# Info Support International Group

**Consultancy**

### Info Support NL
- Softwareontwikkeling
- Beheer
- Training

### Info Support BE
- Softwareontwikkeling
- Beheer
- Training

**Productbedrijven**

### R&R WFM
- SaaS-oplossing
- Personeelsplanning

### Datarotonde
- SaaS-oplossing
- Data-integratie

### ZorgInfo
- SaaS-oplossing
- Zorgprocessen

### BESTMIX
- Software voor het produceren en verhandelen van voeding

# Info Support International Group facts

Opgericht in
1986
in Nederland

600+
medewerkers

Specialized
cloud
solutions

Jaarlijkse
80 omzet
miljoen

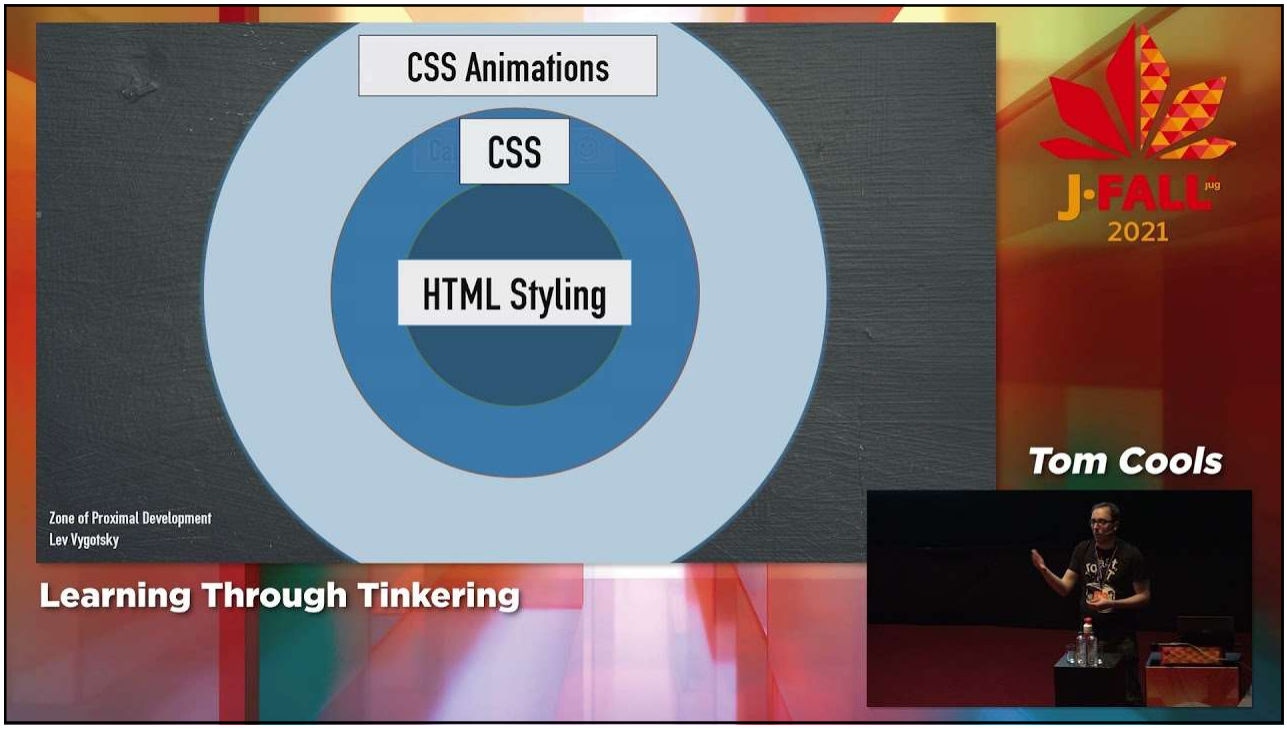
Lange
termijn
focus

Activiteiten
in Europa,
Amerika en Azië

Familiebedrijf
(niet-beursgenoteerd)

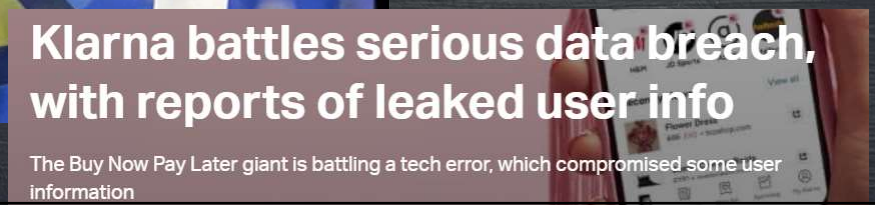
Custom made
SOFTWARE
solutions

Project: NS
12 miljoen berichten per dag die het reizen sneller, veiliger en betrouwbaarder maken.
NS
NS
trein


CSS Animations
CSS
HTML Styling
Zone of Proximal Development
Lev Vygotsky
Learning Through Tinkering
J·FALL
2021
Tom Cools

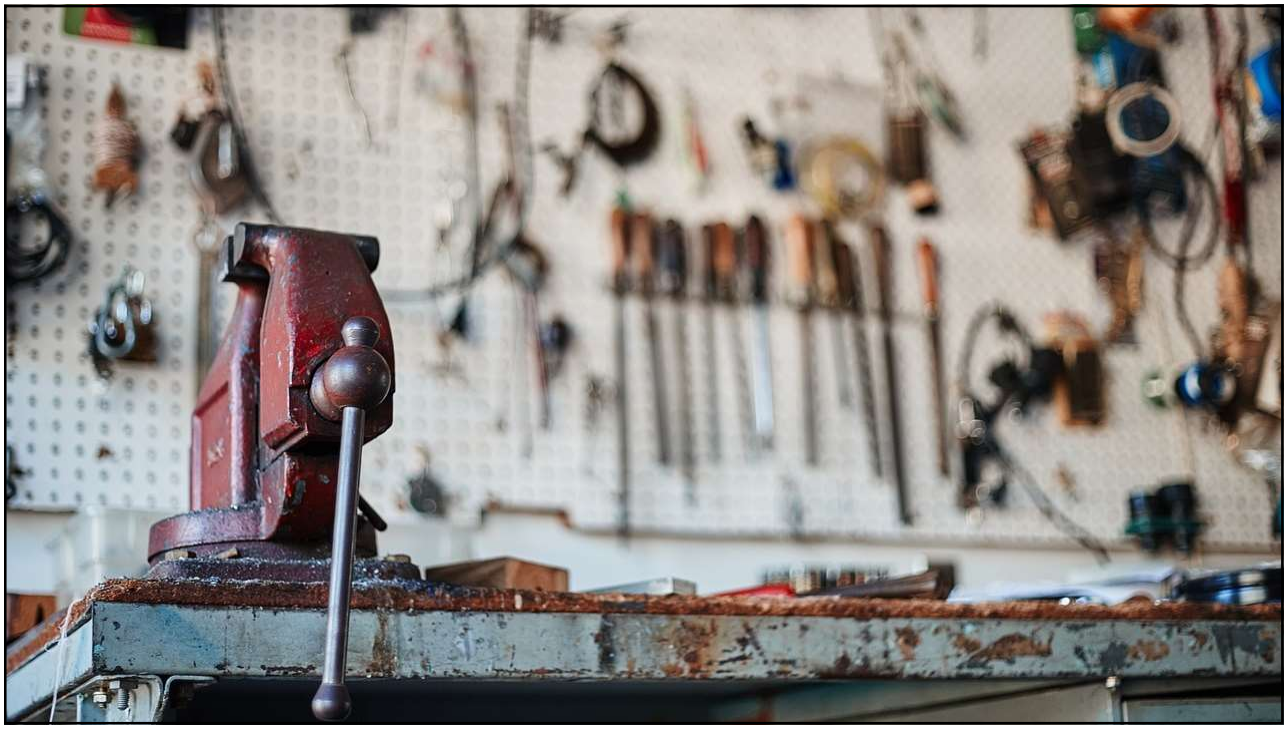
# What's the price of a mistake?

