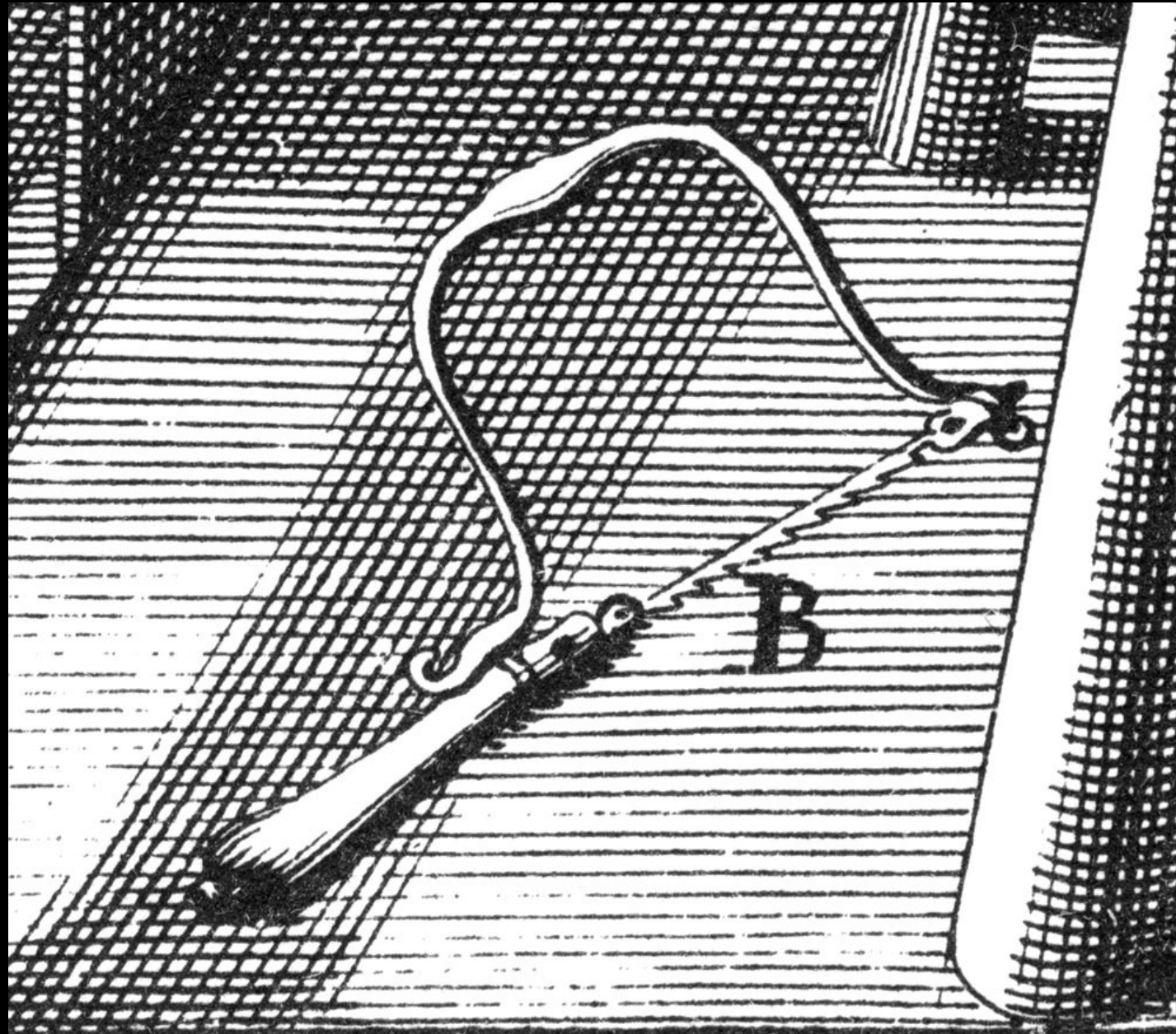
