

Now booting: LUISE.EXE

Boot Profile: Codemotion Milan 2025 Edition

Architecture: Azure

User Profile: Architect | MVP | Open Source Advocate | she/her

Visual Identity: #ff69b4

> Checking system components...

Creativity Engine.....[OK]

DevOps Pipeline Alignment.....[OK]

Accessibility Compliance Scanner.....[ENABLED]

Punk Attitude.....[ACTIVE]

Princess Protocols.....[👑 READY]

> Loading core values...

Motto: "Changing the world one app at a time ✨"

Favorite number: 42

Response model: "It depends!"

Documentation is her love language



- +
  - • We've all shipped bugs we were sure were covered
- This session is a call to rethink why we test, what we test, and how we test



Test less!

Less is more\*

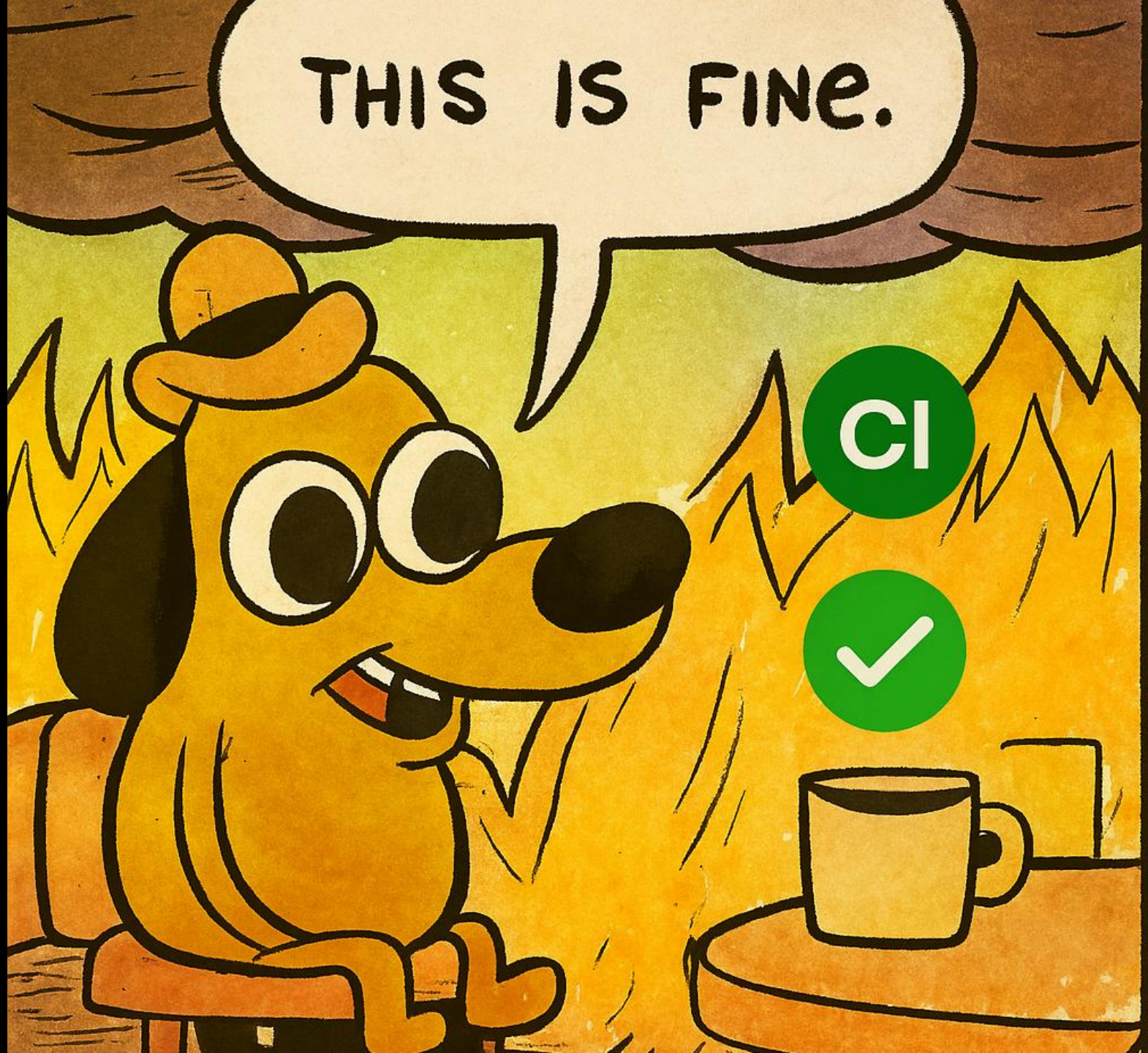


\*doesn't apply to chocolate



## Sounds familiar?

- High test coverage
- All builds green
- Production's on fire



# Green ain't safe.

- Coverage ain't confidence.
- And deep in your heart, you know that.
- That's the reason why you refuse to deploy on Fridays – 'cause you can't trust your tests.

