



Long-term IT projects

@pawel_lewtak

A close-up, profile view of a man with short dark hair and a light beard, wearing a light blue button-down shirt. He is wearing a small, white, lapel-style microphone clipped to his shirt. The background is dark blue with some out-of-focus light spots.

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0. Disclaimer

A glowing blue DNA double helix structure is shown against a dark background. The helix is composed of two intertwined strands connected by horizontal rungs representing base pairs. The entire structure has a bright blue, almost cyan glow, with some areas appearing more saturated than others, giving it a three-dimensional, ethereal appearance. The helix is oriented diagonally across the frame, from the top left towards the bottom right.

1. Analysis

A glowing blue DNA double helix structure is shown against a dark background. The helix is composed of two intertwined strands connected by horizontal rungs representing base pairs. The entire structure has a bright blue, almost ethereal glow, with some areas appearing more saturated than others, creating a sense of depth and movement. The text "What to build?" is centered over the middle of the helix.

What to build?

A glowing blue DNA double helix structure is shown against a dark background. The helix is composed of two intertwined strands connected by horizontal rungs representing base pairs. The entire structure has a bright blue, almost cyan glow, with some areas appearing more saturated than others, giving it a three-dimensional, ethereal appearance. The helix is oriented diagonally across the frame, from the top left towards the bottom right.

What problem to solve?

The root of all evil in programming is misunderstanding of the problem. Ask right questions to right people before first line of code.

Mariusz Gil

*Tech people must speak the language of
Business people, not vice versa.*

Stefan Priebisch

A photograph of a server room with rows of server racks on both sides of a central aisle. The racks have glass doors and some have blue lights. The ceiling has recessed lighting. The text "Domain Driven Design" is overlaid in the center.

Domain Driven Design



Event Storming

Impact
Full

Pow
Wow

Waterfall vs Agile



The Only Thing That Is Constant Is Change

Heraclitus

A photograph of a spiral staircase with a central yellow circular light fixture. The text "2. Architecture" is overlaid in the center.

2. Architecture

A photograph of a spiral staircase with a large, textured, brown, dome-shaped object in the center, overlaid with the text "Monolith vs Microservice". The staircase is made of dark grey or black metal or stone, with a central yellow circular structure. The text is white with a black outline, centered horizontally across the image.