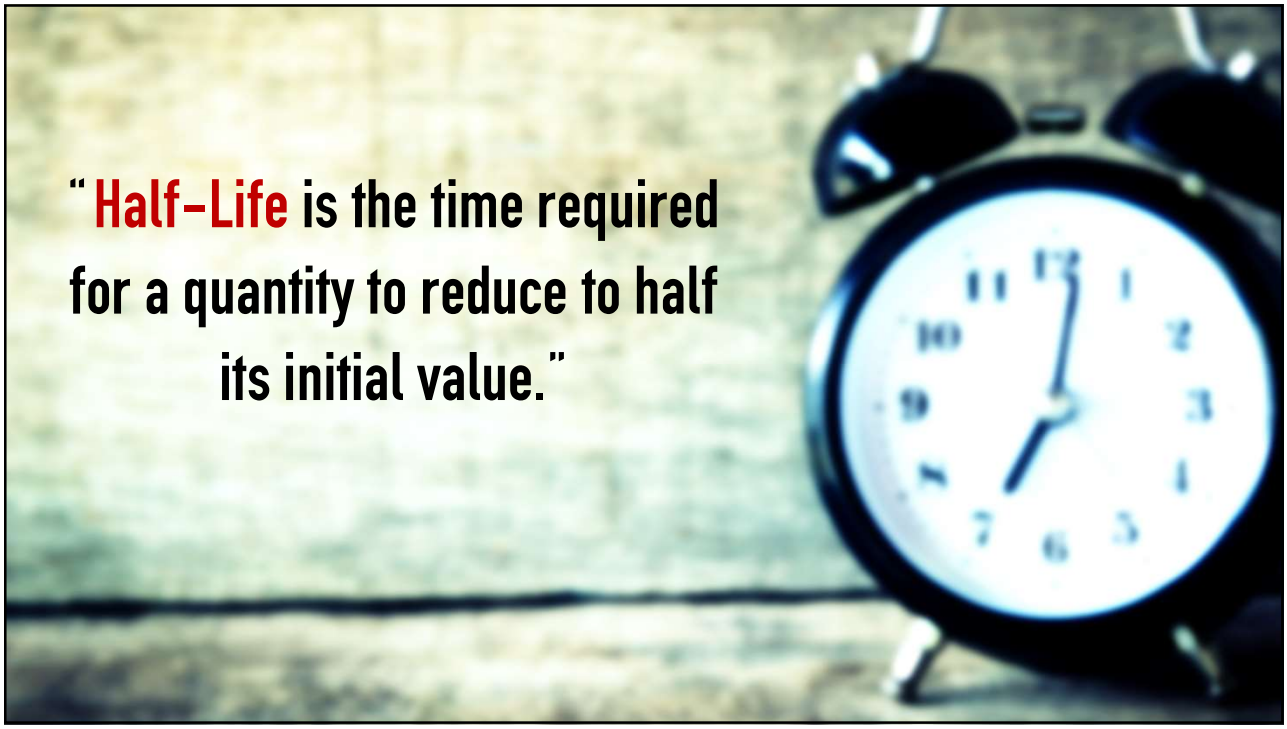
```
name: "Daniel  Verlaan"
adres: "Barend en Van Dorpweg 2"
email: "[redacted]"
phone: "0620[redacted]"
bsn: "766427840"
passport: "RT42L22Z2"
result: "Negatief"
test: "Antigeen sneltest"
```




We need to regulate our own industry,
Before we are forced to regulate.

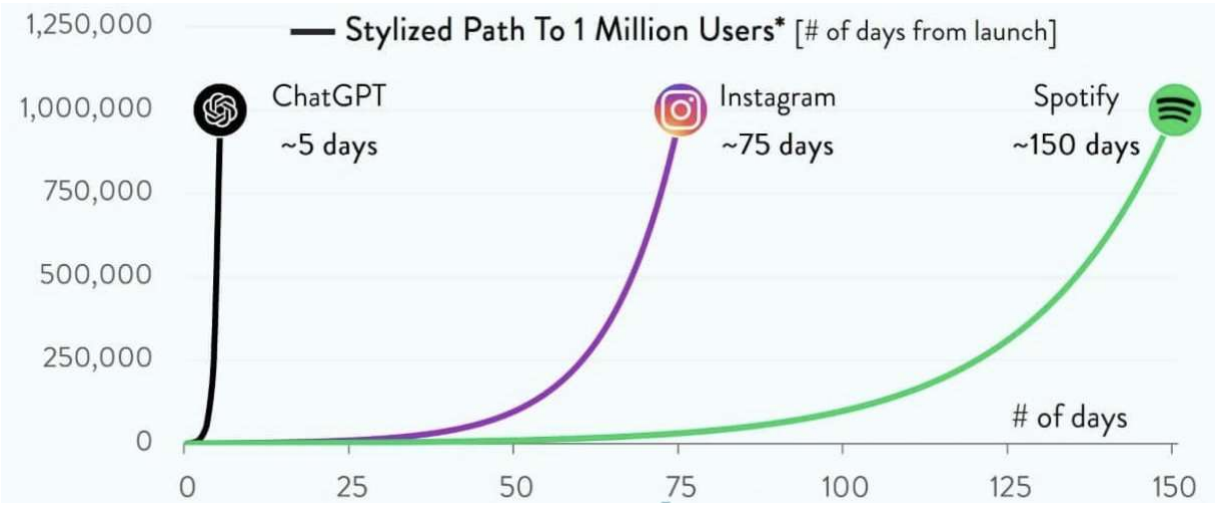
– Bob Martin (author of Clean Code)



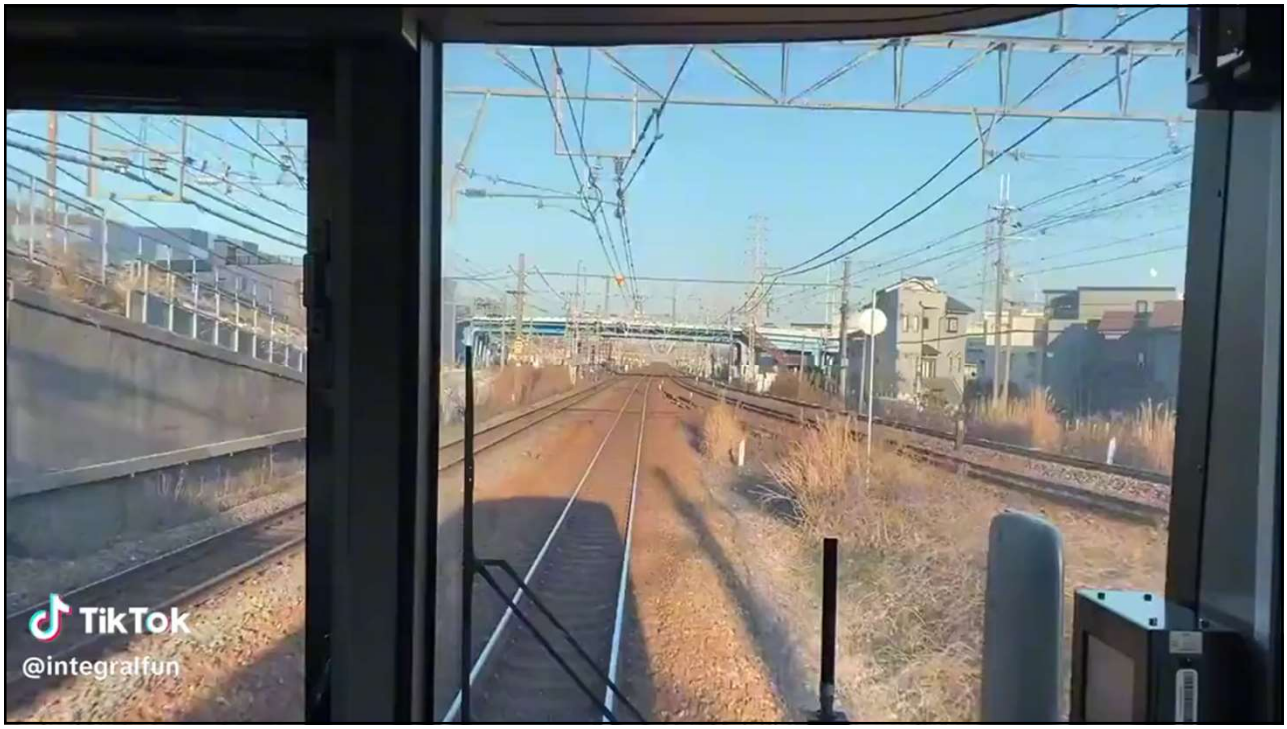

"Half-Life is the time required for a quantity to reduce to half its initial value."

## A hype today could be a standard tomorrow

- Java 17 (September 17, 2021)
- Quarkus (March 7, 2019)
- Kotlin (February 15, 2016)
- Kubernetes (July 21, 2015)
- Spring Boot (April, 2014)
- Docker (March 13, 2013)




Source: https://twitter.com/Contrary_Res/status/1610752946412847104/photo/1




# Learning Through Tinkering

- Finding the right things to learn about;
- Applying what you learned;
- Common mistakes while learning;
- Getting to most out of your new knowledge;

# Learning Through Tinkering

- Finding the right things to learn about;
- Applying what you learned;
- Common mistakes while learning;
- Getting to most out of your new knowledge;