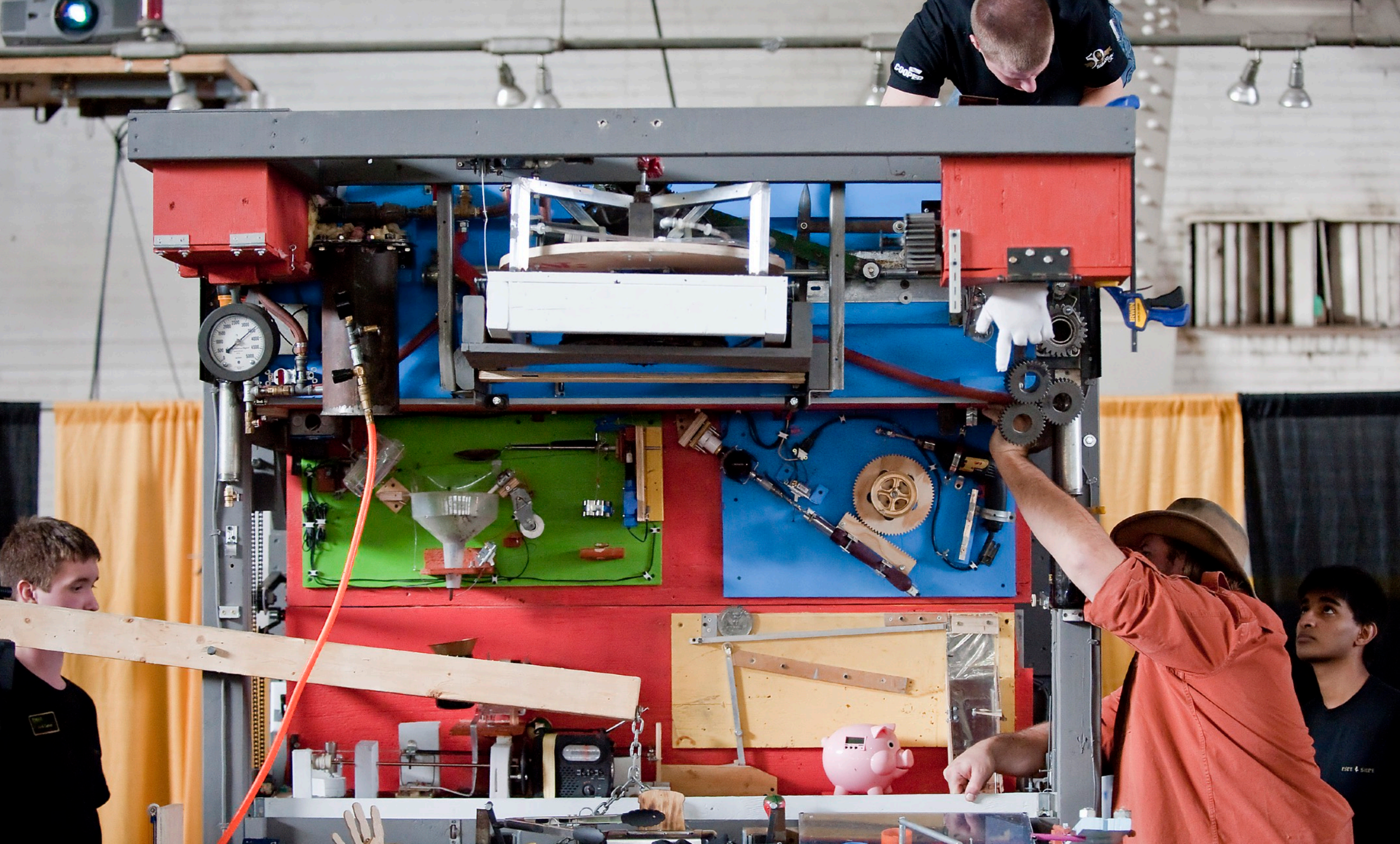


