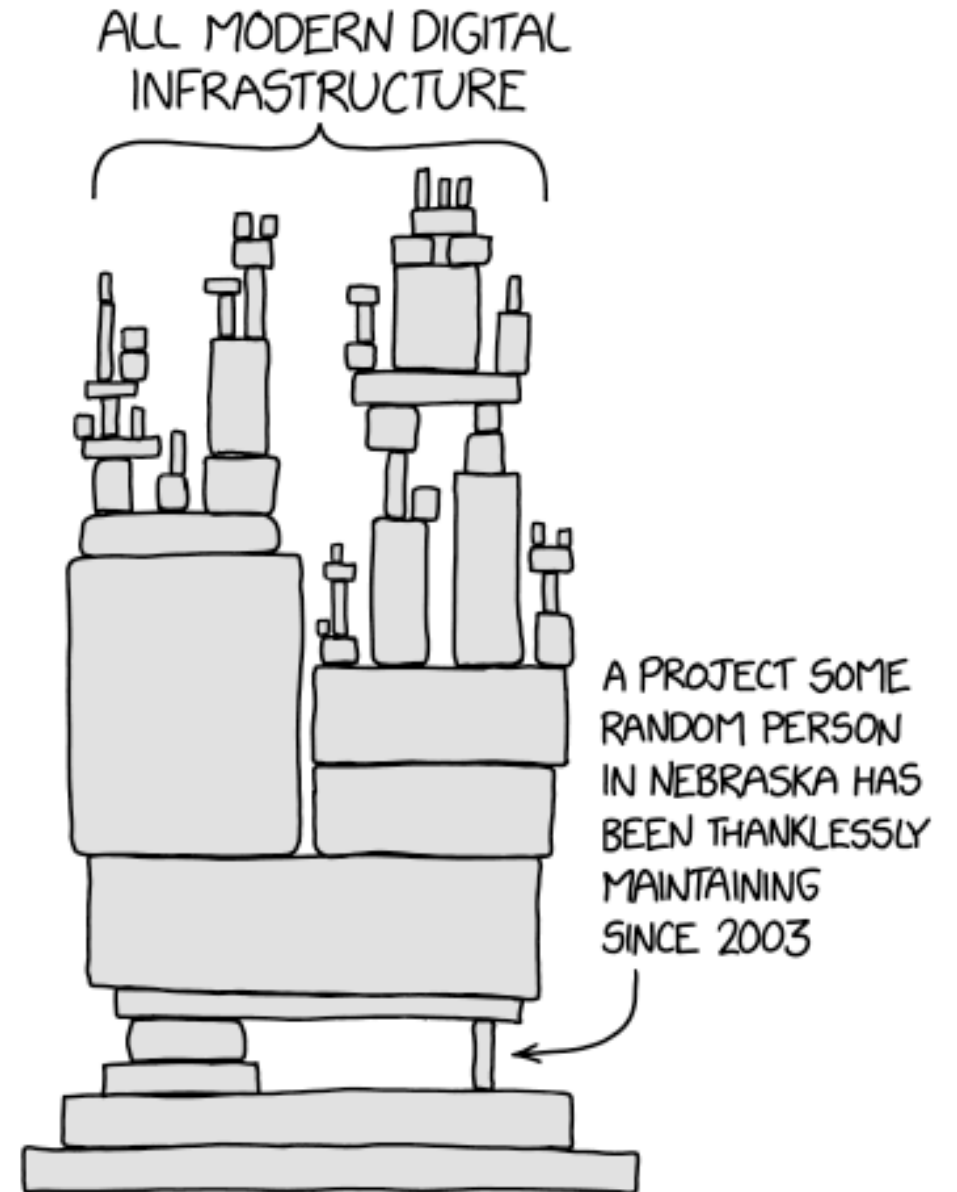
Diversify Your Knowledge: T-Shaped





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

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



TASK DESCRIPTION vs. EFFORT



Estimate
goals

Set Deadlines

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



Setting goals

 Specific	 Measurable	 Attainable	 Realistic	 Time-bound
<p>Do: Set real numbers with real deadlines.</p> <p>Don't: Say, "I want more visitors."</p>	<p>Do: Make sure your goal is trackable.</p> <p>Don't: Hide behind buzzwords like, "brand engagement," or, "social influence."</p>	<p>Do: Work towards a goal that is challenging, but possible.</p> <p>Don't: Try to take over the world in one night.</p>	<p>Do: Be honest with yourself- you know what you and your team are capable of.</p> <p>Don't: Forget any hurdles you may have to overcome.</p>	<p>Do: Give yourself a deadline.</p> <p>Don't: Keep pushing towards a goal you might hit, "some day."</p>