You created a system in which  
developers are afraid to ship

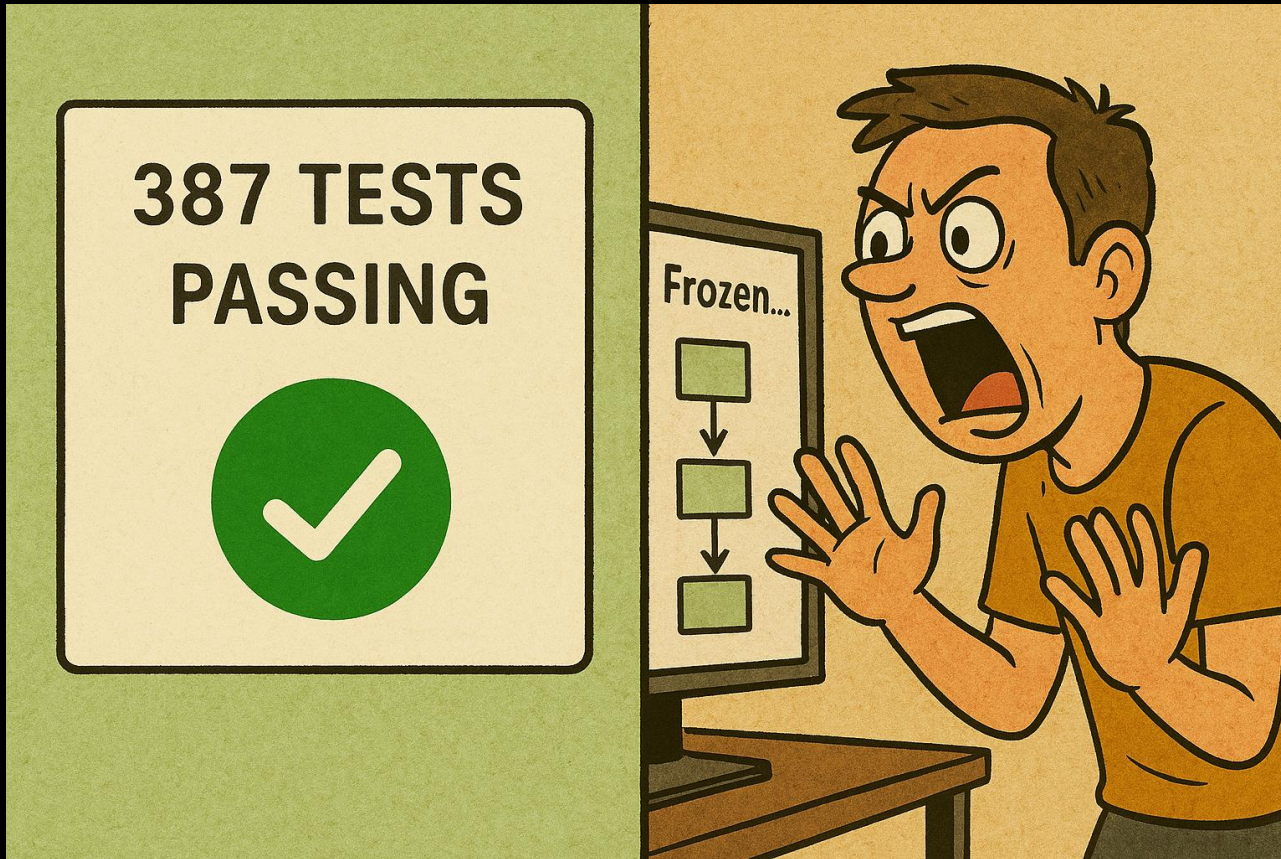


Your users don't care how many  
tests you've written.

They care that your software works.

“Please don’t confuse test quantity with software reliability under pressure”

# We test what we can count – not what really counts



- Testing is a means, not the end
- Too many teams treat test coverage like a performance metric
- In reality, it's a vanity metric
- Doesn't add value per se
- Doesn't necessarily contribute to our ultimate goal: software success

# Let's start with the user\*

We measure test quantity because it's easy. Numbers feel safe

But it's a proxy  
(and often a bad one)  
for reliability

Why? Because we're disconnected from real usage, real risk, and real failure modes

\*You know those pesky people we build software for in the first place

“When we lose connection to real-world behavior, we cling to what we can control: Code coverage. Test counts. Green bars. Metrics that look like progress, but don't guarantee safety.”