# Coping With Legacy Code



Joe Francis

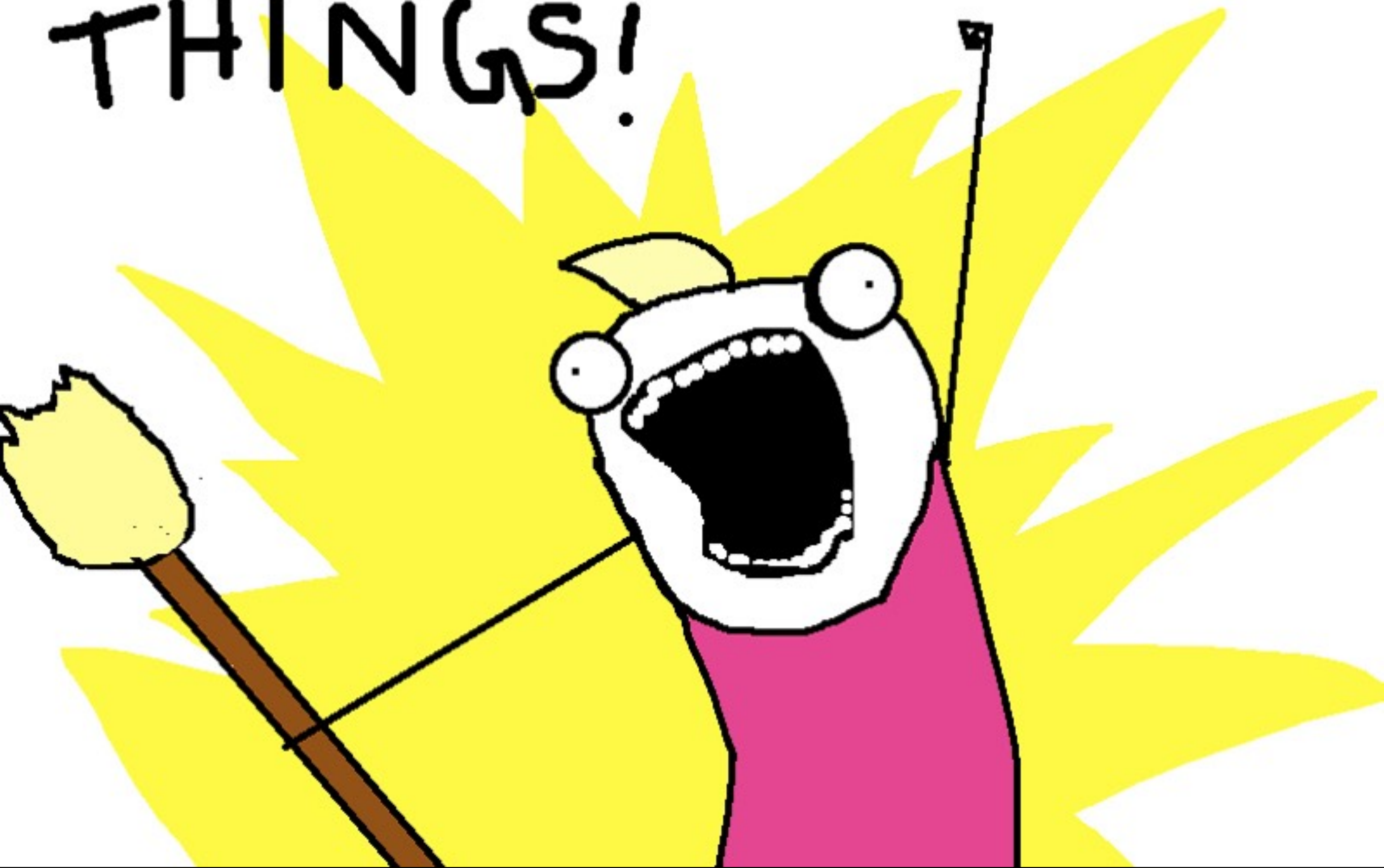




Legacy Code?



ALL THE  
THINGS!





**D'OH!**



**I DO HAVE A VERY PARTICULAR SET OF  
SKILLS**

**SKILLS I HAVE ACQUIRED OVER A VERY LONG CAREER.**





Problems are the price of progress.  
Don't bring me anything but trouble.  
Good news weakens me.