Monolith vs Microservice

*you shouldn't start a new project with
microservices*

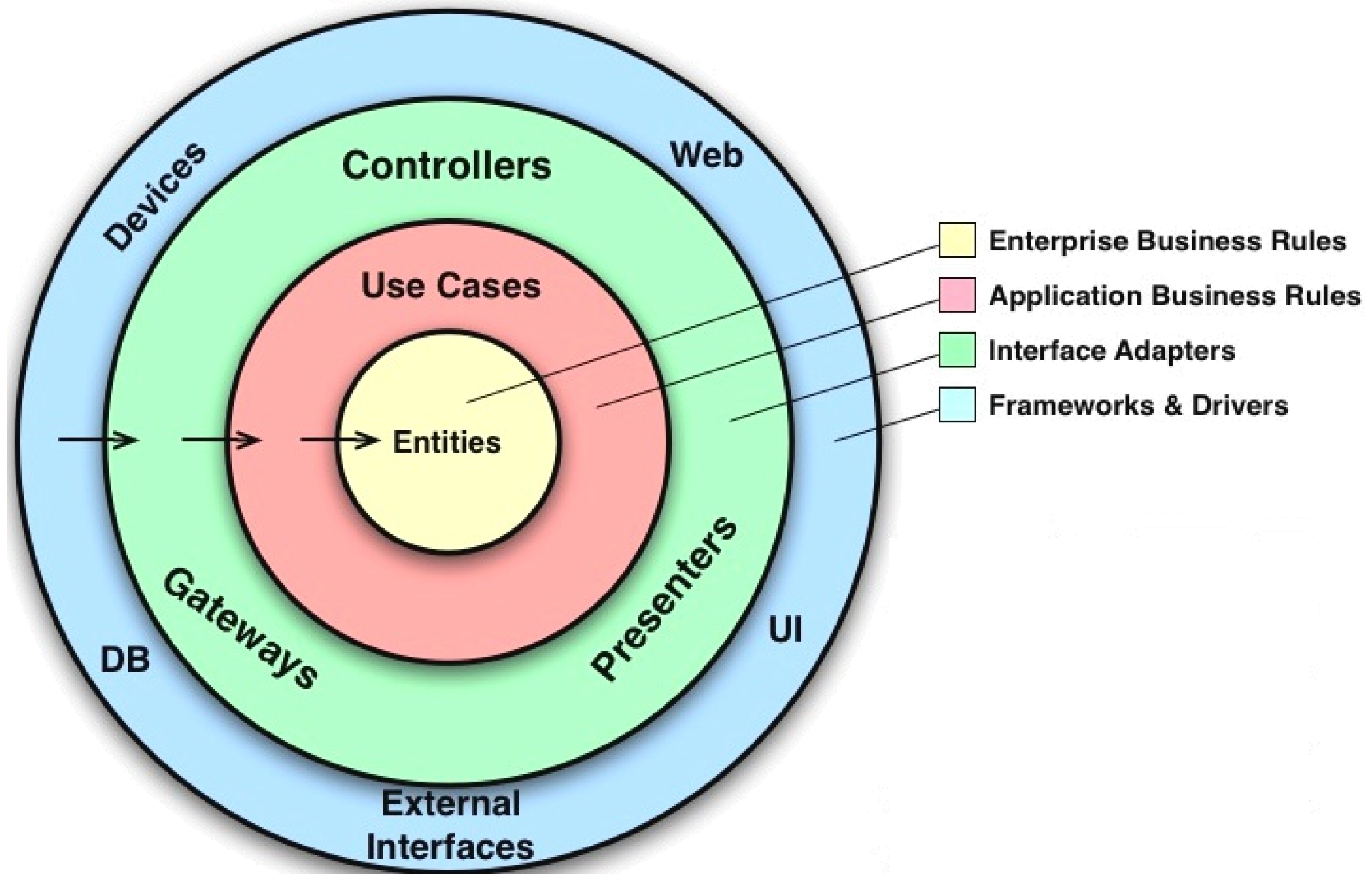
Martin Fowler

A photograph of a spiral staircase with a central yellow circular light fixture. The text "Service Oriented Architecture" is overlaid in white with a black outline.

Service Oriented Architecture

A photograph of a modern architectural staircase. The staircase features a curved, light-colored concrete wall on the left side. The steps are dark, possibly black or dark grey, and are arranged in a circular or semi-circular pattern. In the center of the staircase, there is a prominent yellow circular feature, which appears to be a decorative element or a light fixture. The overall design is clean and minimalist.

Clean architecture



A night sky with the Milky Way galaxy visible as a bright, blueish-white band of stars. The foreground shows the dark silhouette of a tree on the left and a low horizon line. The text "You're not unique" is overlaid in the center in a white, outlined font.

You're not unique

ANIPAS



microservices
serverless
artificial intelligence
machine learning
blockchain
nosql
virtual/augmented reality
internet of things
cloud computing
deep learning
quantum computing

Fashionable software carries risk. Consider the business context and take risks when it makes your business different.

Jon Topper

3. Tests



A detailed view of a Ferrari AC 133 L engine, showing the central intake manifold with three red stripes, the dual carburetors, and the air filters. The engine is surrounded by various hoses, wires, and components, all set within the engine bay of a red car.

Test Driven Design

FERRARI
AC 133 L

FERRARI
AC 133 L

A high-resolution photograph of a Ferrari V8 engine, viewed from the front. The engine is painted a light grey or silver color, with three prominent red vertical stripes running down the center of the intake manifold. The engine is surrounded by various black plastic components, including air filters and intake ducts. The text "Behaviour Driven Development" is overlaid in the center of the image in a large, white, sans-serif font with a thin black outline. The background shows the red inner fenders of the car's hood.

Behaviour Driven Development

FERRARI
AC 163 R

FERRARI
AC 163 L

If it's hard to write a test, it's a signal that you have a design problem, not a testing problem.

Kent Beck

4. Code review

```
FROM tbl_room WHERE room_checked='0'  
$uncheckedRoom["room_name_full"];  
class='List-gro  
disposition_user = u.user_ID
```





L₁

E₁

A₁

R₁

N₁



5. Continuous ...

A photograph of a factory production line for water bottles. The scene is filled with stainless steel machinery and conveyor belts. Numerous blue and white plastic water bottles are in motion, creating a sense of continuous flow. The background shows more industrial equipment and a clean, well-lit environment. The text "Continuous integration" is overlaid in the center in a white, bold, sans-serif font with a black outline.

Continuous
integration

A photograph of a factory production line. In the center, the text "Continuous deployment" is overlaid in a white, bold, sans-serif font with a black outline. The background shows a complex industrial environment with multiple conveyor belts. Numerous blue and white cans are being processed, moving from left to right across the frame. The machinery is made of stainless steel and includes various rollers, guides, and control panels. The floor is a light-colored, tiled grid. The overall scene is brightly lit, typical of an industrial setting.

Continuous
deployment



LIKE
·A·
BOSS

6. Monitoring



Servers, services, etc.