# What most teams actually do

That won't get better with AI –  
the agent that just wrote your code  
wants the tests to pass –  
so it will write it that way –  
rather than testing something meaningful

Habit, not intent	"Testing" that isn't testing	Misaligned goals	Why this happens	The real problem
<ul style="list-style-type: none"><li>• Most testing happens by gut feeling</li><li>• We write what feels right. What feels enough</li><li>• Developers often write tests for the code they just wrote, not for the system's real behavior</li></ul>	<ul style="list-style-type: none"><li>• Bullshit-Tests<ul style="list-style-type: none"><li>• Unit tests that mock everything except the actual behavior</li><li>• stubs that assume the happy path</li><li>• assertions that test for the existence of a response rather than its correctness</li></ul></li></ul>	<ul style="list-style-type: none"><li>• We often test for what's easy to simulate, not what's most likely to go wrong</li></ul>	<ul style="list-style-type: none"><li>• Devs are trained on tools, not test thinking</li><li>• We learn to write unit tests, not to design tests</li></ul>	<ul style="list-style-type: none"><li>• We're not testing what users actually do. We're testing what we hope they'll do</li></ul>
Test-after thinking: "I wrote this, I should test it," not "What does this need to survive?"	Cargo cult testing: writing tests that look good, but don't build confidence	We don't model behavior; we only check mechanics	Testing becomes checklist work, not craft	This isn't just ineffective; it's dangerous!

Don't throw code over the fence  
and hope it works 🤞

# Coverage is a signal, not a goal

## What you test in your fantasy world

### Linear flows

no back buttons, retries, or dirty state

### No constraints

infinite bandwidth, zero latency, perfect APIs

### No edge cases

just one type of user, doing one thing, correctly

### Everything mocked:

nothing ever fails, because nothing is real

### Always perfect inputs:

valid data, right format, happy path



Magical. Elegant. Sparkly. Totally detached from reality

## What your system actually looks like

### Mismatched data

nulls, special characters, malformed fields

### Stateful weirdness

users halfway through a process, dirty session storage

### Network pain

flaky APIs, retries, 404s

### Real integration

real payloads, real contracts, real dependencies

### Time pressure

edge-of-month logic, timing issues, concurrency



Solid. Messy. Sometimes stubborn. But real, and it gets the work done.

There is a gap between your test suite and your system's true risk landscape!