— *Charles Kettering* —

AZ QUOTES







Big Projects  
=  
Hard Problems









Obstacles









**Spaghetti: not just in your code!**





**Know Your Characters**



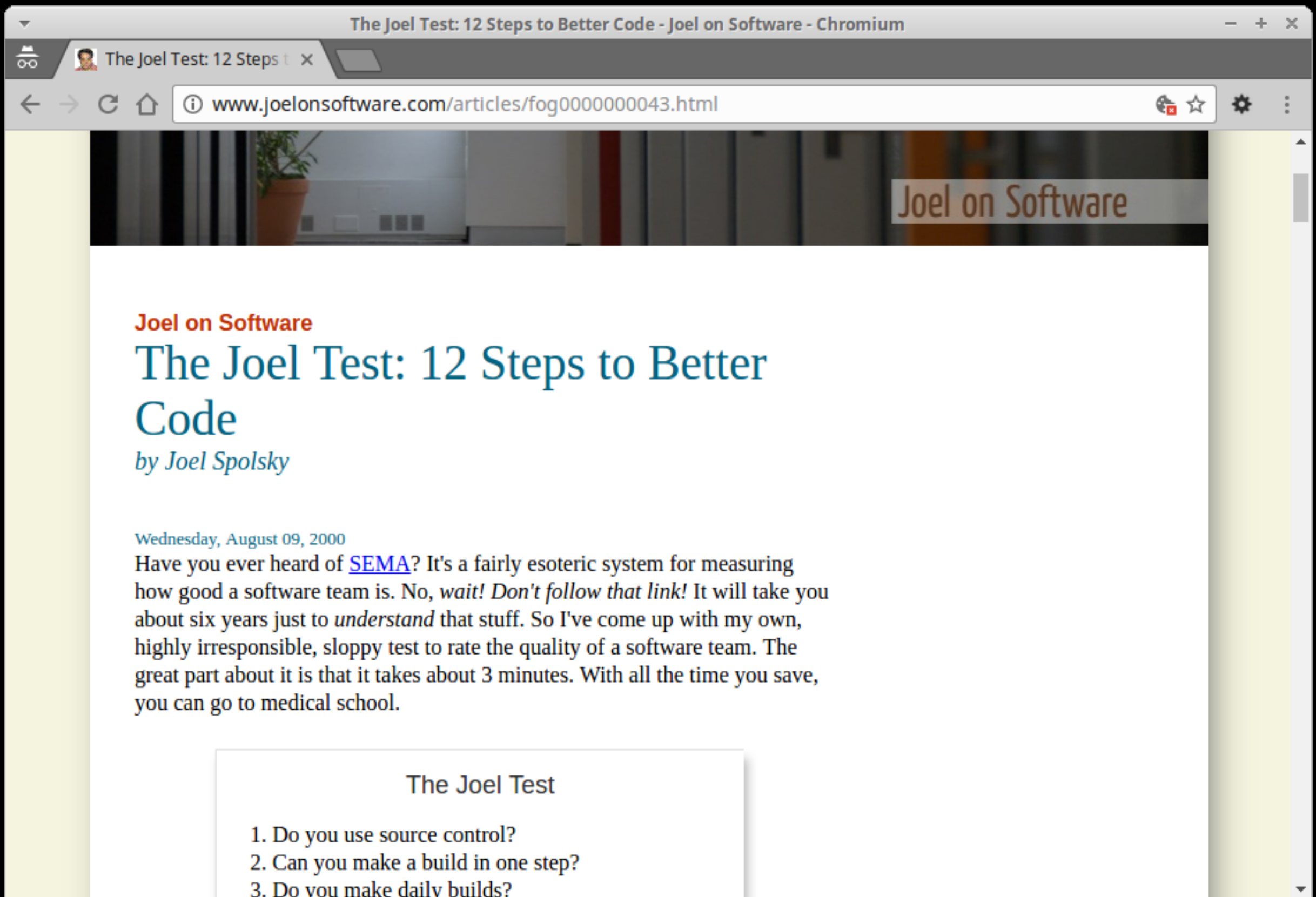
# Your Team Has Secret Super Powers

(They don't know it either)



listen





Honesty About Fundamentals



# **Understand** Cohesion & Coupling



**HELLO**

my name is

**DEATH**

©Kowulz.com





BESCHERELLE *allemand*  
DIZIONARIO ORFABICO  
italiano  
grammatica  
italiano  
essenziale  
ellenico  
italiano  
GRAMMATICHE ESSENZIALI DELLA LINGUA ITALIANA  
ZANICHELLI

Langenscheidts  
Großes Schulwörterbuch  
Deutsch-Englisch  
Neu '92  
L

Langenscheidts Schulwörterbuch  
Französisch  
L

german  
english  
VISUAL  
BILINGUAL  
DK

Collins  
Dictionary & Grammar  
Latin  
Collins

THROUGH THE  
LANGUAGE GLASS  
GUY DEUTSCHER  
Collins

Spolsky  
Language Policy  
CAMBRIDGE

An Introduction to Discourse Analysis  
JAMES PAUL BEE  
CAMBRIDGE

sayQ 30 in unmag  
German 30 Days  
L

Collins Turkish  
PHRASEBOOK & DICTIONARY  
FREE 60  
L

ESSEN  
TIALS OF  
ENGLISH  
GRAMMAR  
UTRO  
HUTERSON  
R

A University  
Grammar of English  
Randolph Quirk  
Sidney Greenbaum  
L

THE NATURAL APPROACH  
GARDINER  
TRENDS  
L

THE PRACTICE OF ENGLISH LANGUAGE TEACHING New Edition  
Jeremy Harmer  
Longman

A History of the English Language — L.C. Pangloss  
George M Hall  
L

How to write a paper  
Oxford

Phonetics  
Language Testing  
Oxford

McKenney  
Phonetics  
Language Testing  
Oxford

DOUGENY  
Mechanical Strategies in the Language Classroom  
Cambridge

Emmerson and Herndon  
Five-Minute Activities for Business English  
Cambridge

Roach  
Phonetics  
Language Testing  
Oxford

McKenney  
Phonetics  
Language Testing  
Oxford

Eats, Shoots & Leaves  
d

LATERL 2012  
European Conference Sessions  
Publishing





**They Matter**



Scripts = executable documentation

Automation = documentation that  
verifies itself



# THE TWELVE FACTORS

## I. Codebase

One codebase tracked in revision control, many deploys

## II. Dependencies

Explicitly declare and isolate dependencies

## III. Config

Store config in the environment

## IV. Backing services

Treat backing services as attached resources

## V. Build, release, run

Strictly separate build and run stages

## VI. Processes

Execute the app as one or more stateless processes

## VII. Port binding

A close-up of Darth Vader's helmet, centered in the frame. The helmet is dark and metallic, with its iconic breathing apparatus visible. The background is a blurred city skyline at night, with numerous yellow and white lights from buildings and streets. The overall tone is dramatic and menacing.

**I FIND YOUR LACK OF  
CONFIDENCE**

**DISTURBING**





Process Maturity?