7. Metrics



Business Metrics

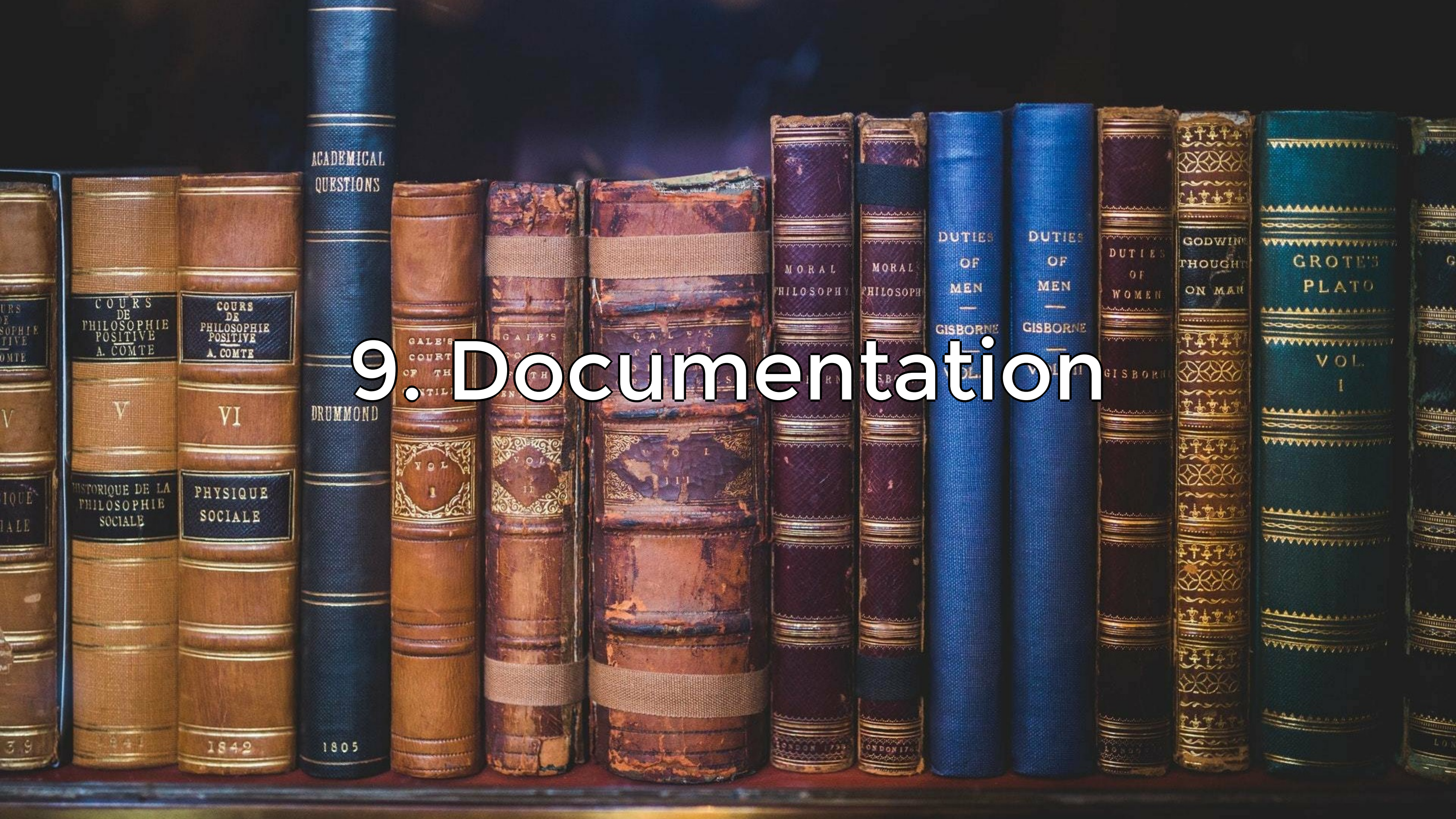




8. Automation



If it moves, automate it!



9. Documentation

Start with README



ACADEMICAL
QUESTIONS

DRUMMOND

1805

COURS
DE
PHILOSOPHIE
POSITIVE
A. COMTE

V

HISTORIQUE DE LA
PHILOSOPHIE
SOCIALE

COURS
DE
PHILOSOPHIE
POSITIVE
A. COMTE

VI

PHYSIQUE
SOCIALE

1842

GALE'S

VOL
I

GALE'S

VOL
II

GALE'S

VOL
III

MORAL
PHILOSOPHY

LONDON 1799

MORAL
PHILOSOPHY

LONDON 1799

DUTIES
OF
MEN

—
GIBBORNE

DUTIES
OF
MEN

—
GIBBORNE

DUTIES
OF
WOMEN

LONDON

GODWIN'S
THOUGHTS
ON MAN

LONDON

GROTE'S
PLATO

VOL.
I

LONDON

LONDON



10. Communication



It's not a soft skill



It's core skill!