# Picking something to learn...

Tiktok

Meetups

Technology Radar

Conferences

Blogs

Collegues

## Belgian Java User Group

Brussels, Belgium

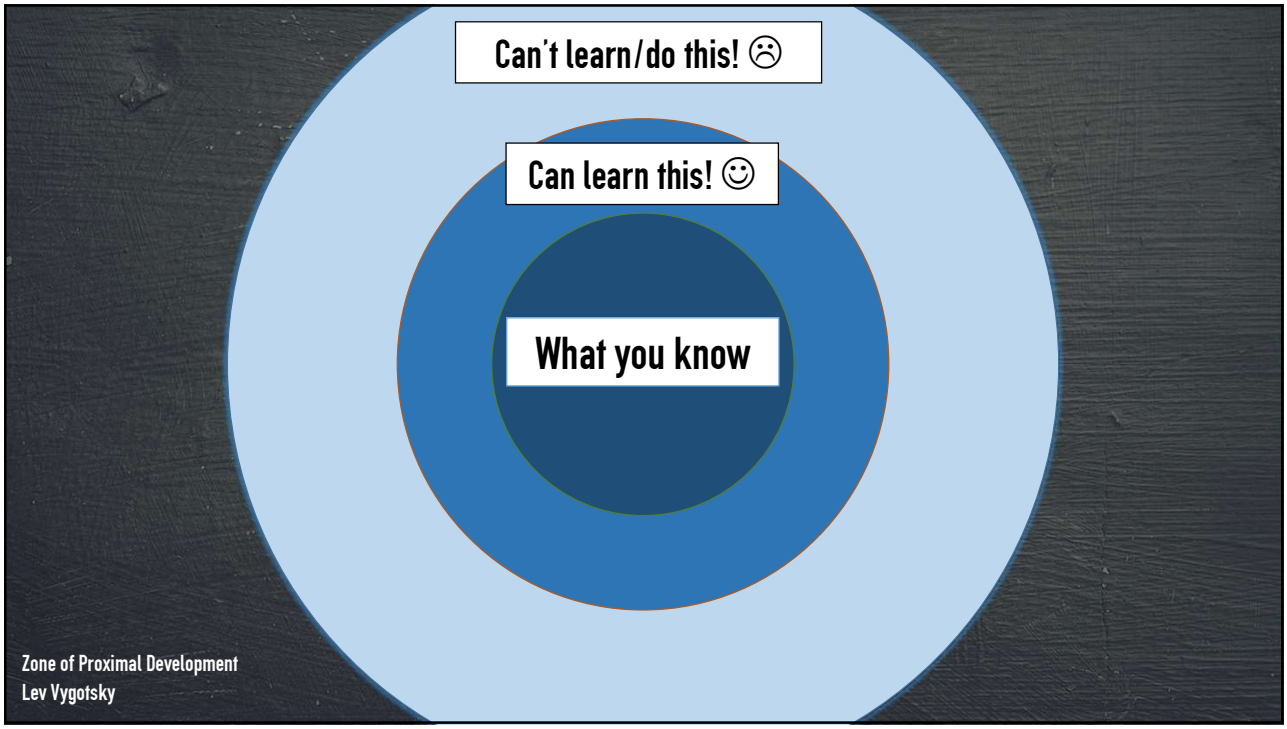
1,449 members · Public group

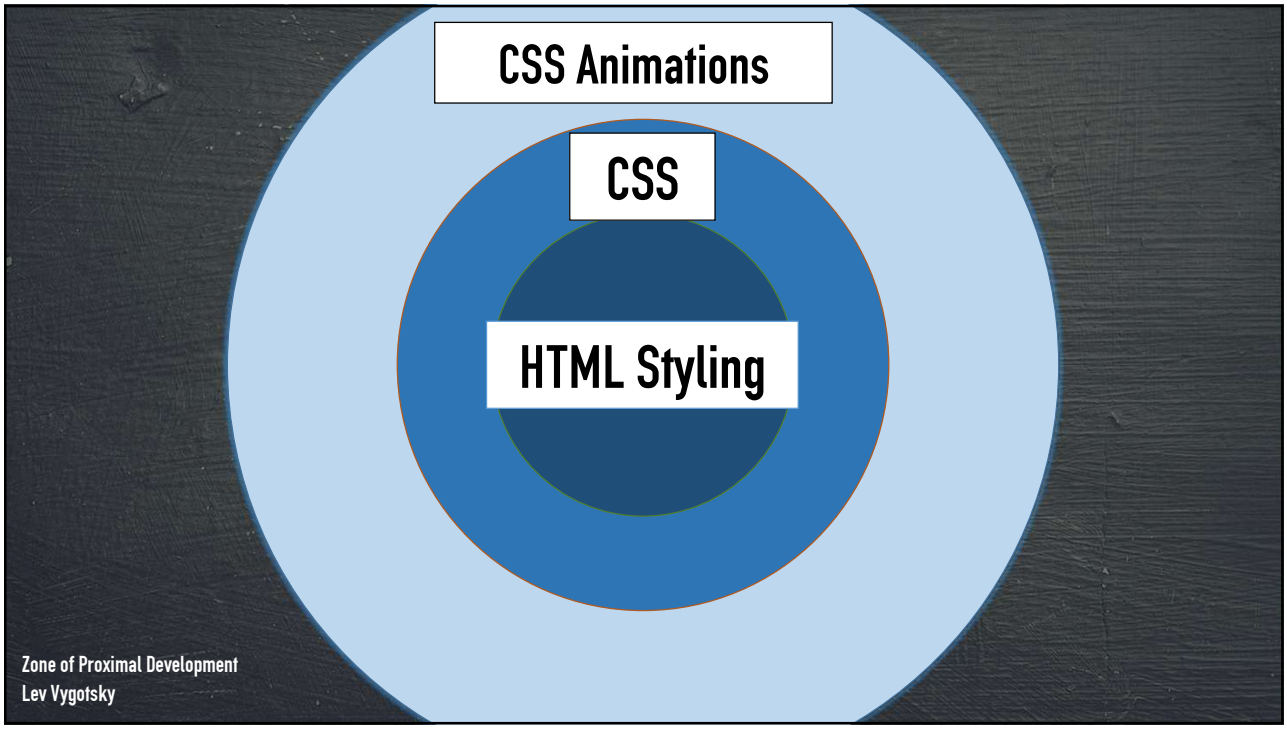
Organized by **Tom Cools** and **9 others**

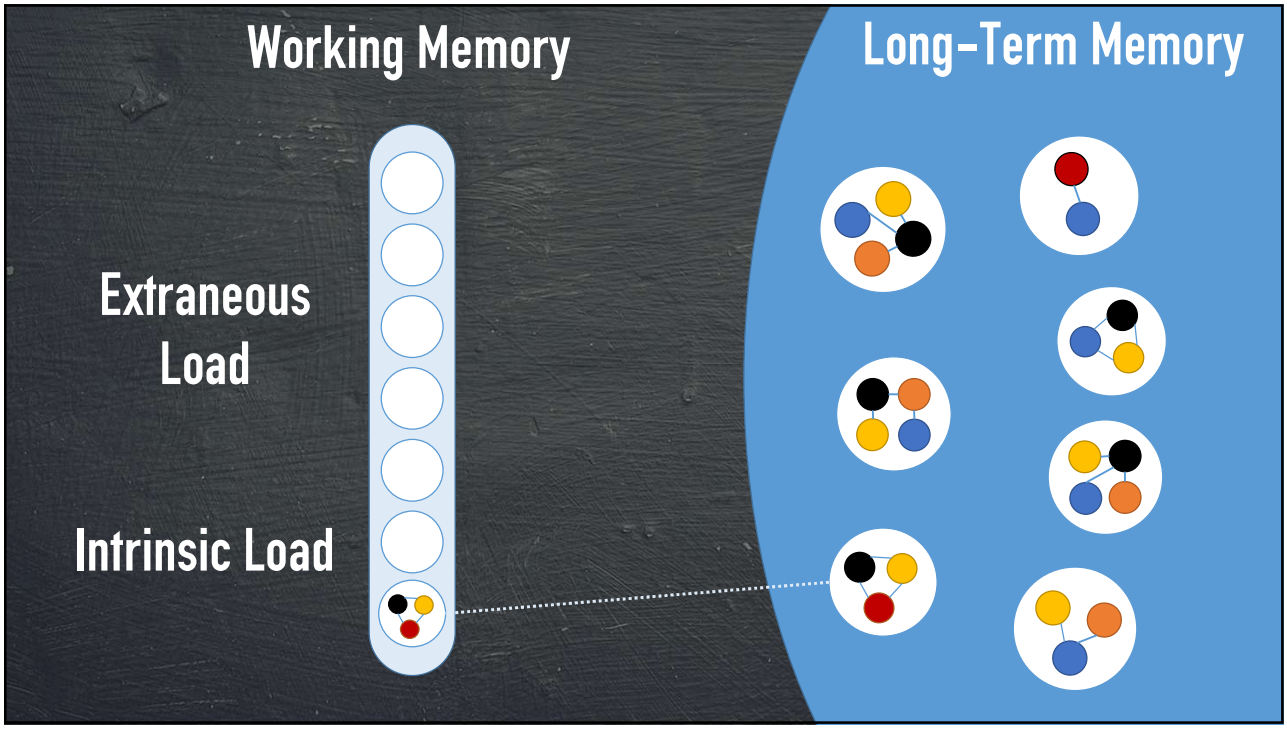
Share:

"One should not pursue goals that are easily achieved. One must develop an instinct for what one can just barely achieve through one's greatest efforts."