**No More  
Heroics**



Follow Through

***Always***





Make Custom Tools

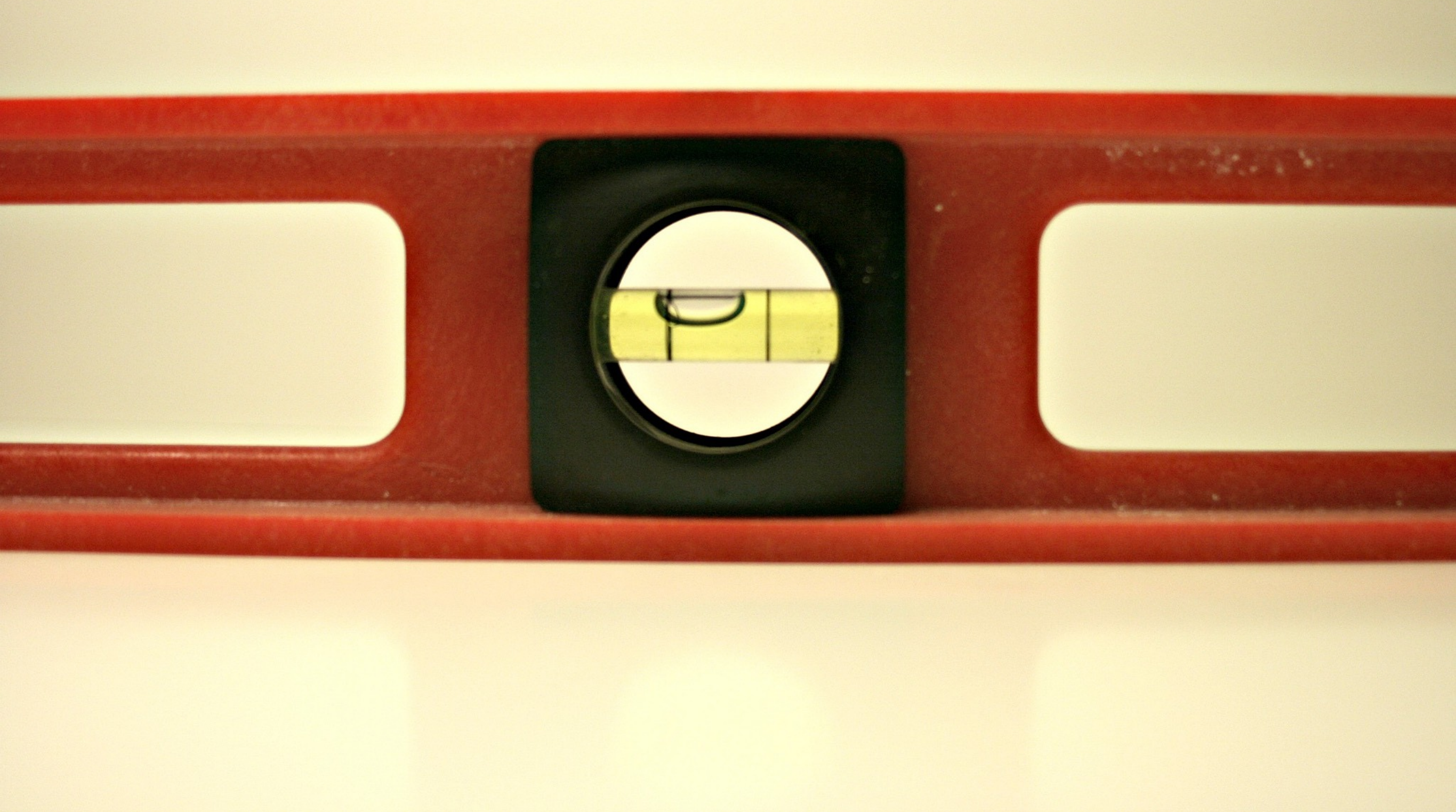


**I HATED GIT**



**NOW I HATE  
IT LESS**





Seek Stability



**WATCH YOUR STEP**











# SKILL SHARE SCHEDULE

Saturday

12 Catch the Rooster  
Free Lunch