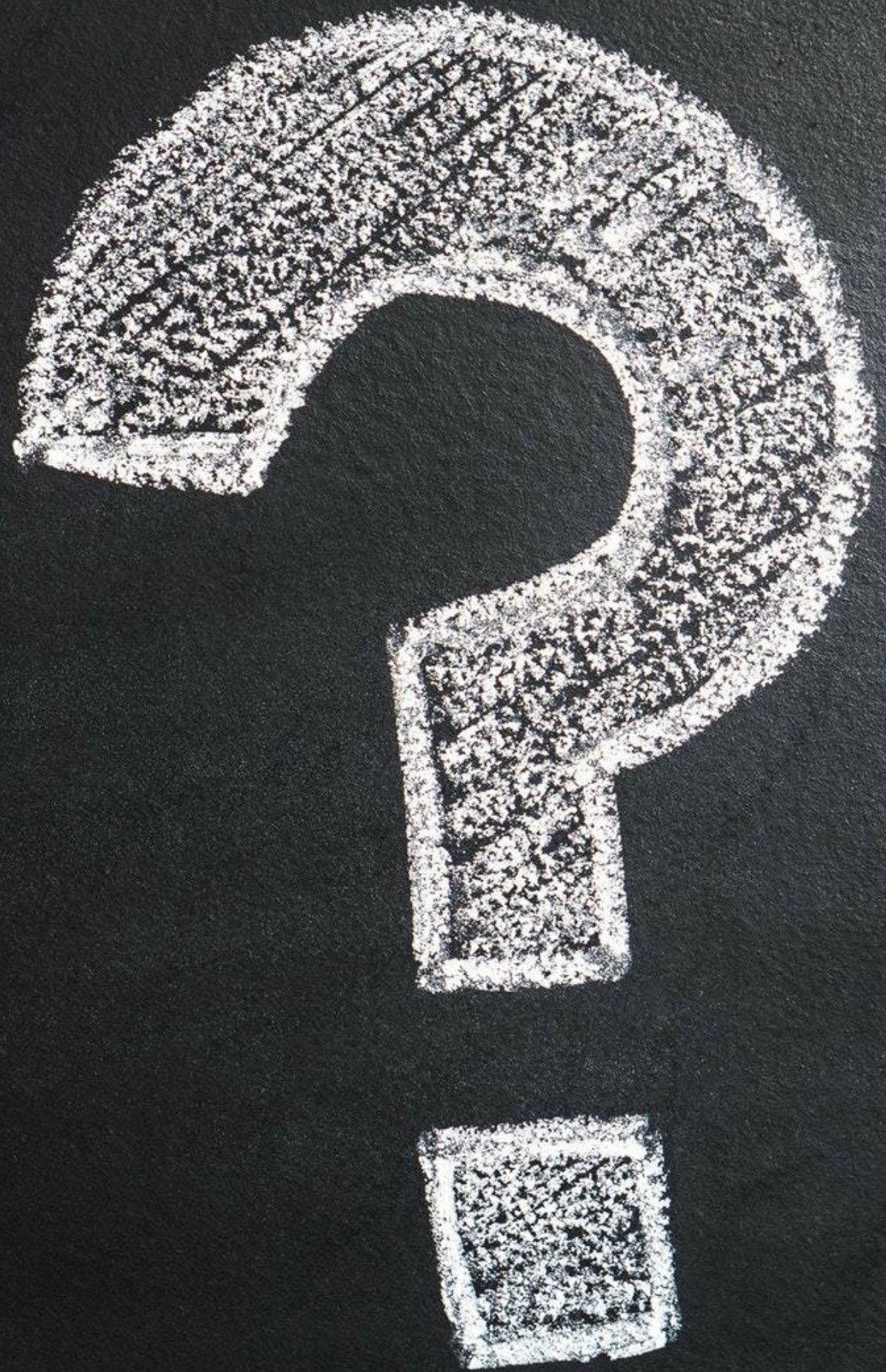
I wish the understanding were more widespread that we plateau in coding skill mid-career, it is all about communication after that.

Denton Gentry

A person is shown from the back, standing on a stage. They are wearing a dark t-shirt and a dark beanie. Their right arm is raised, holding a clear plastic water bottle. Their left arm is also raised, with the hand open. The background is dark, and there is a bright light source at the top center, creating a lens flare effect. The text "Thank you!" is overlaid in the center of the image in a white, bold, sans-serif font.

Thank you!

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