# What testing should actually do

## **Unlocks speed**

no fear in releasing

## **Improves design**

bad code  
is hard to test

## **Clarifies intent**

tests show what  
matters

## **Unites teams**

common language:  
expected  
behavior

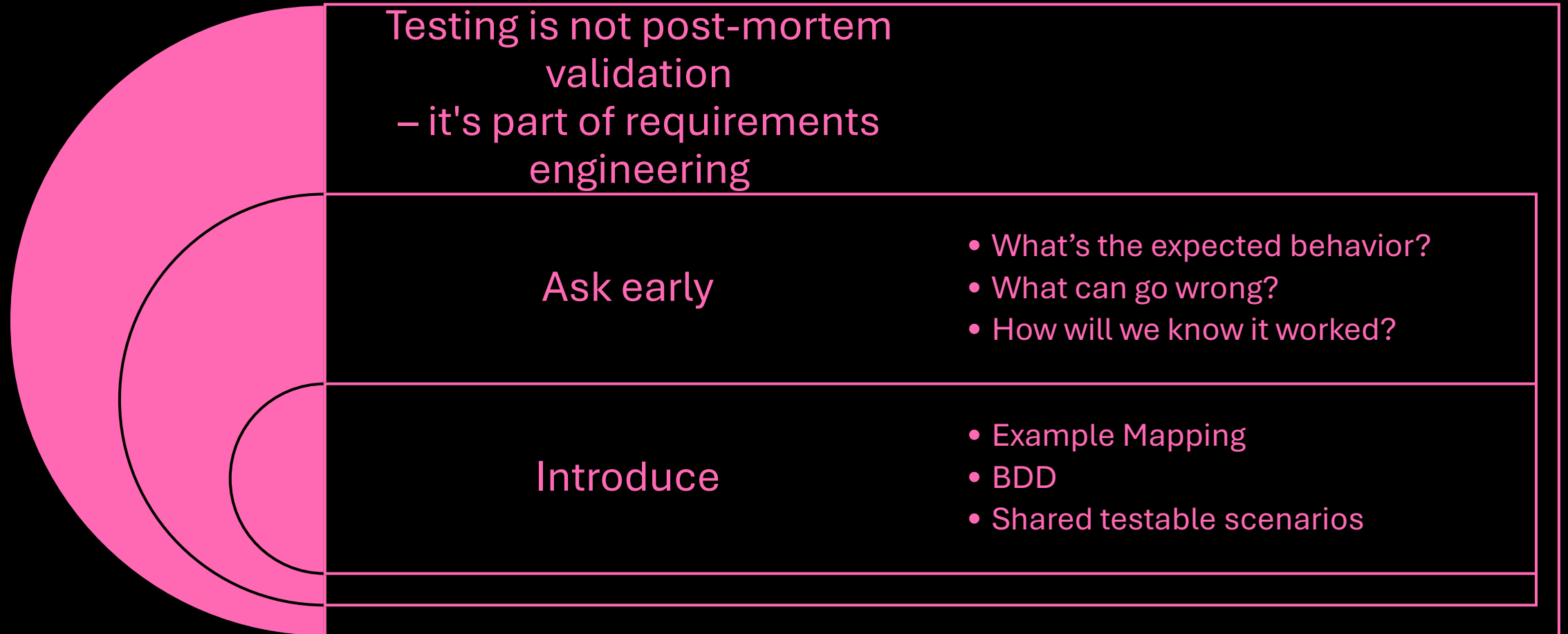


“You don’t write better software in spite of tests. You write it because of them.”

# Shift left.

(yes, again)

# If Testing happens after coding, it's already too late



# What's the behavior we actually care about?

Behavior is what  
users see.  
Code is just the  
plumbing

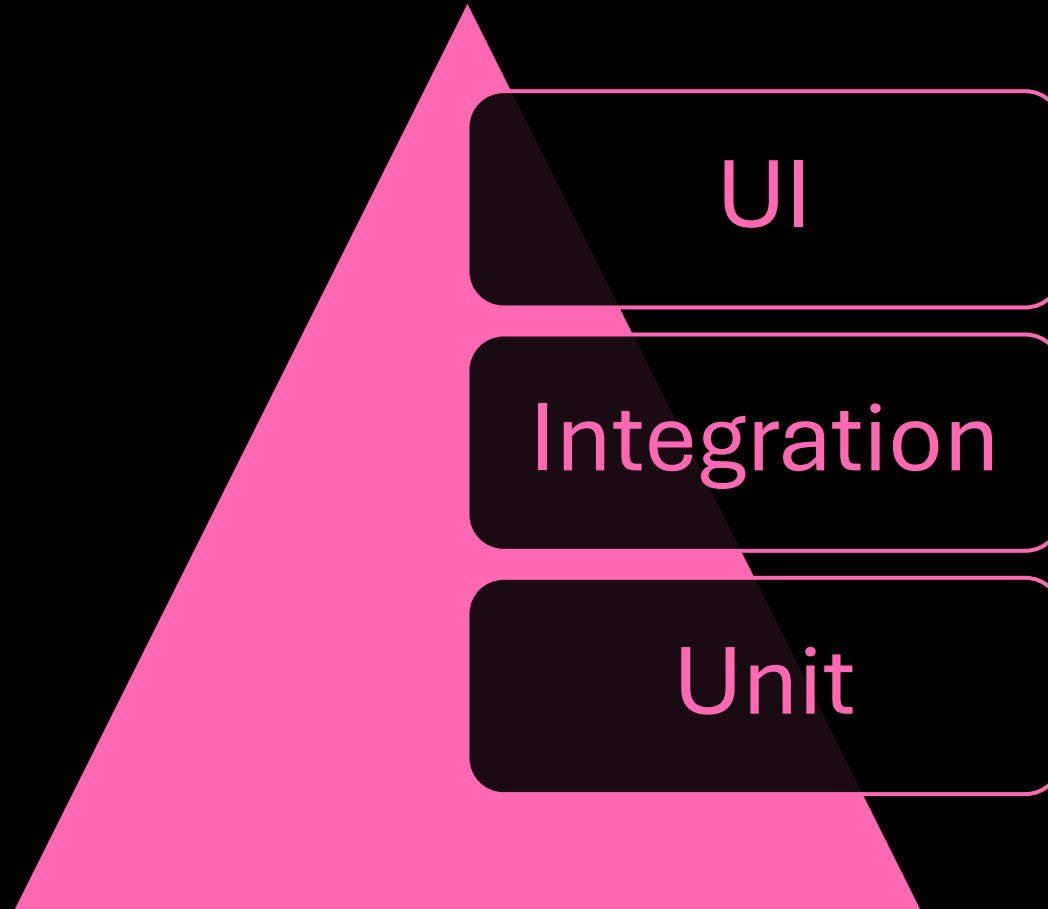
Don't test "that a  
method returns a  
list"

Test:  
"that customers with  
overdue accounts  
can't book a ride"