There are
no ideal
solutions

HOW TO BUILD A MINIMUM VIABLE PRODUCT

NOT LIKE THIS



1



2



3



4

LIKE THIS



1



2



3

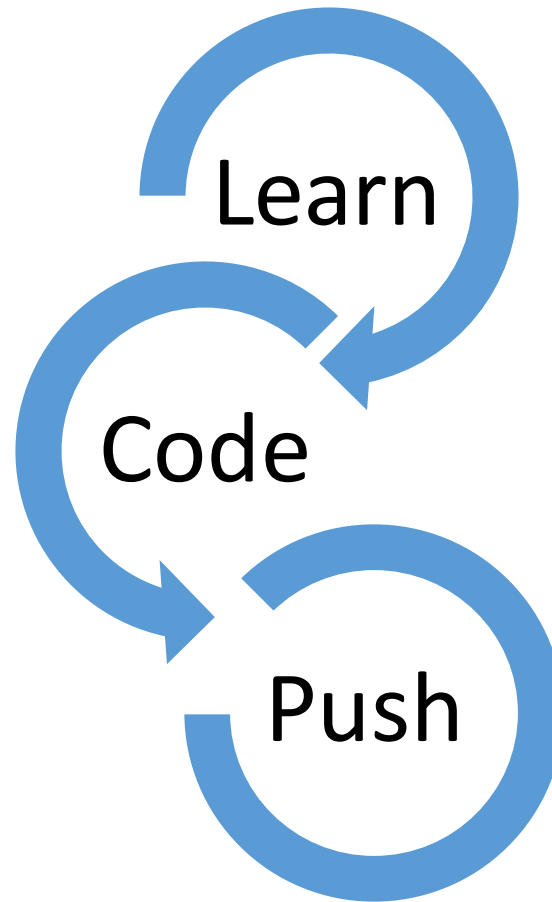


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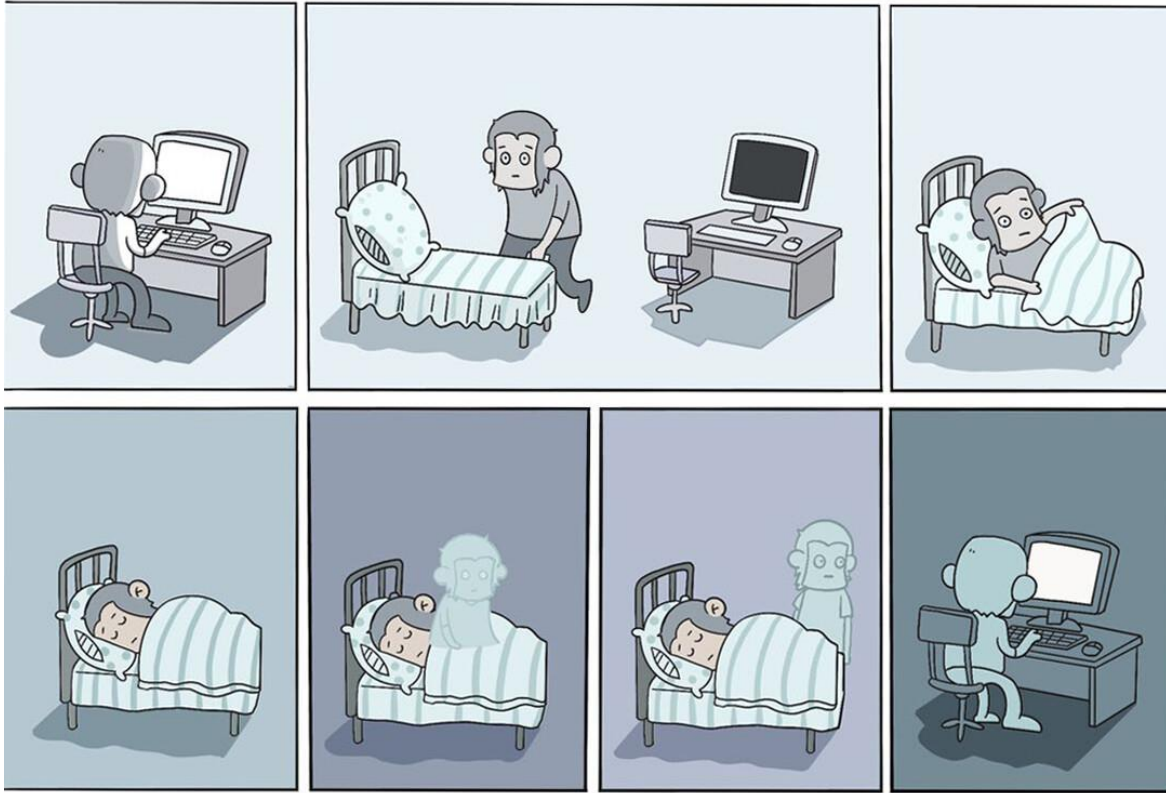
5