– Albert Einstein




CSS Animations
CSS
HTML Styling
Zone of Proximal Development
Lev Vygotsky

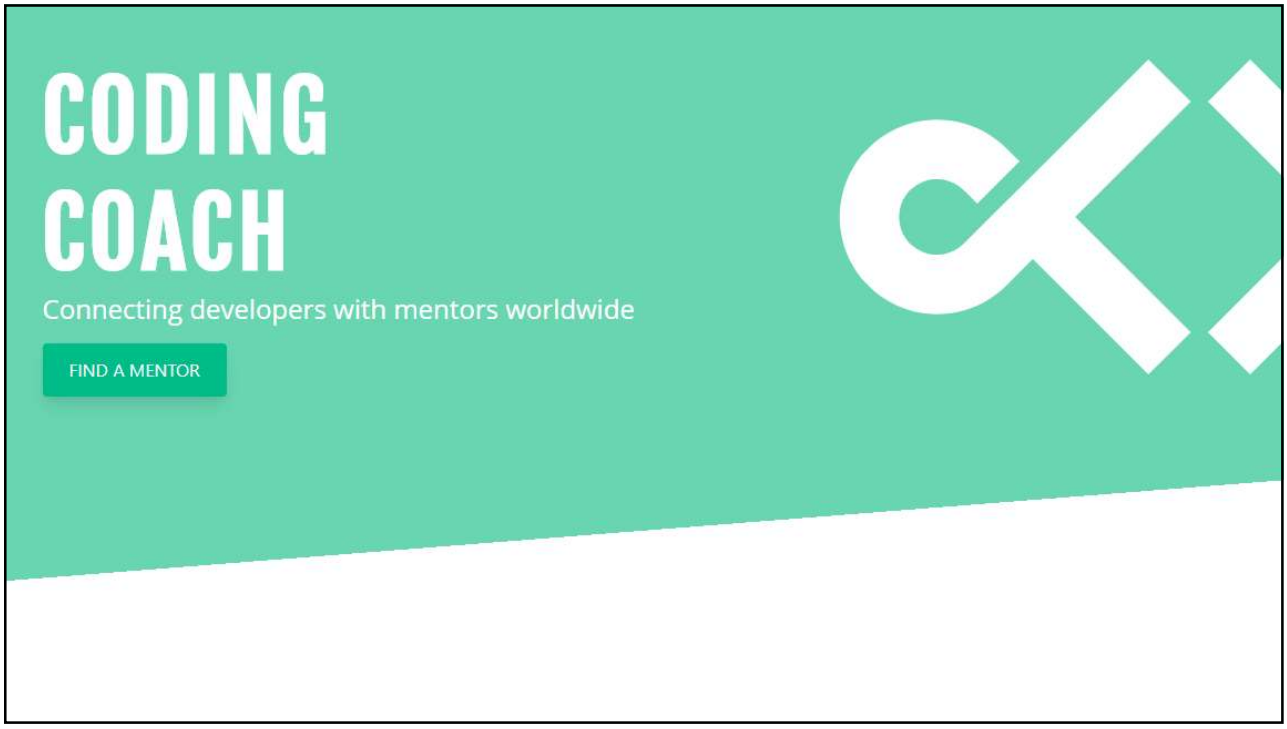

Working Memory
Long-Term Memory
Extraneous Load
Intrinsic Load

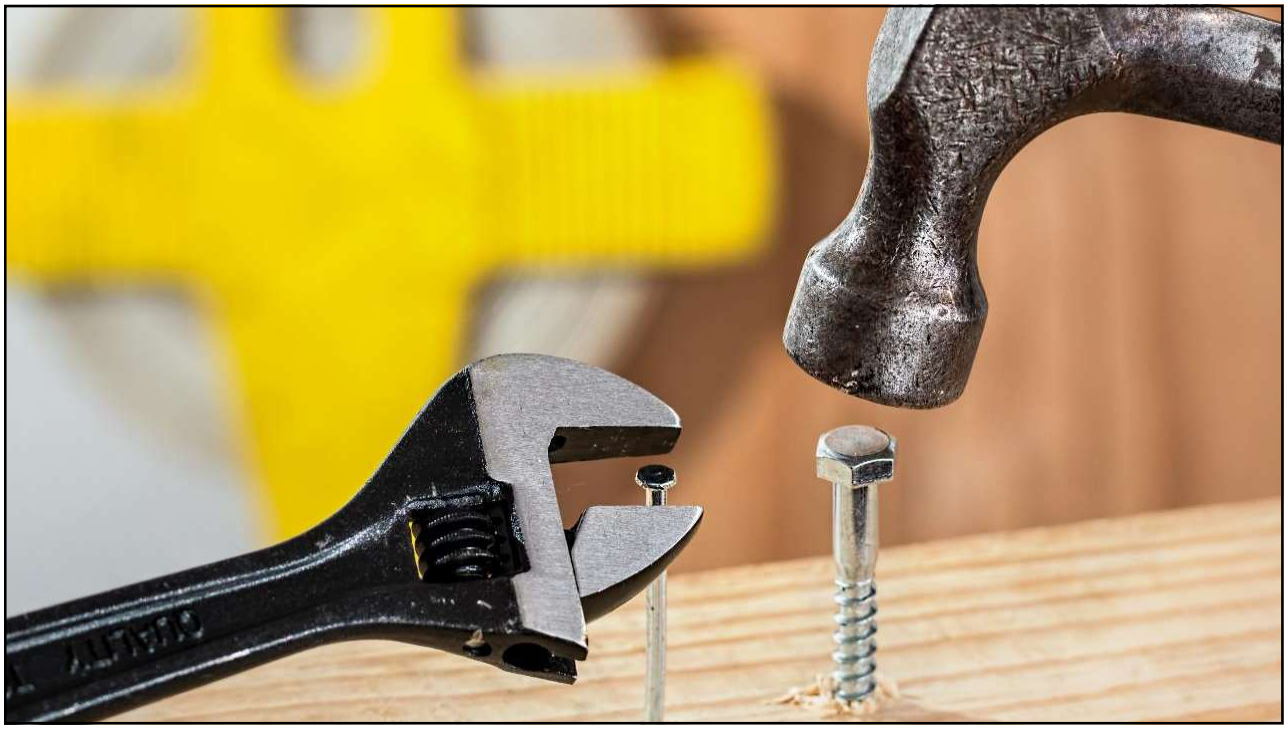
"Technical implementations decay faster than the concepts they are based on"

# Concepts don't decay as fast

- Object Oriented Programming
- Functional Programming
- TDD
- DDD
- Design Patterns
- Clean Code

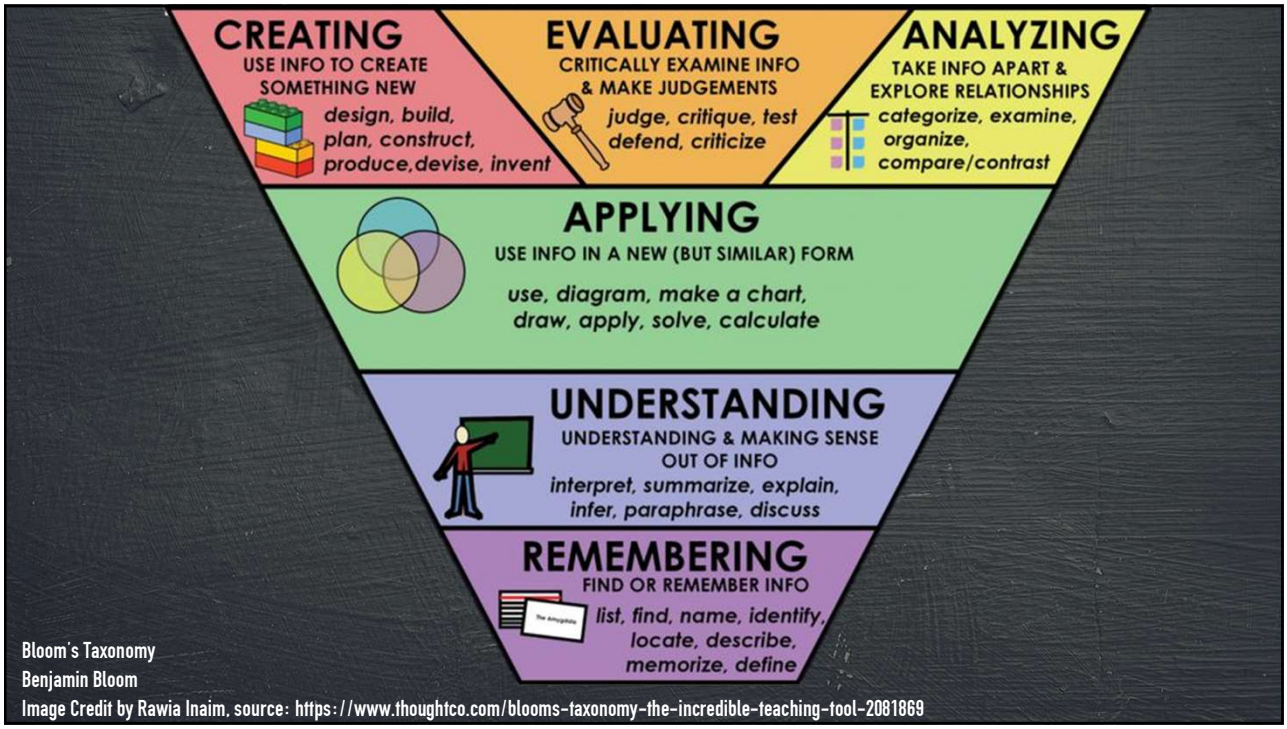
# https://roadmap.sh/roadmaps





# Learning Through Tinkering

- Finding the right things to learn about;
- **Applying what you learned;**
- Common mistakes while learning;
- Getting to most out of your new knowledge;




Bloom's Taxonomy
Benjamin Bloom
Image Credit by Rawia Inaim, source: https://www.thoughtco.com/blooms-taxonomy-the-incredible-teaching-tool-2081869