Let's challenge a sacred cow



# The testing pyramid

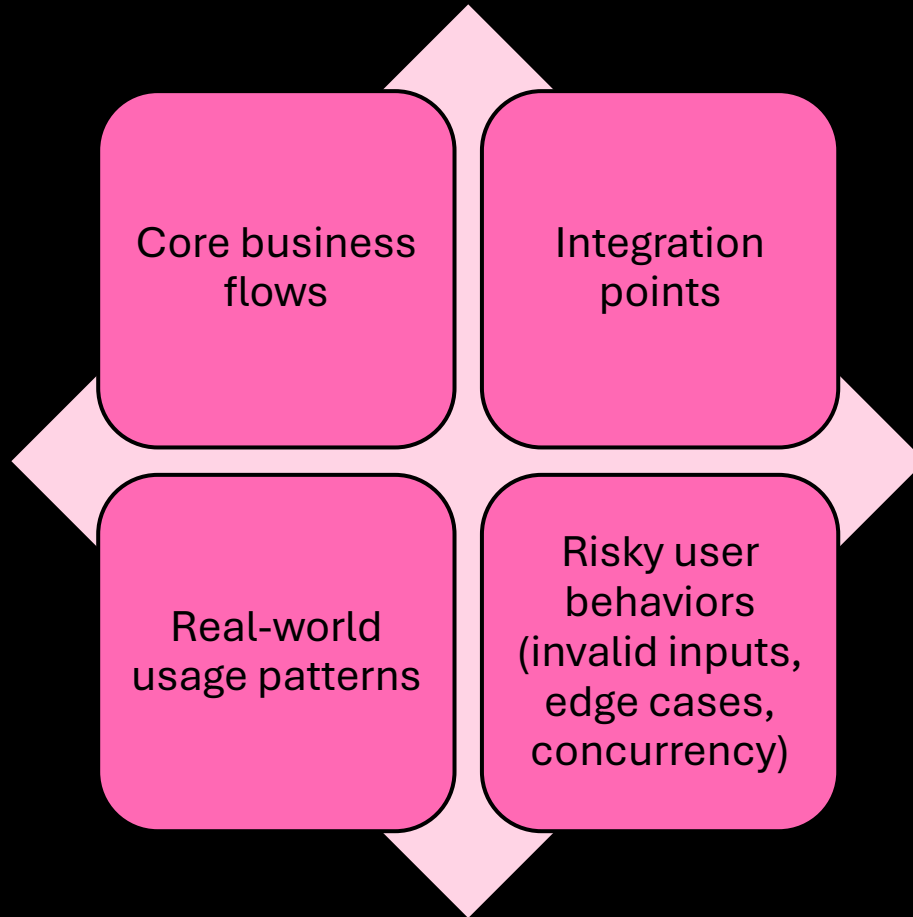


# We've unit tested ourselves into a false sense of security



- The pyramid told us: test more at unit level, fewer at integration/UI
- It assumes low-level tests are fast, stable, and valuable. Sometimes that's true, sometimes it's busywork
- Problem: Most bugs aren't in isolated logic; they live in flows, boundaries, contracts, data

# Prioritize tests that catch real risk



💡 Ignore trivial logic.  
If a test doesn't reduce risk, delete it.

You don't need 1.000 tests.

You need the *right* 42.

# #Testgoals

- Coverage of behavior, not lines of code
- Fewer tests. Higher return
- Measuring assurance, not activity



# Test design starts with variation

Test design is not just “write a test case”

Ask at a minimum

These aren't edge techniques; this is how to test the right way

What are the valid/invalid inputs?

Which boundaries do apply?

What states can the system be in?

What transitions can occur?

Equivalence partitioning

Boundary value analysis

state transitions

decision tables

# Real maturity = confidence in what you didn't test, because it didn't matter



# Good tests align teams, not just code

Shared examples align expectations

BDD and example mapping aren't buzzwords; they're communication tools

When tests describe behavior

- QA tests less manually
- Product owns more quality
- Devs stop guessing "what done means"