image by blog.fastmonkeys.com original idea: spotify product team

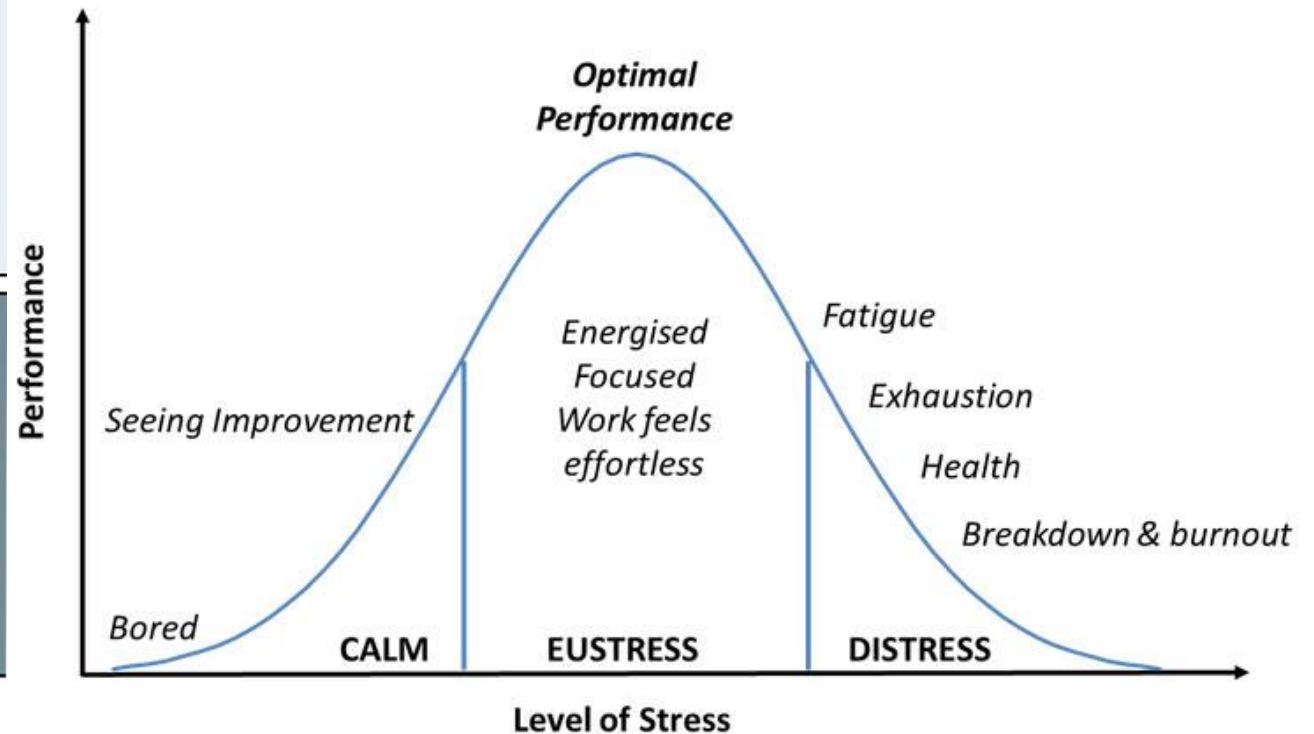


* - all images are links and clickable