3 Soapmaking - in the shed  
Bike Repair - outside

Magic Trick Swap - studio @ 3:30

Chicken Prep - kitchen

4 Herbal Tinctures

Painting

Chicken Cooking

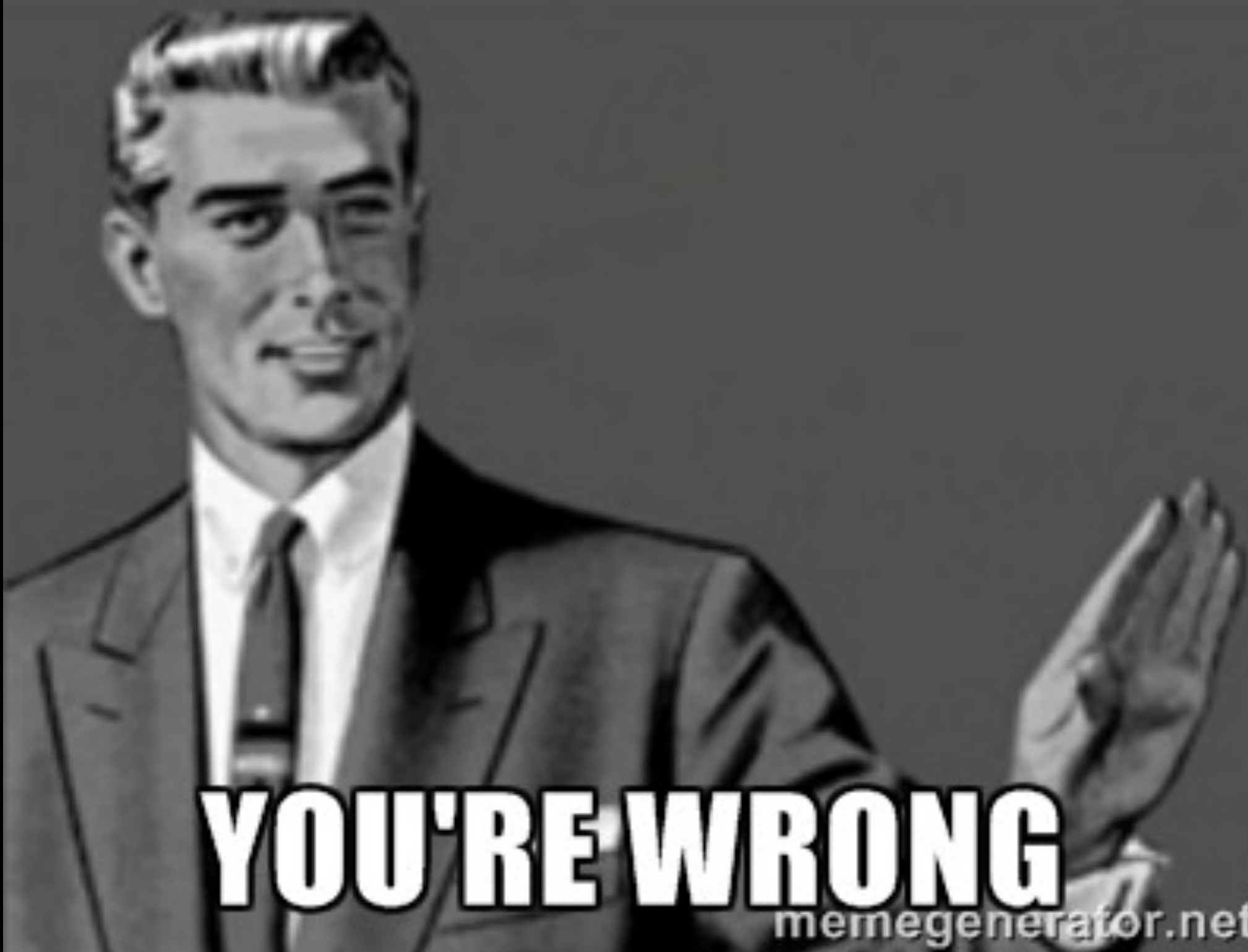


# Understand the Business Needs

("it's always been that way" doesn't count)