# Behavior-Driven Development isn't about Cucumber

BDD is a collaboration practice, not a testing framework

Its power lies in creating shared understanding between Dev, QA, and Product

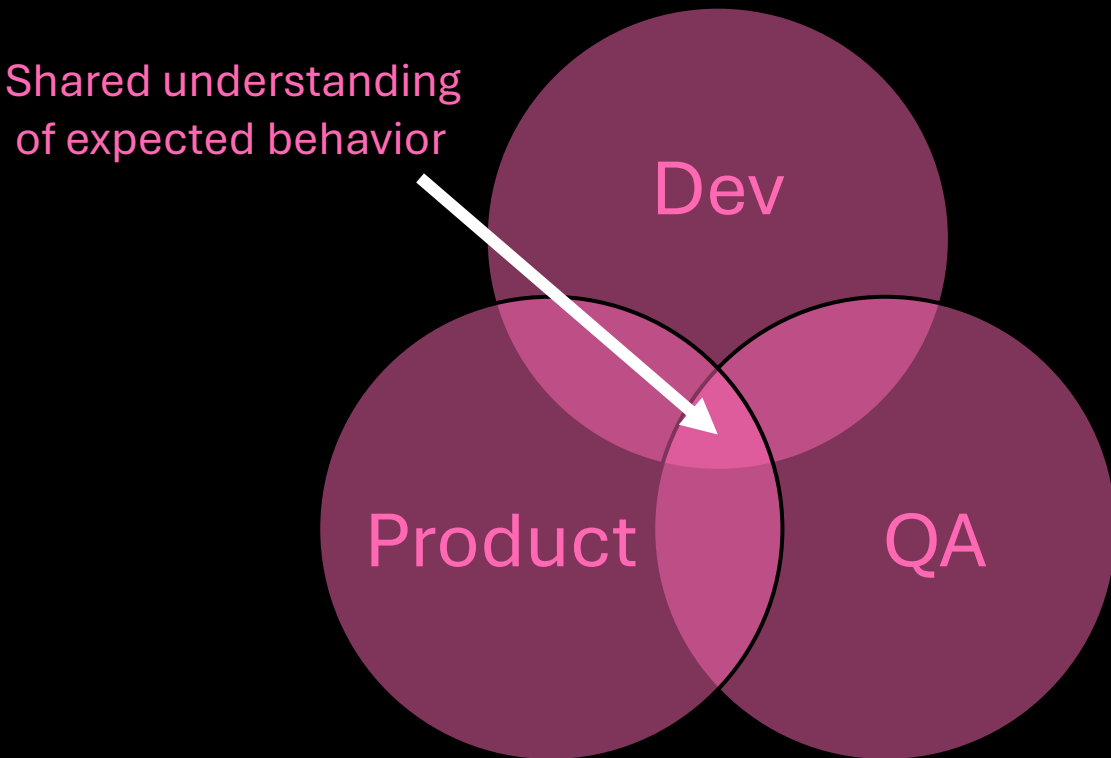
It forces teams to define:

- What a feature should do
- What counts as success or failure
- What edge cases must be handled

“Software Development is a Team sport”

Software Development is a  
people business!

# BDD helps you build the right thing, not just build the thing right



- **BDD = Better conversations**

- Teams talk about what the system should do in specific situations
- This reduces ambiguity before it becomes bugs

- **BDD = Concrete examples**

- Instead of vague stories (“As a user, I want...”), we define real scenarios:
- “If a user has no active subscription, and they log in, then they should be redirected to the upgrade screen”

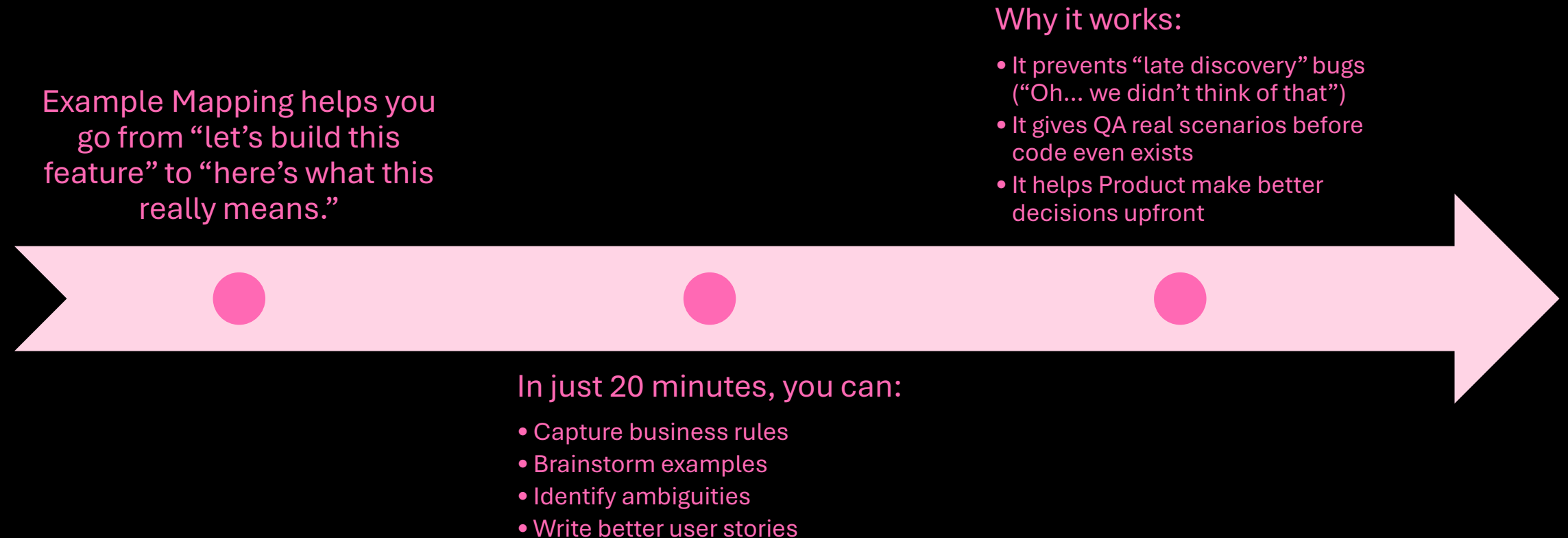
- **BDD = Aligning dev, QA, and product**

- Everyone agrees on the behavior we expect
- These behaviors become the foundation for test cases, acceptance criteria, and implementation

“If your team is writing Gherkin scenarios that no one outside Dev ever reads; you’re not doing BDD.