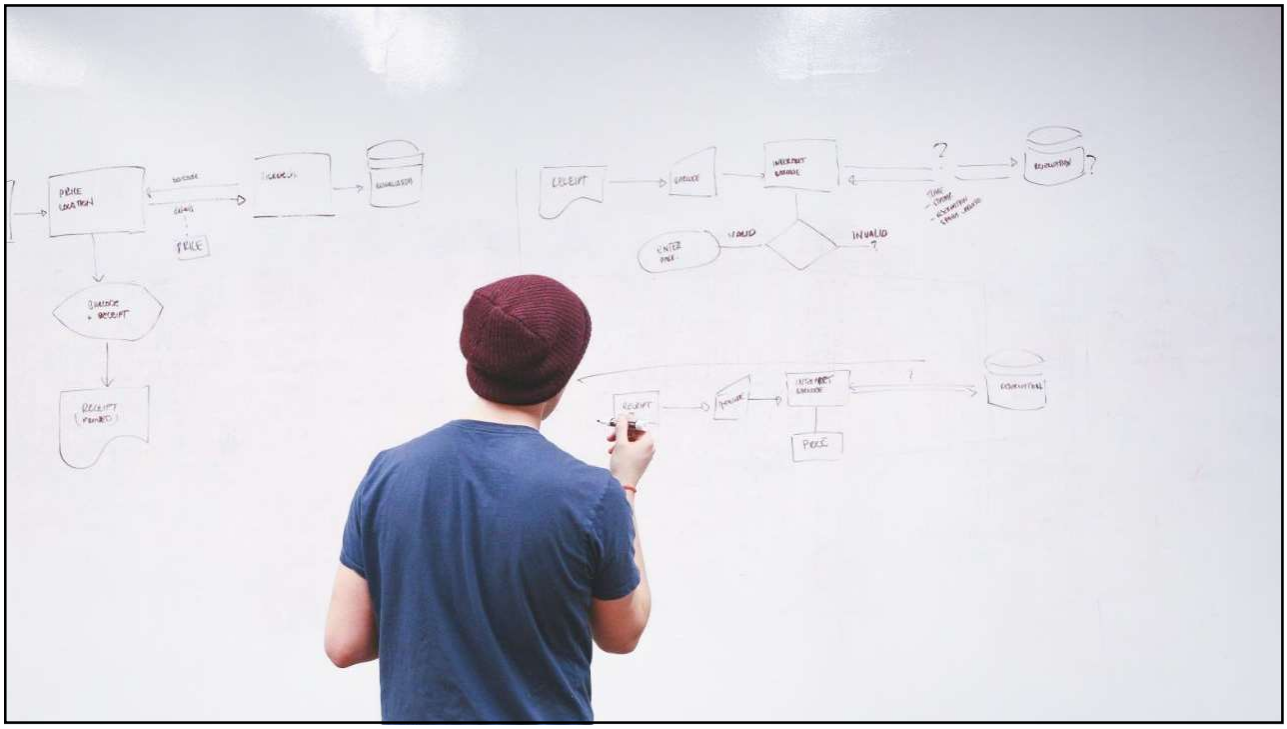
# What is tinkering?

"Experimenting with ideas/frameworks in an integrated environment to fully understand their capabilities"

Limit
Yourself

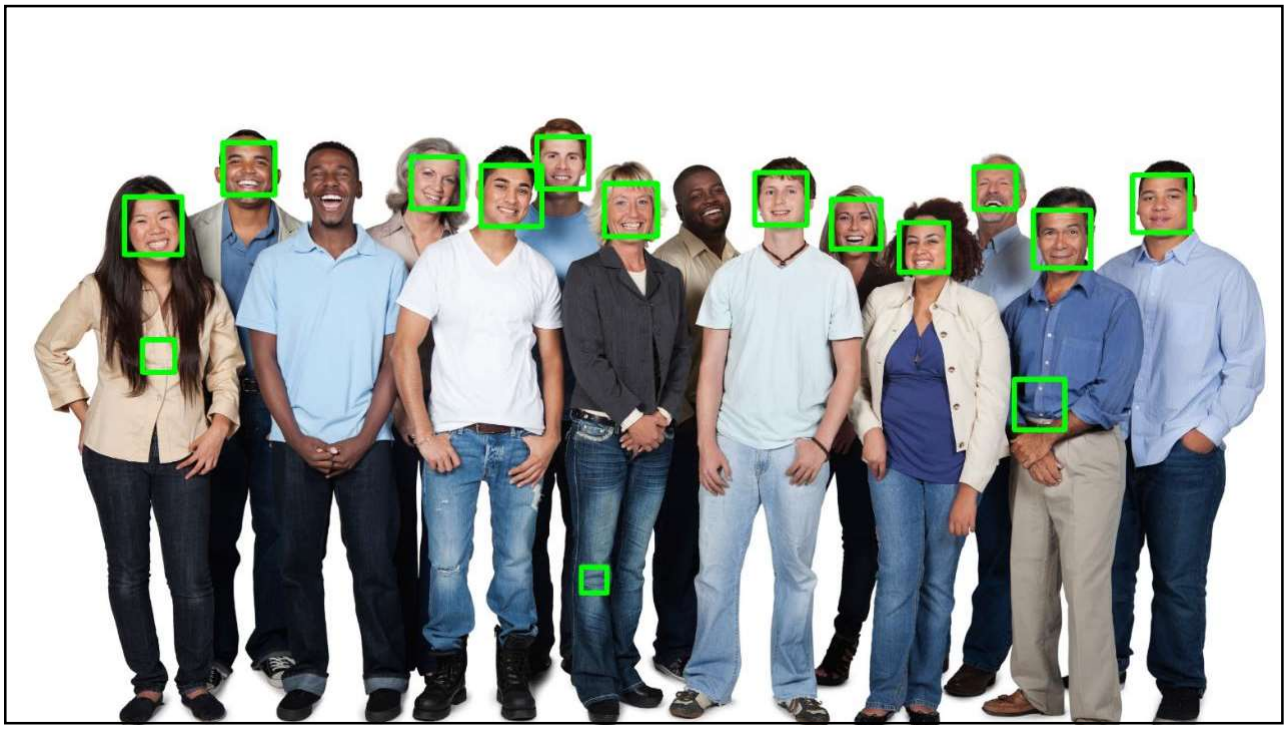
Limit
Yourself

Reflect



OpenCV

Microsoft Cognitive Services
Face API



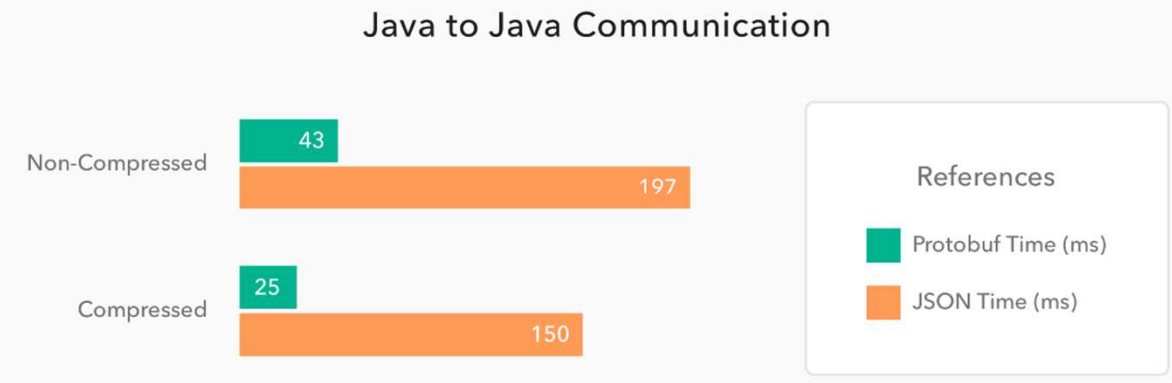
Reflect

Image: CERN – ATLAS calorimeter
http://cdsweb.cern.ch/record/910381#02

google.com
https://cloud.google.com › topics · Vertaal deze pagina

How Pokémon GO scales to millions of requests?

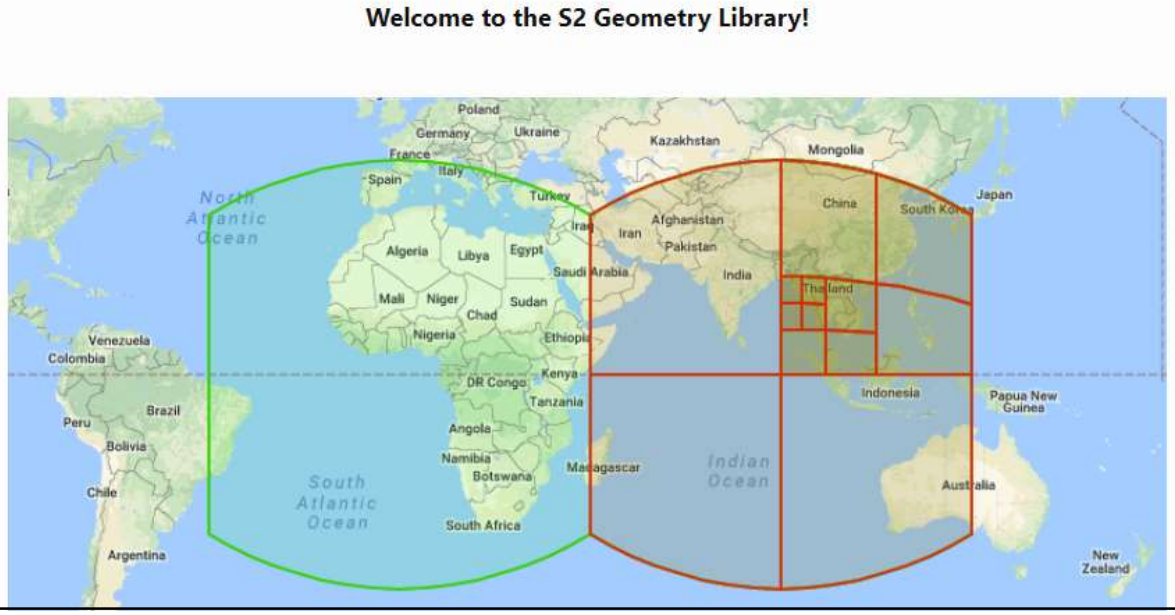
27 okt 2021 — We also write the **protobuf** representation of each user action into Bigtable for logging and tracking data with strict retention policies. We ...