Work-life balance

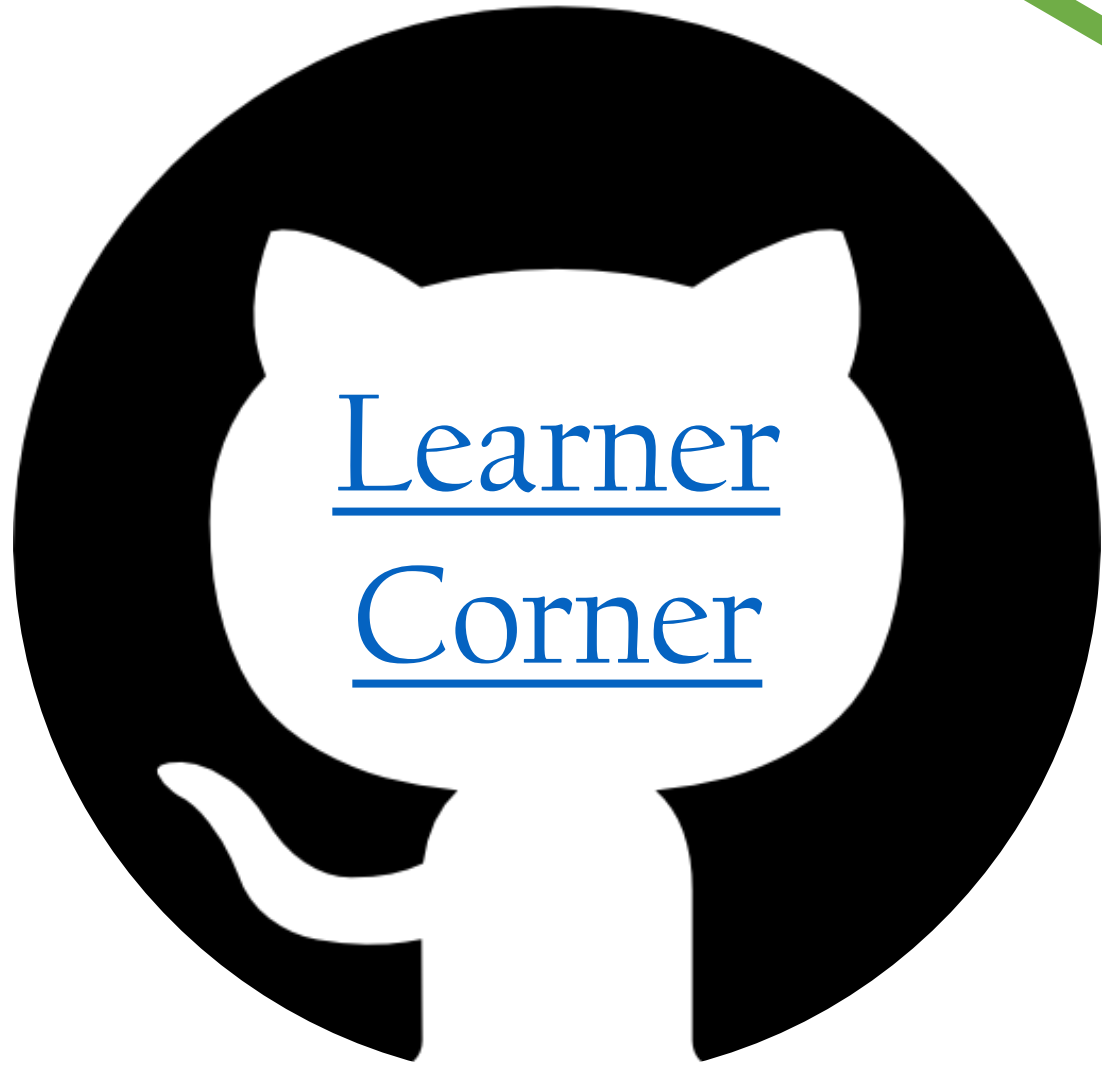


Programmer Life





Best
practices
are
context
dependent



Read with
pleasure

Thank you