You’re doing ‘Cucumber-Driven Development.’  
That’s not the same.”

# Turn vague requirements into testable scenarios



The best test you’ll ever write is the one that prevented a bad requirement from getting to devs in the first place



# Turn user stories into contracts

## What it is

- Shared testable scenarios = the glue between teams
- These should live *before* and *outside* the code
- Everyone agrees upfront: “If this passes, we’re done.”

## Format Example

- “If a customer cancels before their trial ends, they shouldn’t be charged.”
- “If an API returns malformed data, we should show a fallback UI.”

## Why it matters

- Reduces finger-pointing
- Prevents “that’s not what I meant” bugs
- Turns quality into a shared outcome, not a job description

# Testing can't save you from blame culture

A lot of testing strategies aren't about improving software. They're about avoiding blame

We write shallow unit tests not to validate behavior, but to say 'Look, I covered it.'

We comment "covered by test XYZ" to silence questions, not to build confidence.

QA runs the same regression suite weekly. No one knows what it protects. But hey, it's documented

Product signs off on requirements they never really read. "If it's not in the spec, it's not my fault."

# Don't try to automate culture

you can't fix a cultural problem with more tech

You can buy the best testing framework

Add all the test coverage dashboards

Plug in AI code gen for test cases

But if your teams don't trust each other, if requirements are vague, if blame is the operating model: all that tooling just automates the wrong behaviors

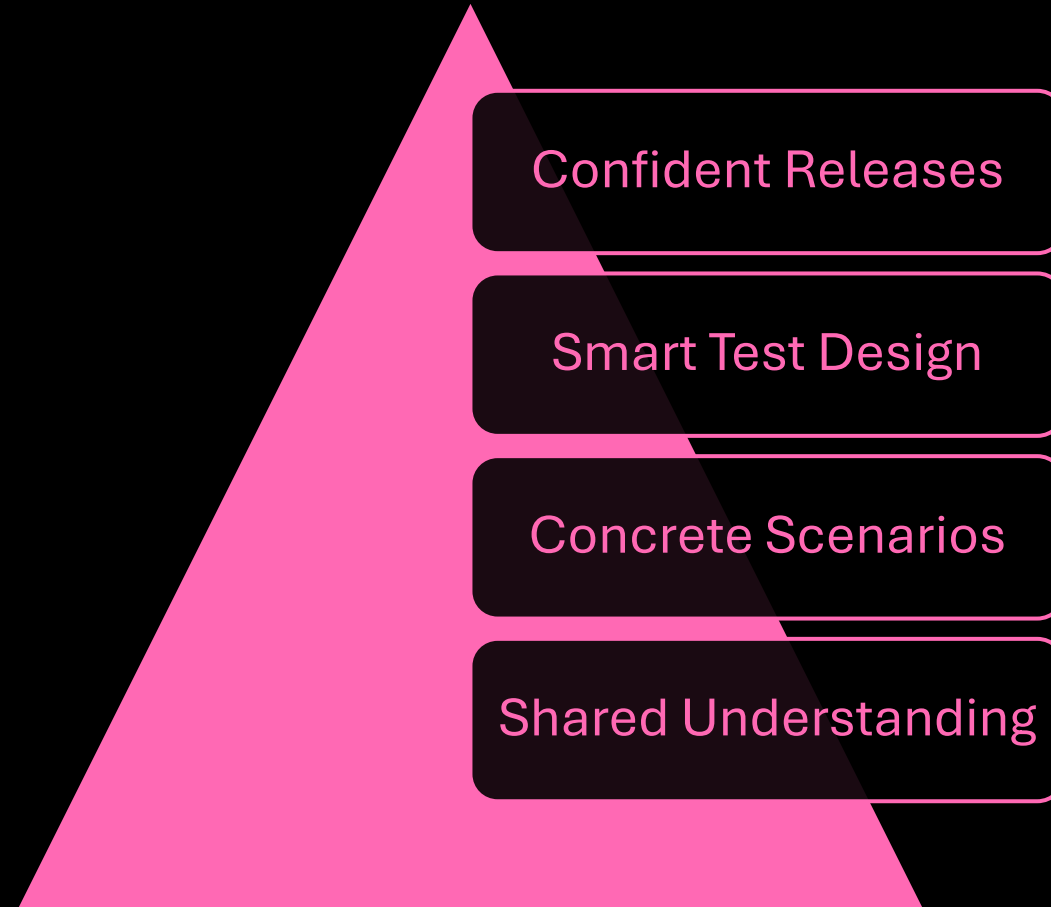
“If your test suite is just a legal defense strategy, it’s already too late.”

