All Code Sucks
Why Bad Code is Everywhere and What to Do About It

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I'm Joe Collins, I'm from Zengenti.
We do websites for universities and local authorities.
I don't actually do any websites, I work in the hosting team.
We maintain the cloud on which the websites run.
We use a combination of Ansible and Python
to maintain an estate of about 3000 servers.
However, tonight Matthew,
I am going to talk about why all code sucks.

We all know what good code looks like,
or at least we think we do.
But I should probably define what I mean by sucky code.

"Programs are meant to be read by humans and only incidentally for computers to execute."
— Donald Knuth

"It is better to have clean code that doesn't work than crap code that does."
— Robert C. Martin

Don't take my word for it,
Donald Knuth the Yoda of Computer Science
says that code is for humans to read
and sometimes for computers to run.
He is all about the readability.

Uncle Bob Martin in his inimitable style
backs this up but uses the term clean code.
But it is really a proxy for readability.
If you and understand it then you can fix it,
but if you can't understand it and it breaks you can't fix it.

All Code Sucks

2025-03-13

└─The Great Hunt for Non Sucky Code

I have been at this for about 25 years.
Looking for code that doesn't suck.
Trying to produce code that doesn't suck.
I have worked with scumbags and saints.
And in companies big and small.
But all the code sucked. Consistently.
We did amazing things with it. But it still sucked.

Maybe I was just unlucky.
But I have come to the conclusion that all code sucks.
And that I should stop looking for the perfect code.
And instead admit that all code sucks.
And then work out what to do about it.

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Why Code Sucks
The statistics favour of suck

· Half of everything is below average

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Straight out of the gate, half of everything it below average.
Well below the median.
You don't have to be Francis Galton to realize that.

Then there is Sturgeon's law or revelation
or whatever you want to call it.
He was talking about science fiction at the time
but it works in this situation.
Only some things are really good.
Put another way most stuff isn't that good.

Why Code Sucks
The statistics favour of suck

· Half of everything is below average
· Sturgeon's Revelation (90% of everything is shit)
· The 2 Year Old Programmer Problem (inexperience)

Then an issue particular to the programming business,
the demand for programmers over the last 25 years has always
outstripped supply.
When I started working the average working age was 2 years.
And that hasn't changed.
As more and more people have entered the business
then have kept the average age down.
As a group we still don't have that much experience.

- Structure of Software Startups (early school leaver syndrome)

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└─Why Code Sucks

Startups are the worst

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