Source: https://auth0.com/blog/beating-json-performance-with-protobuf/

# S2 Geometry

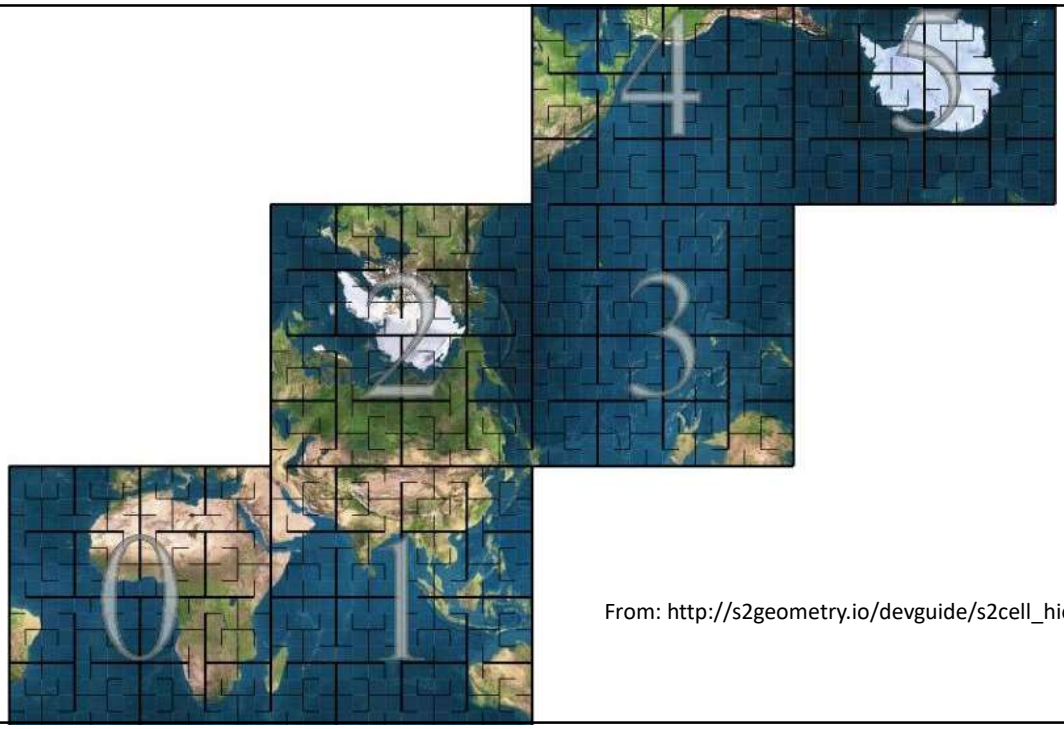
From: http://s2geometry.io/



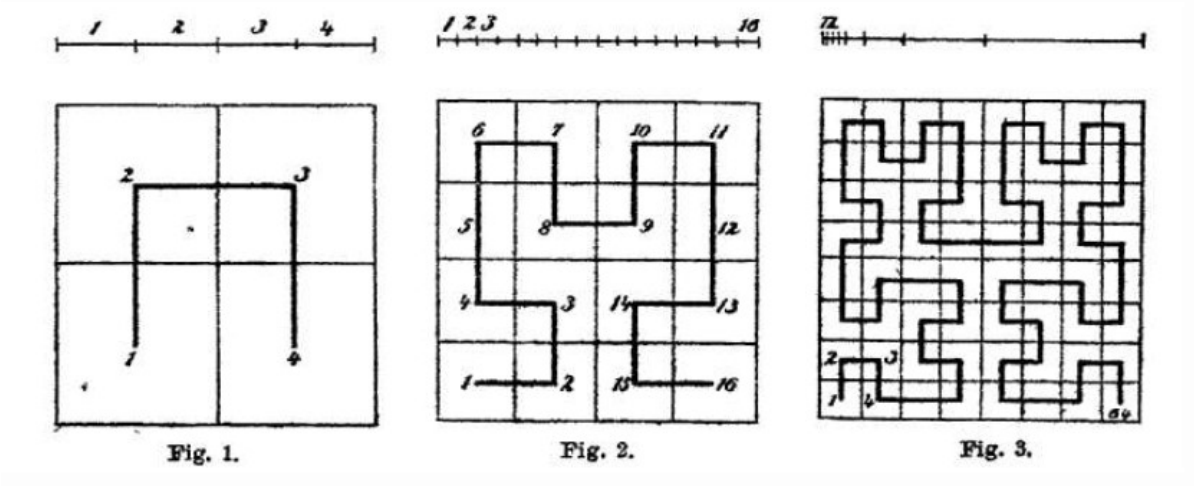
Location based on Latitude and Longitude

Our Office:

Latitude: 52.040953
Longitude: 5.534875




From: http://s2geometry.io/devguide/s2cell_hierarchy




From: http://s2geometry.io/devguide/s2cell_hierarchy

# 100 11 01 1000...0

L0 (Face) 4 | L1 Cell 3 | L2 Cell 1 | Last 1 = Terminator

If a L0 cell has an area of 85 011 012.19 km², how many levels does it take to get to ~1 cm²?

**30 Levels!**

30 Levels * 2 bits = 60 bits

3 bits for L0 Faces

1 termination bit

You can map every $cm^2$ on earth in 64 bits!

001 00 11 01 00 10 01 01 01 10 10 00 10 00 00 10 11 11 01 10 10 01 10 10 00 10 01 11 00 10 10 1

2692B4417B4D1395

Alternative
Approaches

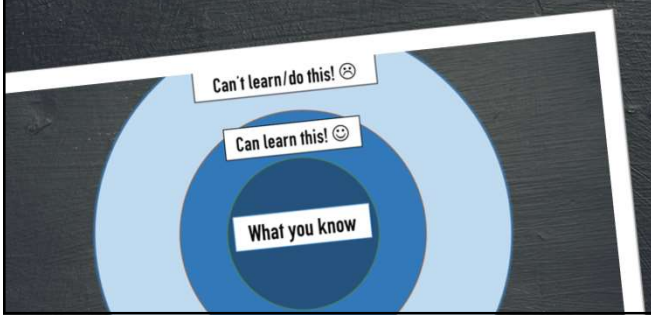
Character: "Chonk" by purr.in.ink
Twitter: @purrinink

# Alternative Approaches

## Learning Through Tinkering

- Finding the right things to learn about;
- Applying what you learned;
- **Common mistakes while learning;**
- Getting to most out of your new knowledge;

# Too much new stuff




# Cramming new knowledge

# StackOverflow Based Development

AKA, the copy-paste loop

# Step out & Don't Come back

# Perfectionism is not helpfull

"Compare yourself to who you were yesterday, not to who someone else is today."

# Ask your collegues!

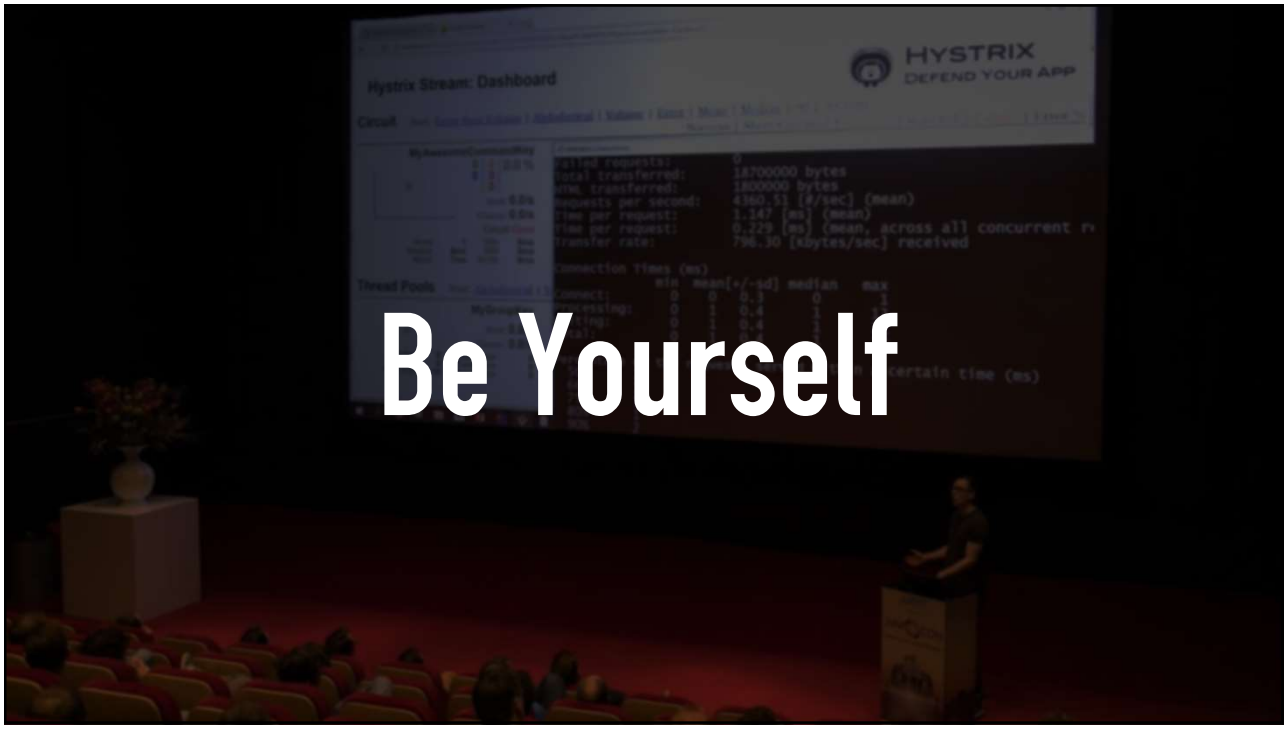
# Work towards where you want to be in 3 years