## ⚡ Without clear requirements

- Developers guess
- QA reverse-engineers intent
- Product rewrites expectations after bugs surface

BDD, example mapping, and testable scenarios all sit on the same base: requirements that make sense.

# Requirements Engineering Is the Foundation of Testing That Works



Requirements engineering isn't optional. It's the prerequisite for software that doesn't suck.

# Real fixes for cultural problems

Blame avoidance

Shared responsibility for outcomes

Shallow specs

Example mapping & BDD

Testing-as-a-stage

Requirements + behavior-first mindset

Tool worship

Systemic thinking & team alignment



# Homework – or what to do next Monday

## Delete one test

- ...that gives you no confidence and exists only to make a coverage metric happy

## Ask better questions

- “What does success look like?”
- “What’s the riskiest part of this?”
- “How will we know it works?”

## Model a scenario before you code

- Try writing just one behavior in Gherkin or free-form:
  - “If [condition], and [state], then [expected outcome].”

## Call out a CYA pattern

- Spot it in a standup
- Name it
- Kill it with kindness 💖
- (“Are we testing this because it’s risky, or because we don’t want to be blamed?”)

## Share one example before implementation

- Not a test case
- A real-world user story that you can validate together

Better testing isn’t about writing more tests.  
It’s about making better decisions; together.



# {CODEMOTION} CONFERENCE MILAN 2025

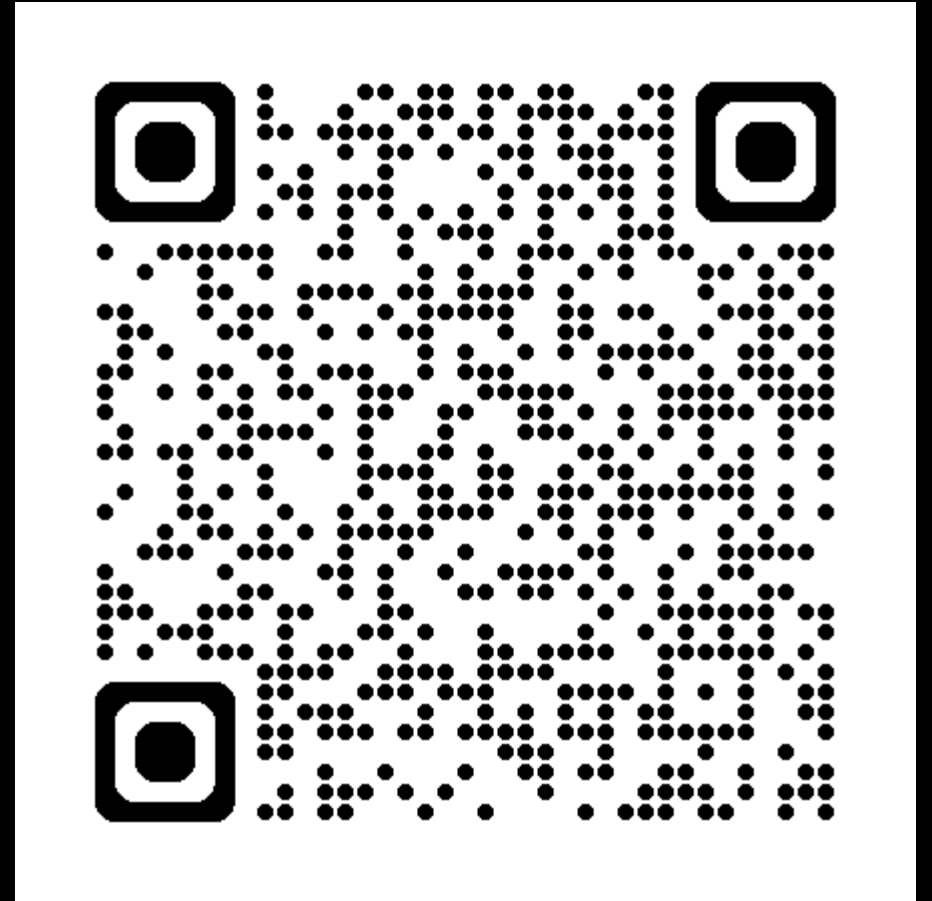


**Don't forget to  
rate the talk!**



# Want the slides?

- Connect with me on LinkedIn
- Send a message “hot pink”



[Linkedin.com/in/LuiseFreese](https://www.linkedin.com/in/LuiseFreese)

# In case...

- You want to convince your boss
- Or your peers
- Or want to deep-dive into the methods with hands-on-workshops:
- Hit me up, I do this (and more) for a living 😊