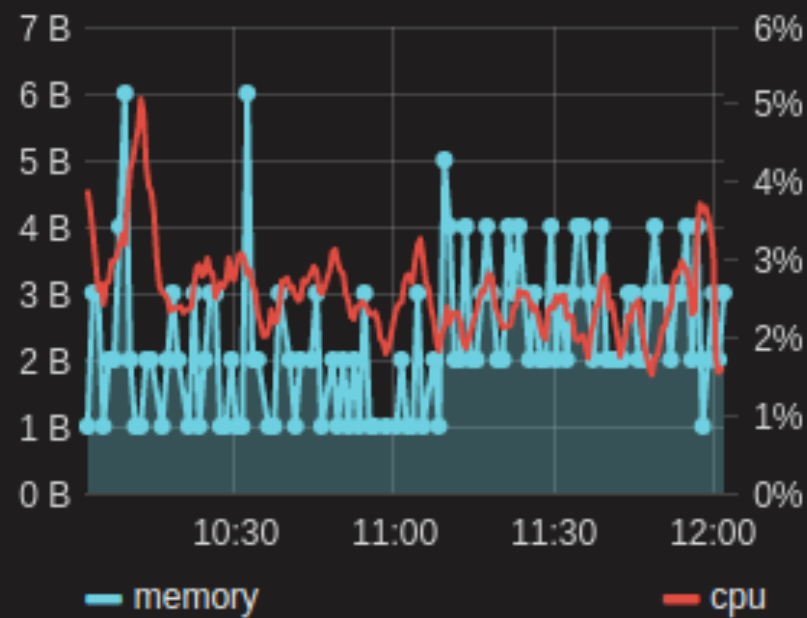
**UM, EXCUSE ME SIR  
BUT...**



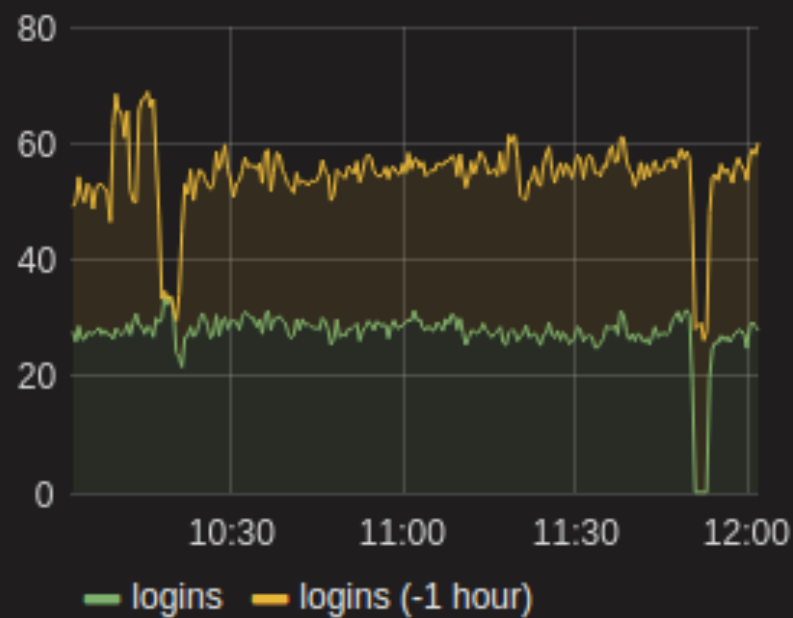
**YOU'RE WRONG**



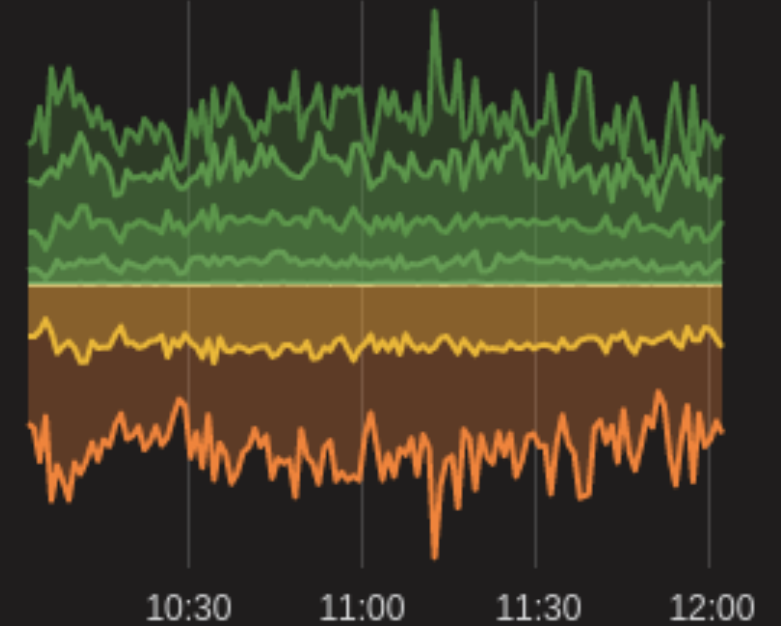
Memory / CPU



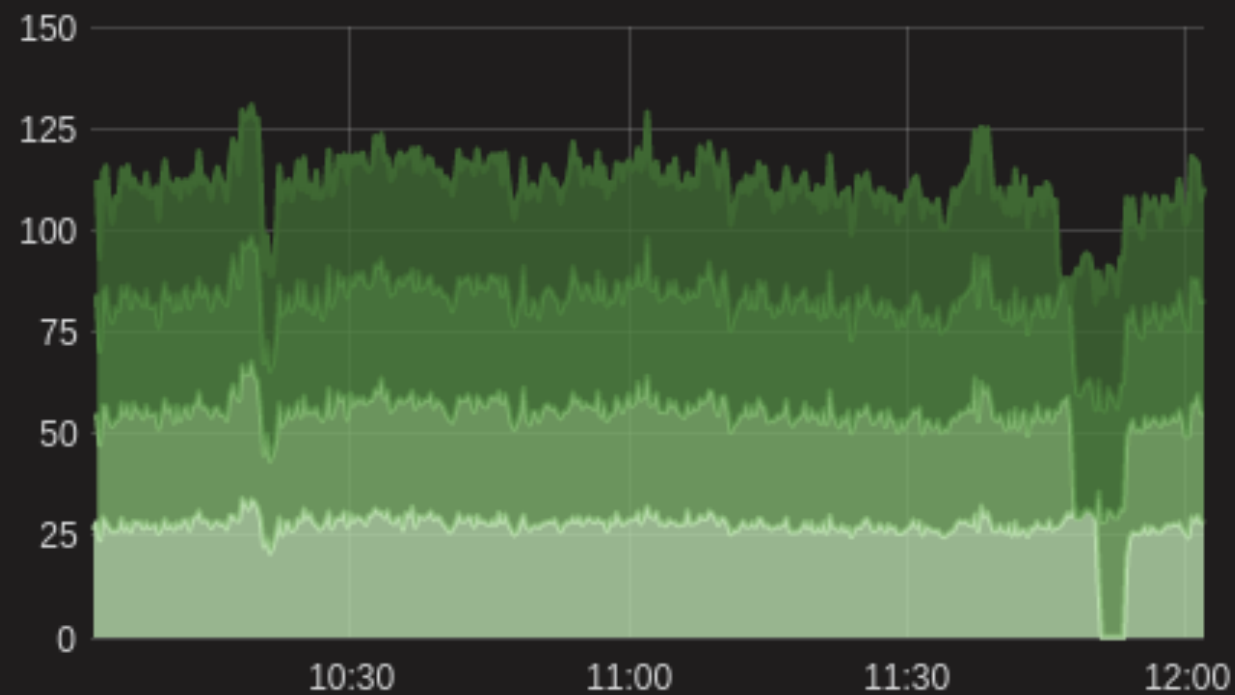
logins



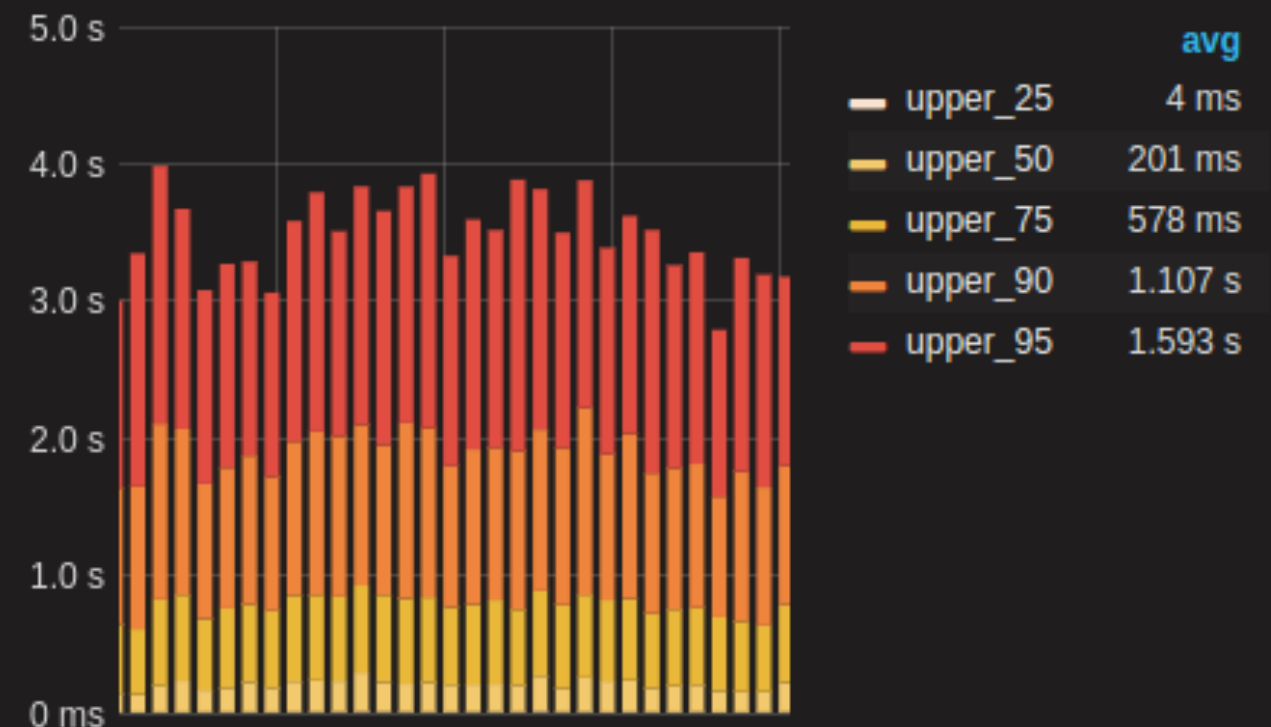
Traffic In/Out



server requests



client side full page load









Remove Dead Code  
with  
**Extreme** Prejudice





# Avoid Full Rewrites



# **My Big Bang Theory**



Small Steps,  
Accumulate Victories

**WE NEED TO BUILD A WALL**



[memeshappen.com](http://memeshappen.com)





**MAKE THEM PAY FOR  
IT**

**⚠ CAUTION**

**Hazardous Waste  
Storage Area.**

**Unauthorized Persons  
Keep Out!**





**Y U IGNORE ME?**

[quickmeme.com](http://quickmeme.com)

Someday Never Comes

*The passionate, functional, micro-serviced approach*



*Expert*

# Resumé Driven Development



Idiomatic Code  
**before**  
Clever Code

A black and white portrait of Albert Einstein, showing his characteristic wild, white hair and mustache. He is looking directly at the camera with a slight, thoughtful expression. The background is dark and out of focus.

Insanity:  
doing the  
same thing  
over and over  
again and  
expecting  
different  
results.

- *Albert Einstein*

[www.quotesworthrepeating.com](http://www.quotesworthrepeating.com)





You **need** a dictator

# Closing Thoughts

- Recognize legacy isn't all bad
- Don't do a big bang rewrite
- Do not let people, process, and culture problems fester
- Don't be afraid to do gross things
- Don't let your nice things get spoiled



# Questions?

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[joe@lostapathy.com](mailto:joe@lostapathy.com)