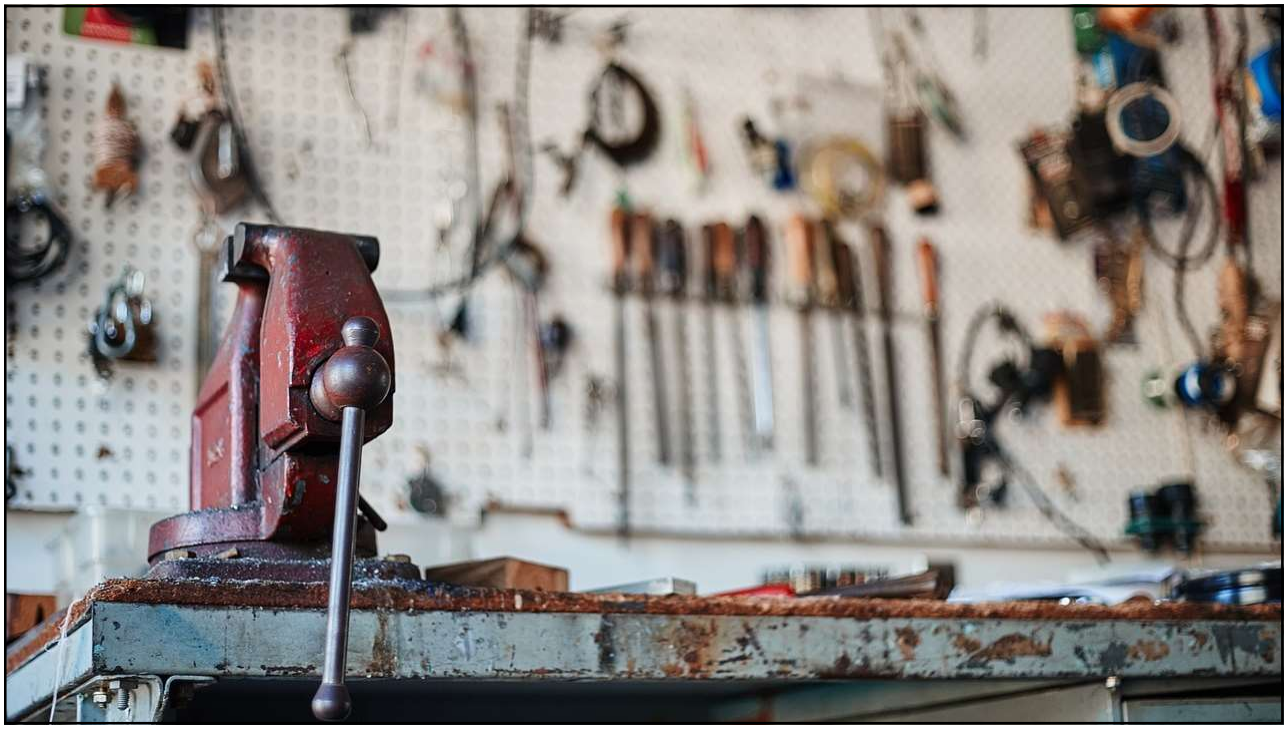
# Learning Through Tinkering

- Finding the right things to learn about;
- Applying what you learned;
- Common mistakes while learning;
- Getting to most out of your new knowledge;

# Share what you learned!

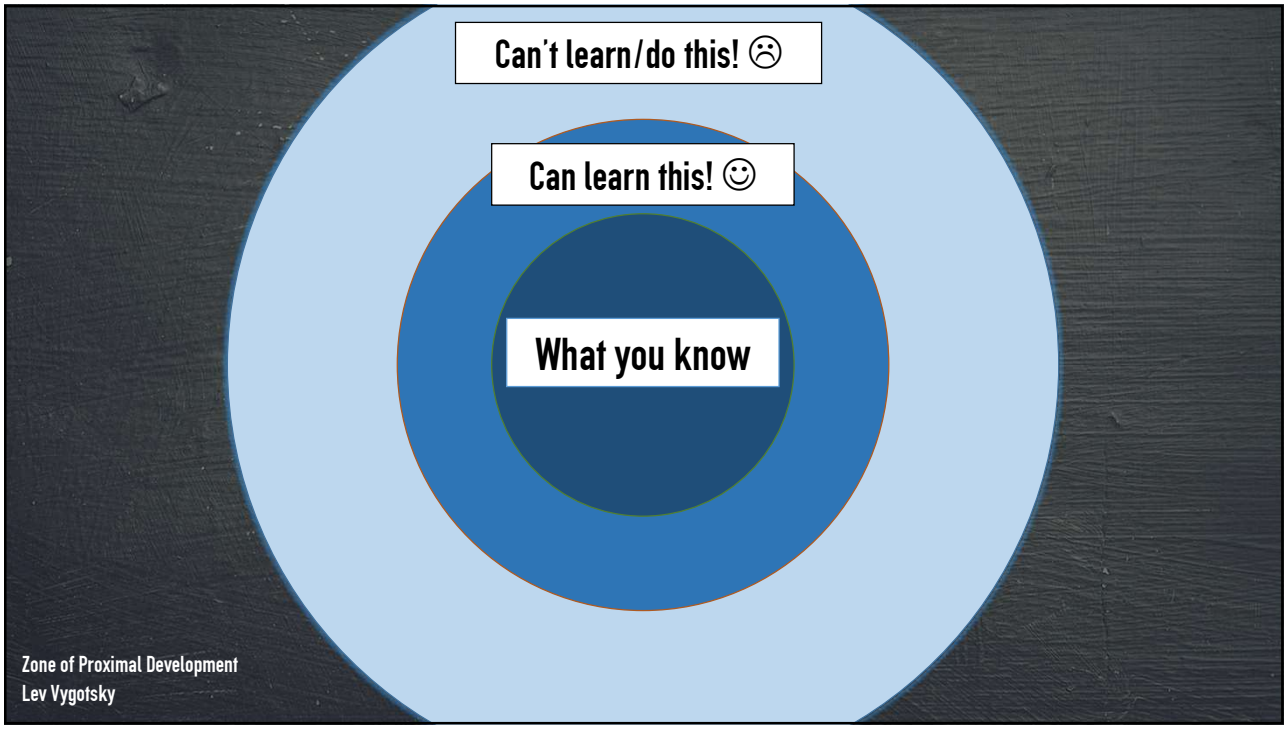
CODING
COACH
Connecting developers with mentors worldwide
FIND A MENTOR
Do Good

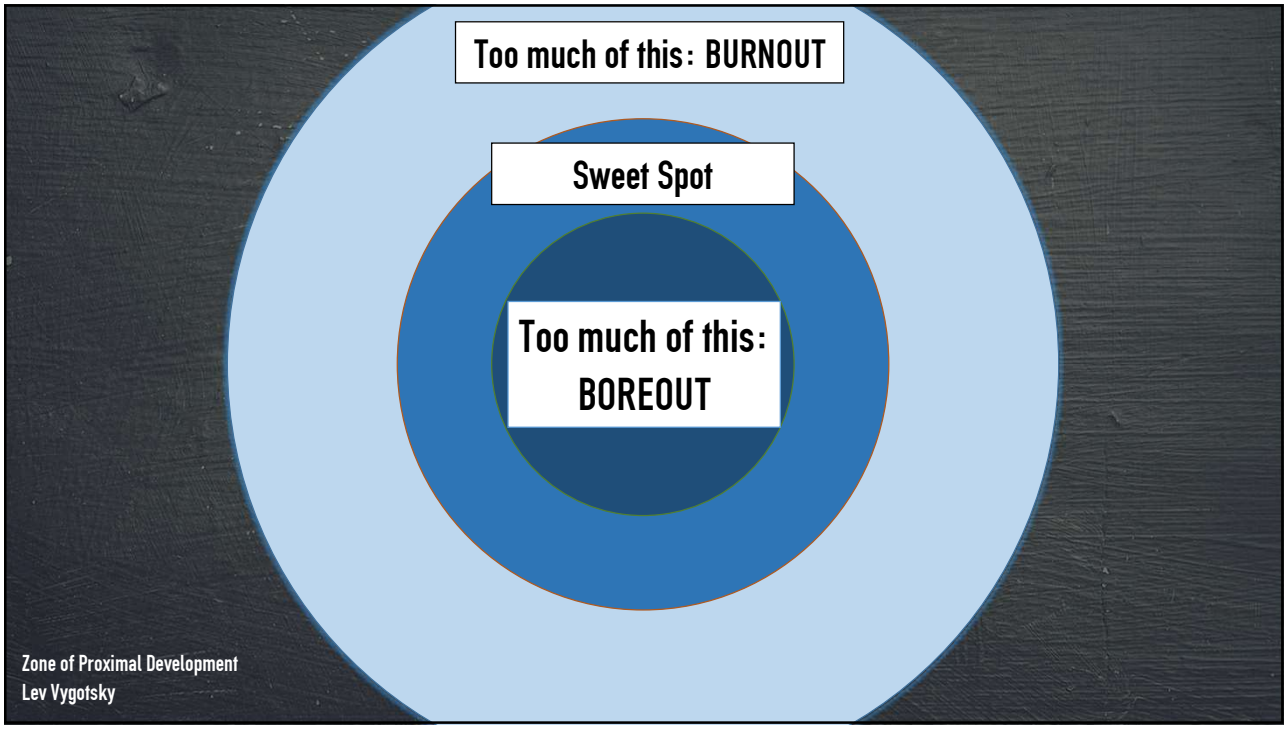

Hystrix Stream: Dashboard
HYSTRIX
DEFEND YOUR APP
Be Yourself



"Who is responsible to update and maintain your knowledge and skills?"

# You Are


Can't learn/do this! ☹
Can learn this! ☺
What you know
Zone of Proximal Development
Lev Vygotsky

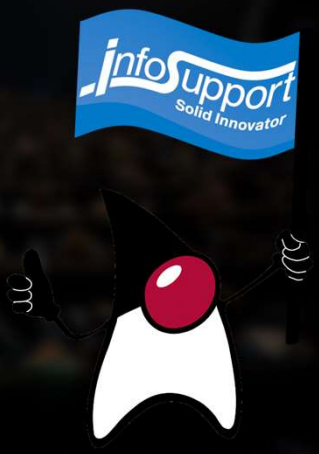

Too much of this: BURNOUT
Sweet Spot
Too much of this: BOREOUT
Zone of Proximal Development
Lev Vygotsky

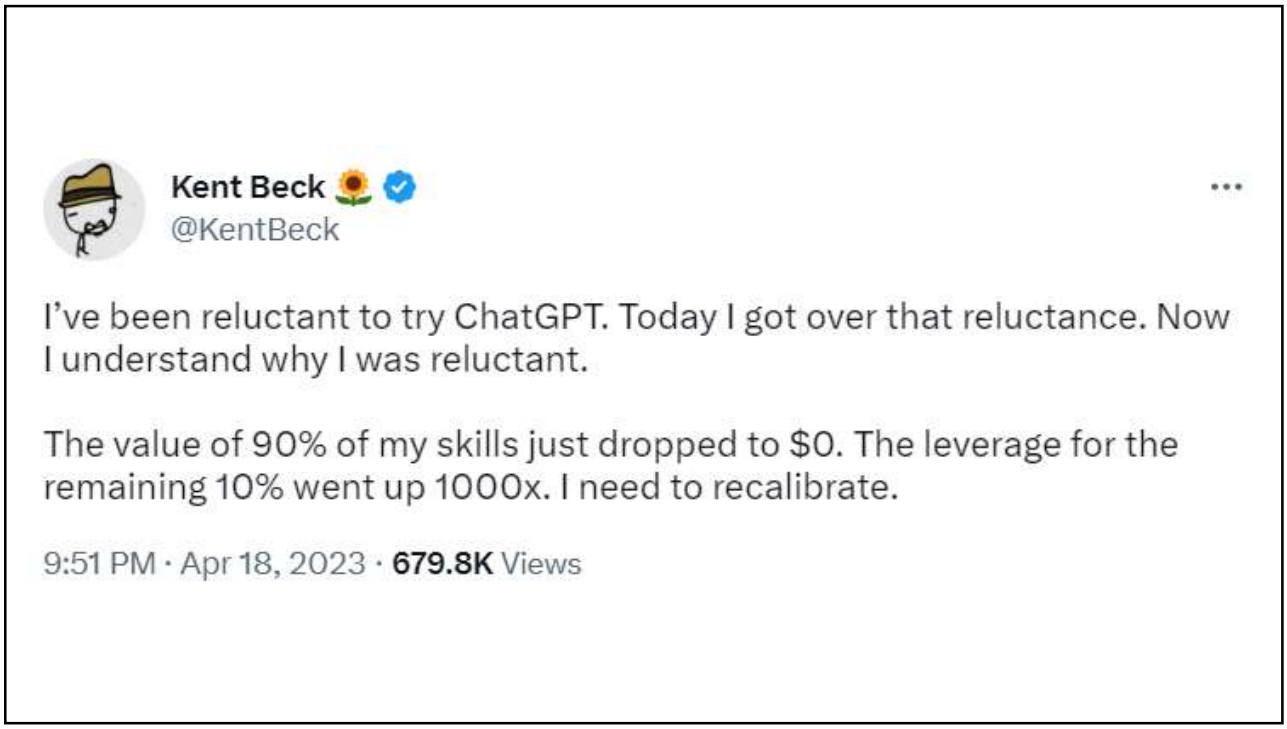
# Learning Through Tinkering

- Finding the right things to learn about;
- Applying what you learned;
- Common mistakes while learning;
- Getting to most out of your new knowledge;

Content: tomcools.be/soon-☺

Twitter: @TCoolsIT



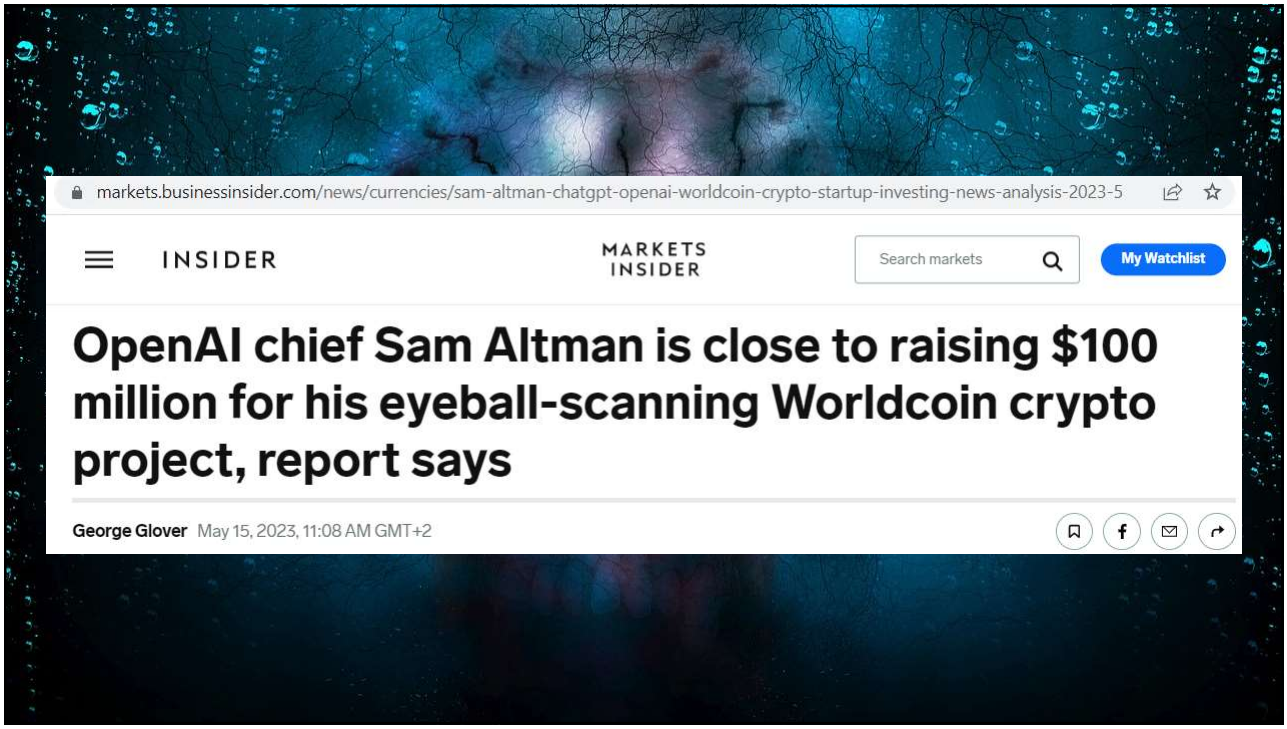

Kent Beck
@KentBeck
I've been reluctant to try ChatGPT. Today I got over that reluctance. Now I understand why I was reluctant.
The value of 90% of my skills just dropped to $0. The leverage for the remaining 10% went up 1000x. I need to recalibrate.
9:51 PM · Apr 18, 2023 · 679.8K Views

## The Neurological Levels

Dilts Pyramid

## We've been here before

- Books: End of knowledge
- Internet: End of knowledge
- Google: End of knowledge
- Code Completion: End of knowledge
- ChatGPT?




**Overreliance** is a failure mode that likely increases with model capability and reach. As mistakes become harder for the average human user to detect and general trust in the model grows, **users are less likely to challenge or verify the model's responses.**

Source: https://cdn.openai.com/papers/gpt-4-system-card.pdf

## Concepts don't decay as fast

- Object Oriented Programming
- Functional Programming
- TDD
- DDD
- Design Patterns
- Clean Code

## What is a Code Reading Club?

It's an experiment!

At its core is the idea that the paradigm we use to teach programming is flawed. One of the most obvious omissions is the ability to read code, both phonetically and analytically. Read **Felienne's blog post** for more information about the theory behind it.

# Stageopdrachten:

https://carriere.infosupport.com/afstudeeropdrachten

## Twitterlijst

Mensen die ik volg waar ik best wel wat informatie uit haal. Kijk zelf even door hun geschiedenis voor je ze volgt, misschien matcht het niet met jou.

- @ThePracticalDev
- @nicolas_frankel
- @ASpittel
- @techgirl1908
- @danielbryantuk